

June 10, 2021: Version 1.1.1

# Margin Survey: Intermediaries

## Survey Update

In response to feedback from market participants, the Joint Steering Group on Margin (JSGM) elected to issue an updated version of the intermediary margin survey to allow additional time so that as many intermediaries can participate as possible.

### Critical Survey Updates

#### Response Date

Updated survey response due date: **August 2, 2021**

#### Tiered Question Priority

Although the JSGM prefers firms respond fully to the survey by the modified response date, the JSGM acknowledges not all respondents may be able to do so. Therefore, the JSGM prioritized the survey questions into three tiers.

**Tier 1** questions are the most critical and should be the primary focus of survey respondents. If the firm can only respond to a limited set of questions by the new amended deadline, the firm should focus on Tier 1 questions first before the other tiers. **Tier 1** questions are highlighted in **PALE ORANGE**.

**Tier 2** questions are the next most important questions and ideally firms can also respond to these questions as well by the deadline. Firms should not focus on Tier 2 questions if it impacts the firm's ability to answer Tier 1 questions. **Tier 2** questions are highlighted in **PALE BLUE**.

**Tier 3** questions are important, but the JSGM would prefer firms only respond to these questions once Tier 1 and Tier 2 questions are answered by the deadline. **Tier 3** questions are not highlighted.

#### Firms That Already Submitted a Survey Response

Thank you for your response. Firms are encouraged to continue to compile data and resubmit a response if their prior response with respect to Tier 1 and Tier 2 questions was partial and incomplete up until the amended response date of **August 2, 2021**.

#### Question Structure and Response Template compared to Version 1.0.0

Version 1.1.1 includes no changes to any of the Version 1.0.0 questions or the Excel response template. The only differences are the question tiering and due date extension.

## Purpose & Summary

The G20 agreed that the FSB should coordinate with standard-setting bodies to look at issues regarding margin calls during the early stages of the COVID-19 pandemic. The FSB Steering Committee Group on NBFI (SCN) agreed to set up an ad-hoc group to look at the issues around cleared and uncleared margin.

The margin work carried out by this group (Joint Steering Group on Margin, JSGM) will examine, based on relevant data and information, whether and, if so, to what extent margin calls were, for at least some market participants, unexpectedly large in centrally cleared and uncleared derivatives and securities (cash) markets. This will include both initial and variation margin, and will cover at least:

- Margin in cleared and uncleared markets during the **February 1, 2020 to April 30, 2020** (COVID Period) market turmoil, including clearing member-client dynamics;
- Margin practice transparency, predictability and volatility during the COVID Period market turmoil across various markets, jurisdictions and margining models; and
- Liquidity management preparedness of market participants to meet margin calls.

**The following survey seeks to explore details on margin calls from the point of view of intermediaries<sup>1</sup> during the COVID Period.**

## Survey Response Due Date: **UPDATED**

**August 2, 2021**

## Questions?

Contact the Joint Working Group on Margin, Intermediary Margin Survey Co-Chairs:

Jeffrey Hasterok, [jhasterok@cftc.gov](mailto:jhasterok@cftc.gov)

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<sup>1</sup> A firm in the business of offering, buying, selling, or otherwise dealing or trading securities, market making in securities or derivatives, and/or entering into derivative transactions with CCPs, other dealers, or its customers for its own account or on behalf of its customers. Includes but not limited to swap dealers, broker/dealers, banks acting as intermediaries, or similar. Also referred to as a “firm” throughout the survey.

## Survey Metadata

### A. Definitions

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Refer to the Glossary for definitions of defined terms in this survey.

### B. Source

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The Basel Committee on Banking Supervision (BCBS), the International Organization of Securities Commissions (IOSCO), and the Committee on Payments and Market Infrastructures (CPMI), as members of the Joint Steering Group on Margin (JSGM).

### C. Respondents

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Intermediaries subject to regulatory oversight of the member regulatory agencies of the BCBS and/or IOCSO that transacted or maintained a position in cleared or uncleared derivatives or securities during the COVID Period.

BCBS and IOSCO member regulatory agencies are listed here:

BCBS: <https://www.bis.org/bcbs/membership.htm>

IOSCO: <https://www.iosco.org/about/?subsection=membership&memid=1>

There are three primary types of intermediaries that should respond to the survey based on their activities during the COVID Period:

1. Consolidated firms that transacted in cleared markets primarily as intermediaries
2. Consolidated firms that transacted in uncleared markets primarily as intermediaries
3. Consolidated firms that transacted in both cleared and uncleared markets primarily as intermediaries

The survey below is the same for all three types of firms. However, where appropriate the survey allows for “not applicable” or “N/A” entries for firms that acted as intermediaries in only cleared or only uncleared markets, but not both.

### D. Submission Count

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Submit a **single response** for the firm as a consolidated whole instead of separate responses for different subsidiaries or affiliates. Do not submit multiple survey responses for the firm for this survey.

If the consolidated firm transacted or maintained a position in cleared or uncleared derivatives or securities **both** as an intermediary **and** as a client<sup>2</sup>, the firm should submit

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<sup>2</sup> A typical example would be a G-SIB banking organization with dealer subsidiaries and separate asset management subsidiaries.

**two responses**, one response to this survey and another, separate response to the “Client Margin Impact Survey”:

1. Submit a single response to this “Margin Survey: Intermediaries” for the consolidated entity that includes the activity of subsidiaries that primarily transacted as intermediaries, but excludes the activity of subsidiaries that primarily transacted as clients, such as pension funds, investment managers, mutual funds, trust banks, hedge funds, etc.
2. Submit a single response to the separate “Client Margin Impact Survey” for the consolidated entity that includes the activity of subsidiaries that primarily transacted as clients, such as pension funds, investment managers, mutual funds, trust banks, hedge funds, etc., but excludes the activity of subsidiaries that primarily transacted as intermediaries.
  - a. See <https://www.iosco.org/surveys/2021/jwgm-ws3/>

## E. Demarcation between Intermediary and Client Surveys

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### i. Intermediaries

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Firms that:

- consider themselves “intermediaries” and/or “dealers” in derivative, funding, and/or securities markets
- seek to make markets and collect bid/ask
- are direct clearing members of CCPs and provide clearing access for clients, customers or counterparties
- are direct clearing members of CCPs and do not provide clearing access for clients, customers or counterparties, but clear trades to hedge risk they take on from trading with clients, customers or counterparties
- are registered swap dealers, broker/dealers, or similar

### ii. Clients

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Firms that:

- manage and invest the assets of others, such as pension funds, investment managers, mutual funds, trust banks, hedge funds, etc.
- manage and invest their own funds, such as family offices and insurance companies
- are generally price takers and are not active market makers collecting bid/ask
- are direct clearing members of CCPs and do not provide clearing access for clients, customers or counterparties, and only clear trades to hedge/speculate for their own firm (not hedging client risks)

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## F. Affiliates

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**Exclude** data from all inter-affiliate and intra-group transactions from the survey response.

## G. Anonymization and Confidentiality

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Firm submissions will be anonymized by BCBS regulatory members before transmission to BCBS, or will be anonymized at IOSCO before transmission to BCBS/BIS for compilation with results collected by BCBS. No firm-level data will be released to the public.

**Do not include** any information in the response (especially the qualitative narratives) that could identify the firm, such as the firm name, names of specific employees, or business unit names unique to the firm.

## H. Submission Format

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Submissions in the English language only.

Submissions should use the standard ASCII character set only, no extended ASCII. ASCII characters 10, 13, 32-126 are allowed. Many currency denominations and foreign symbols fall under the extended ASCII character set. For this reason, any reference to currency denomination in the narrative responses should be reported as the three-letter alphabetic ISO 4217 currency code (e.g., USD, GBP, EUR, JPY) rather than translated currency name or currency symbol (e.g., \$, £, €, ¥). Report all currency values in USD equivalents. Unit = 1 USD (not thousands, millions, etc.)

**Before submissions firms should review the in-built field type checks in cell C8 or C9 on each of the quantitative worksheets.**

Submit the response as a single Microsoft Excel spreadsheet using the accompanying Excel submission template. To minimize compatibility issues, do not add Visual Basic for Applications (VBA) code or macros to the submission. Do not include dynamic, embedded links to other files or websites in the submission. Do not embed other documents inside the Excel file itself. Remove “author”, “last modified”, and similar Excel document metadata identification properties before submitting the file.

Submission Excel file names should be in the following format:

**cc-fff-JWGM-204-vv.xlsx**

cc: replace with the firm's 2-digit ISO country code<sup>3</sup>

fff: report "fff" as-is. "fff" will be replaced with a unique 3-digit anonymous code by either a) the firm's BCBS member supervisor before transmission to eBIS, or b) IOSCO member regulatory staff once submitted to IOSCO.

JWGM-204: report "JWGM-204"

vv: version of the submission, starting with 01 and to be incremented for any resubmissions

Dashes: report the "-" characters in the file name where listed above

## I. Transmission

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If the firm's primary regulator is a BCBS member: follow QIS submission instructions from the firm's BCBS member supervisor.

If the firm's primary regulator is an IOSCO member: submit completed Excel file via email directly to [jwgm-ws2@iosco.org](mailto:jwgm-ws2@iosco.org). Do not password protect the Excel file submitted to IOSCO.

## J. Errors

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If the firm needs to resubmit the file because of an error, resubmit the entire file, not individual tabs.

If the firm's primary regulator is a BCBS member: contact the firm's BCBS member supervisor for resubmission instructions. Increment the version number of the submission per Section H. Submission Format above.

If the firm's primary regulator is an IOSCO member: submit the updated, corrected Excel file via email directly to [jwgm-ws2@iosco.org](mailto:jwgm-ws2@iosco.org). Do not password protect the Excel file submitted to IOSCO. Increment the version number of the submission per Section H. Submission Format above.

## K. Partial Submissions

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Firms should attempt to complete the survey fully. However, partial submissions will be accepted.

## L. Supervision and Examinations Implications

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Any submissions or responses to the survey **will not** be used for any bank or non-bank supervisory, examination, or regulatory context or program. Responses will be anonymized and aggregated for analysis purposes.

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<sup>3</sup> See <https://www.iso.org/iso-3166-country-codes.html>

## M. Survey Results

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The anonymized and aggregated survey results will inform the preparation of the FSB’s July interim report to the G20 on “Lessons learnt from the COVID Event”, and in the autumn, into the FSB’s report on progress in the non-bank financial intermediation (NBFi) work program to the G20.

## N. Additional Notes

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For all the questions below, as much as possible differentiate answers by asset class<sup>4</sup>, CCP, product line, business unit, geographic region, currency, and/or client/customer/counterparty type<sup>5</sup>, where materially applicable.

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<sup>4</sup> See Appendix A

<sup>5</sup> See Appendix B

## Survey: Intermediaries

All questions below refer to the “COVID Period”: **February 1, 2020** through **April 30, 2020**

**Report all currency values in USD equivalents. Unit = 1 USD (not thousands, millions, etc.)**

### FOR ALL QUESTIONS ASKING FOR A “RANKING”

Some questions below ask firms to rank factors by importance. **If ranking all factors listed is impossible or impractical, rank the top three to five most important factors.** Leave unranked factors blank instead of reporting N/A or similar.

#### A. Firm Contact Information

Firm contact information will be removed and anonymized for aggregation and analysis purposes, and will only be used by the firm’s primary regulator to contact the firm if there is an issue with the submission.

Submit this contact information via:

- a) the firm’s BCBS supervisor if the firm’s primary regulator is a BCBS member, or
- b) email to IOSCO if the firm’s primary regulator is an IOSCO member

**DO NOT INCLUDE this contact information in the Excel survey response itself.**

1. Firm contact person information (name, email, phone number)
2. Firm name
3. Firm LEI<sup>6</sup>, if available

#### B. Firm Metadata

The total consolidated assets bin may be used to cluster responses by size as part of the analysis of the anonymized, aggregated survey submissions.

1. Unique firm identification code (provided by firm supervisors; firm leaves this blank)
2. Firm country of domicile (ISO 3166 Country Code)<sup>7</sup>
3. Firm total consolidated assets in USD equivalents as of March 31, 2020<sup>8</sup>:
  - a. Bin 1: 0 to 500 billion USD
  - b. Bin 2: Greater than 500 billion to 1 trillion USD

<sup>6</sup> Legal Entity Identifier. See <https://www.gleif.org/en/about-lei/introducing-the-legal-entity-identifier-lei>

<sup>7</sup> See <https://www.iso.org/iso-3166-country-codes.html>

<sup>8</sup> If the firm’s financial reporting cycle does not end on March 31, pick an asset value from a date as close as possible to March 31

c. Bin 3: Greater than 1 trillion USD

4. Accounting standard for total consolidated assets in USD equivalents

5. Survey transmission channel (BCBS or IOSCO member supervisors)

### C. Overall Firm-Wide Flows<sup>9</sup>

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1. Did the firm experience flow stress<sup>10</sup> relating during the COVID Period?
  - a. If yes or no, describe.
  - b. If yes, provide specific dates or narrow date ranges when flow stress peaked for the firm.
  - c. If yes, rank<sup>11</sup> the flow stresses the firm experienced by type listed in **Appendix C**, from maximum stress (1) to minimum stress (13). If not applicable to the firm, leave blank. Do not rank two flow stress types as a “tie”; report each rank 1 to 13 only once, or leave blank if not applicable to the firm.
2. During the COVID Period, did the firm experience any material **structural**<sup>12</sup> flow timing mismatches between structural flows due and structural flows received?
  - a. If yes, describe the source of the material structural flow timing mismatches and the firm’s approach to managing structural flow timing mismatches.
  - b. If yes, rank the structural flow timing mismatches by type listed in **Appendix C**, from maximum timing mismatches (1) to minimum (13). If not applicable to the firm, leave blank. Do not rank two structural flow timing mismatches types as a “tie”; report each rank 1 to 13 only once, or leave blank if not applicable to the firm.

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<sup>9</sup> Flows = transfer of cash, assets, liabilities, equity, physical assets, commodities, etc. to external parties or affiliates. Note the questions in this Flows section are not limited to just margin payments, but include the broader activities of the firm. The questions are included to help rank the magnitude and volatility of flows related to derivatives and securities to all the other flows of the firm.

<sup>10</sup> Flow stress = cash flow or settlement stress relating to the ability to transfer cash, assets, liabilities, equity, physical assets, commodities, etc. to external parties or affiliates. “Stress” is a uniqueness, quantity, magnitude, velocity, volatility, and/or frequency of flows in excess of business as usual conditions (BAU) for the firm. The firm may or may not have prepared for the flow stress using stress testing to be considered “stress”. As long as the flow is out of the ordinary compared to BAU conditions it should be considered flow stress.

<sup>11</sup> When comparing flow stresses, weight the magnitude of the stress greater than unexpected volatility. For example, Flow 1: averages 1 million with a 100,000 standard deviation, rose to 3 million in March. Flow 2: averages 100 million with a 50 million standard deviation, rose to 200 million in March. Flow 2 should be ranked with greater stress (closer to rank 1) than Flow 1 (closer to rank 13) because the magnitude of Flow 2 is much larger than Flow 1. For two flows of similar magnitude, rank the flow with greater unexpected volatility as greater stress.

<sup>12</sup> Structural flow timing mismatches: contractual flow timing mismatches lasting at least one day. For example, ongoing agreements to pay a CCP on T+0 but not receive related, offsetting payments from external counterparties until T+1 is a structural flow timing mismatch, because the firm must pay out to external counterparties before offsetting flows are received.

3. During the COVID Period, did the firm experience any material **intra-day** flow timing mismatches between intra-day flows due and intra-day flows received?
  - a. If yes, describe the source of the material intra-day flow timing mismatches and the firm’s approach to managing intra-day flow timing mismatches.
  - b. If yes, rank the intra-day flow timing mismatches by type listed in **Appendix C**, from maximum timing mismatches (1) to minimum (13). If not applicable to the firm, leave blank. Do not rank two intra-day flow timing mismatches types as a “tie”; report each rank 1 to 13 only once, or leave blank if not applicable to the firm.

## D. Margin Calls (Cleared and Uncleared)

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### i. Response Instructions

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**To the extent possible, for all of the following Margin Call related questions in Section D below differentiate (where applicable) responses between:**

- a) cleared derivatives, uncleared derivatives, or cleared securities
- b) end of day initial margin (IM), end of day variation margin (VM), intraday margin (ITD), or ad-hoc margin calls.
- c) House vs. client/counterparty accounts

### ii. Magnitude

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1. Rank the factors in **Appendix D** that affected the magnitude of **margin calls due to the firm** during the COVID Period, from most important (1) to least important (13). If not applicable to the firm, leave blank. Do not rank two factors as a “tie”; report each rank 1 to 13 only once, or leave blank. Respond separately for the factors listed in Section D.i.a) Response Instructions above.
2. Rank the factors in **Appendix D** that affected the magnitude of **margin calls due from the firm** during the COVID Period, from most important (1) to least important (13). If not applicable to the firm, leave blank. Do not rank two factors as a “tie”; report each rank 1 to 13 only once, or leave blank. Respond separately for the factors listed in Section D.i.a) Response Instructions above.

### iii. Timing

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1. **Structural** Margin Call Flow Timing Mismatches<sup>13</sup>: did the firm experience any material **structural** flow mismatches in making or receiving flows related to **margin calls**?<sup>14</sup>

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<sup>13</sup> See the Glossary and Footnote 12

<sup>14</sup> This question is in reference to the timing of margin calls only, whereas Question C.2. above refers to the timing mismatches of all of the flows of the firm, not just margin calls.

- a. If yes, describe, differentiating the narrative answer as much as possible by the factors listed in Section D.i. Response Instructions above.
  - b. If yes, rank the **structural** flow timing mismatches by type listed in **Appendix E**, from maximum timing mismatches (1) to minimum (8). If not applicable to the firm, leave blank. Do not rank two **structural** flow timing mismatches types as a “tie”; report each rank 1 to 8 only once, or leave blank if not applicable to the firm.
2. **Intraday** Margin Call Flow Timing Mismatches: did the firm experience any material **intraday** flow mismatches in making or receiving flows related to **margin calls**?<sup>15</sup>
- a. If yes, describe, differentiating the narrative answer as much as possible by the factors listed in Section D.i. Response Instructions above.
  - b. If yes, rank the **intraday** flow timing mismatches by type listed in **Appendix E**, from maximum timing mismatches (1) to minimum (8). If not applicable to the firm, leave blank. Do not rank two **intra-day** flow timing mismatches types as a “tie”; report each rank 1 to 8 only once, or leave blank if not applicable to the firm.
3. **Aggregate Margin Call Flow Delays**: did the firm experience any material delays<sup>16</sup> in **sending or receiving margin call flows**? If yes, describe,<sup>17</sup> differentiating the narrative answer as much as possible by the factors listed in Section D.i. Response Instructions above.
- a. Separately by the factors listed in Section D.i.a) Response Instructions above, provide the weighted average percentage of **margin call flows** which were **received** from counterparties on the business day when initially due, the following business day after the due date, in 2 to 5 business days after the due date, or, in greater than 5 business days after the due date, by month (separate responses for February, March and April). Provide percentages that sum to 100% for each margin call flow type and month.
  - b. Provide a narrative description of how each of these results differed from BAU, normal, non-stressed periods.

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<sup>15</sup> This question is in reference to the timing of margin calls only, whereas Question C.3. above refers to the timing mismatches of all of the flows of the firm, not just margin calls.

<sup>16</sup> For purposes of this question, ignore contractual grace periods. For example, if per contractual terms a counterparty has a 1 day grace period and therefore can always pay 1 day later than the nominal due date without repercussions: if the counterparty pays on Tuesday what was nominally due on Monday (within the grace period), report the payment arrived on the following business day after the due date.

<sup>17</sup> The narrative answer may discuss delays in both/either sending or receiving margin call flows. The percentage answers per month in Question 3.a. are only in reference to delays in receiving margin call flows.

4. Margin Call Flow Delays by Counterparty Type<sup>18</sup>: did the firm experience material delays<sup>19</sup> **sending or receiving margin call flows** by counterparty types?
  - a. If yes, describe.
  - b. If yes, rank the counterparty types by largest (1) to smallest (9) delays separately for the factors listed in Section D.i.a) Response Instructions above. If not applicable to the firm, leave blank. Do not rank two counterparty types as a “tie”; report each rank 1 to 9 only once, or leave blank if not applicable to the firm. Rank counterparties only by delays **receiving margin call flows** from the counterparties.
  - c. Were delays **sending or receiving margin call flows** concentrated in quantity and/or magnitude among a few counterparties (a few individual counterparties, not a few counterparty types), or distributed more broadly? Describe.
5. Margin Call Flow Delays by Asset Class<sup>20</sup>: did the firm experience material delays<sup>21</sup> **sending or receiving margin call flows** by asset class?
  - a. If yes, describe.
  - b. If yes, rank the asset class types by largest (1) to smallest (14) delays. If not applicable to the firm, leave blank. Do not rank two counterparty types as a “tie”; report each rank 1 to 14 only once, or leave blank if not applicable to the firm. Rank asset classes only by delays **receiving margin call flows**.
6. Did the firm transfer positive variation margin and negative variation margins at the same time? If no, describe the delay including the duration of the delay. Elaborate on the rationale for the firm’s approach.

#### iv. Policies and Procedures

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1. Did the firm make any material changes to counterparty margin call policies and procedures, including but not limited to any modifications to the timing of when initial margin and/or variation margin calls were passed onto counterparties, or how the margin calls were calculated?
  - a. If yes, describe.
  - b. If yes, indicate if these material changes were permanent or temporary.

#### v. Margin Mismatches

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1. Did the firm experience any material margining mismatches? For example, hedges where separate legs of a package of transactions are margined using different

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<sup>18</sup> See Appendix B

<sup>19</sup> For purposes of this question, ignore contractual grace periods. See Footnote 16.

<sup>20</sup> See Appendix A

<sup>21</sup> For purposes of this question, ignore contractual grace periods. See Footnote 16.

margin models and/or calculations (especially where different CCPs are counterparties to opposite sides of a multi-leg transaction), or where the firm must post variation margin to a CCP on a hedge transaction without a right to collect offsetting variation margin from the related counterparty transaction? If yes, describe.

#### vi. Collateral

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1. Did the firm elect to post cash for margin calls due from the firm to a counterparty (including CCPs), even when non-cash collateral was an eligible collateral type?
  - a. If yes, describe the primary factors that influenced the firm's decision to post cash.
  - b. If yes, list the markets (cleared or uncleared), margin call types and asset classes where this activity was most prevalent.
2. Did the firm's counterparties elect to post cash for margin calls due to the firm, even when non-cash collateral was an eligible collateral type? If yes, list the markets (cleared or uncleared), margin call types, asset classes, and counterparty types where this activity was most prevalent.
3. Did the firm engage in or provide collateral transformation services for house and/or client/counterparty accounts to facilitate margin calls? If yes, describe, including describing any material difficulties or challenges transforming collateral into cash or other collateral types suitable for posting to fulfill margin call requirements.
4. Did the firm's counterparties materially alter the type of collateral they paid, posted or transferred to the firm to meet margin calls required by the firm? If yes, describe, including how the types of collateral posted shifted compared to during BAU, normal, non-stressed periods.
5. Did the firm implement any material changes in haircuts on collateral accepted from counterparties for meeting margin requirements?
  - a. If yes, describe
  - b. If yes, quantify by the margin collateral types listed in **Appendix H**. Use weighted average haircuts<sup>22</sup> for a given collateral type to express the magnitude of haircut changes.

#### vii. Transparency

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1. Did the firm provide liquidity risk management tools to counterparties, including tools that helped manage the calculation and timing of intraday margin calls, policies

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<sup>22</sup> For example, sovereign debt usually is subject to varied haircuts depending on tenor. Provide a best-efforts estimate of the change in weighted average haircut across all collateral posted and received within the listed collateral type. The question intends to discern which margin collateral types experienced the largest changes in applied haircuts, on average.

- and procedures? If yes, describe any data and/or tools the firm provided to counterparties to help them estimate margin calls, including any material gaps and/or limitations.
2. Describe how the firm notified counterparties of margin calls. Note differences (if any) between notifications for end of day, intraday and ad-hoc margin calls.
  3. Does the firm have any recommendations on how to improve margin calls, including recommendations related to transparency and predictability? If yes, describe. Note: As appropriate, differentiate recommendations between end of day, intraday, and ad-hoc margin calls, and whether the recommendations relate to minimum CCP margin requirements, SIMM requirements or other requirements for uncleared derivatives, margin requirements set by the firm for counterparties, or other margin model requirements.

#### viii. Third-Party Vendors

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1. Did the firm use any third-party service provider(s) or vendor(s) to facilitate the calculation of and/or the notification of margin calls? If yes, name the firm(s) used, describe the services rendered, and for what products (cleared derivatives, uncleared derivatives, or cleared securities).

#### ix. Margin Lending

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1. Did the firm offer margin lending facilities to its counterparties so that its counterparties could borrow money from the firm to make margin calls to the firm and/or other parties?
  - a. If yes, describe.
  - b. If yes, estimate by week the average amount (as measured by par and/or redemption amount) lent to the firm's counterparties in USD equivalents under the margin lending facilities.

### E. Margin Calls (Cleared Only)

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#### i. Collateral

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1. Did the form of margin collateral accepted from counterparties differ from the collateral accepted by CCPs? If yes, describe separately for cleared derivatives and cleared securities markets.

#### ii. Transparency

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1. Did the firm have the data and tools available to estimate CCP margin calls prior to the call actually being issued to clearing members, including the timing of intraday and ad hoc calls?
  - a. If yes, describe.
  - b. If no, describe and identify any material gaps in data, information, and/or tools needed to perform accurate estimations of margin call amounts and timing, by

CCP, product line, asset class, and house vs. client/counterparty transactions, as applicable.

2. For CCPs where the firm is a clearing member, estimate the firm's overall level of understanding of CCP policies and procedures governing intraday, end of day, and ad-hoc margin call timing and calculation methodologies at CCPs. Estimate the firm's understanding from total understanding and comprehension (1) to complete lack of understanding (10). Estimate derivative CCPs separately from security CCPs, and intraday separately from end of day and ad-hoc calls. Leave blank if not applicable.
  - a. Provide a narrative description of the firm's level of understanding, especially including a description of any material gaps in understanding.
3. For CCPs where the firm is a clearing member, estimate the firm's good faith, best guess estimation of the firm's counterparties' overall level of understanding of CCP policies and procedures governing intraday, end of day, and ad-hoc margin call timing and calculation methodologies at CCPs. Estimate the firm's counterparties' understanding from total understanding and comprehension (1) to complete lack of understanding (10). Estimate derivative CCPs separately from security CCPs, and intraday separately from end of day and ad-hoc calls. Leave blank if not applicable.
  - a. Provide a narrative description of the firm's good faith, best guess estimation of the firm's counterparties' level of understanding, especially including a description of any material gaps in understanding.

### iii. Intermediation

1. Did the firm use its own funds intraday to meet margin calls due to CCPs on behalf of its clearing counterparties?
  - a. If yes, describe.
  - b. If yes, quantify by week the average amount in USD equivalents the firm posted or paid intraday to derivative and security CCPs (separately) on behalf of its counterparties.
2. Did the firm use its own funds overnight or longer<sup>23</sup> to meet margin calls due to CCPs on behalf of its clearing counterparties?
  - a. If yes, describe.
  - b. If yes, quantify by week the average amount in USD equivalents the firm posted or paid overnight or longer to derivative and security CCPs (separately) on behalf of its counterparties.

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<sup>23</sup> In other words, longer than intraday

## F. Margin Calls (Uncleared Derivatives Only)

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### i. Models

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1. Did the firm utilize SIMM to compute minimum uncleared regulatory IM requirements?
  - a. If yes, did the firm require a minimum amount of IM from uncleared counterparties that are in scope for the uncleared margin rules in excess of the amount computed by SIMM?
    - i. If yes, describe how the firm calculates the total amount of IM required for uncleared counterparty portfolios in excess of the amount calculated by SIMM, including the models used and what types of counterparties are required to post additional IM, by asset class.
2. Did the firm utilize other calculation methods than SIMM to calculate minimum uncleared regulatory IM requirements, such as a standardized grid from applicable laws or regulations, or other models approved for use by the firm's relevant regulatory authorities?
  - a. If yes, list the calculation methods used, and for which asset classes<sup>24</sup> the alternative models were used.
  - b. If yes, list the calculation methods used, and for which counterparty types<sup>25</sup> the alternative models were used.

## G. Counterparty Risk

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1. Did the firm make any material changes to its counterparty credit risk policies and procedures related to margin? If yes, describe.
2. Did the firm make any material changes to credit limits applied to counterparty positions or the type of credit limits imposed on those positions? If yes, describe.
3. Did the firm make any material changes regarding how credit limits were calculated? If yes, describe.
4. Is it the firm's practice to collect additional collateral from some or all of its clearing counterparties above CCP minimum margin requirements during BAU, normal market non-stressed periods? If yes, describe.
5. Did the firm require collateral from some or all clearing counterparties in amounts above CCP minimum margin requirements?
  - a. If yes, rank the factors in **Appendix D** when calculating minimum clearing counterparty collateral requirements in excess of CCP minimums, from most important (1) to least important (13). If not applicable to the firm, leave blank.

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<sup>24</sup> See Appendix A

<sup>25</sup> See Appendix B

Do not rank two entries as a “tie”; report each rank 1 to 13 only once, or leave blank.

- b. If yes, describe how the firm calculated minimum clearing counterparty margin requirements in excess of CCP minimum margin requirements.
  - i. Include in the description, as appropriate, internal models, add-ons, multipliers, and/or other methods.
  - ii. Describe how cleared margin minimum requirements for clearing counterparties differed by counterparty type, products traded, and/or counterparty trading strategies during the COVID Period.
  - iii. Compare and contrast the calculation methodology during the COVID Period to a BAU, normal market period, including any changes to anti-procyclical margin methodologies applicable to counterparty minimum margin requirements. Describe any material changes, including what factors drove changes in multipliers/add-ons (sector analysis, internal credit ratings, stress testing, asset class, positions, etc.).
6. Did the firm include anti-procyclical (APC) measures in the models used to calculate counterparty minimum initial margin requirements? If yes, describe. Differentiate responses by cleared derivatives, uncleared derivatives, and cleared securities.
7. Did the firm renegotiate uncleared counterparty credit support documentation because of the firm’s experience during the COVID period? If yes, describe any material renegotiation of counterparty credit support terms regarding margin requirements or source of payment.
8. Did the firm implement any material changes in stress testing scenarios relevant to the risk management of counterparty positions?
  - a. If yes, describe.
  - b. If yes, indicate if these material changes were permanent or temporary.

## H. Operational Risk

1. Did the firm encounter any material operational difficulties or operational risk breaches prompted by migrating staff to a remote work model? If yes, describe.
2. Did the firm experience any material change in the quantity and/or magnitude of valuation disputes with clients or counterparties? If yes, describe the primary causes of the disputes, the applicable asset classes, and product types: cleared vs. uncleared.
3. Did the firm experience any material post trade processing issues? If yes, provide details regarding:
  - a. Causes of any material post-trade processing issues, such as the use of average pricing, give-ups, or issues driven by volume and/or volatility

- b. Magnitude and frequency of any material issues
- c. Strategies for resolving such issues
- d. Elements of post-trade processing systems that require the highest level of manual intervention, especially during periods of elevated volumes or volatility. In other words, describe where bottlenecks in the post-trade processing ecosystem currently reside, and what can be done to remedy the bottlenecks so that the cleared and uncleared trading and settlement ecosystems are more operationally resilient during periods of elevated volumes or volatility.

Differentiate responses by cleared derivatives, uncleared derivatives, and cleared securities.

4. Did the firm experience any material changes in the take up of non-clearing related financial services provided to counterparties, including but not limited to examples of counterparties engaging in uncleared derivatives transactions in lieu of cleared derivatives transactions? If yes, describe.
5. Did the firm experience any material changes in the take up of clearing related financial services provided to counterparties, including but not limited to examples of counterparties engaging in cleared derivatives transactions in lieu of uncleared derivatives transactions? If yes, describe.
6. Did the firm make any material modifications to its counterparty onboarding or offboarding policies? If yes, describe.

#### I. CCP Margin Reinvestment

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1. Did the firm help CCPs execute their margin reinvestment plans, by reinvesting or managing cash and/or other assets received by CCPs as margin? If yes, describe the firm's primary roles, including any material changes in volumes or investment strategies.
2. Did the firm observe any material shift by CCPs between different types of instruments (for example, commercial bank deposits and central bank deposits)? If yes, describe.

#### J. Funding and Liquidity: Note

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The following four sections for Funding and Liquidity contain substantially the same questions. The questions are asked separately to accommodate intermediaries with different business models. Some intermediaries maintain high balances of pre-positioned liquidity resources and may not need to tap funding resources to generate cash to make payments, while other intermediaries maintain lower balances of liquidity resources, and instead rely on contingent funding resources (such as committed lines of credit) to source liquidity resources if needed.

Respondents are expected to fill in all four sections below under funding and liquidity.

## K. Funding<sup>26</sup> Supply

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1. Briefly summarize the firm’s funding strategy, both for BAU and stress periods. Describe and differentiate by secured vs. unsecured, term vs. overnight, equity vs. debt, retail vs. wholesale, as materially applicable to the firm’s business model.
2. Did the firm make any material changes to its funding sources and/or strategies? If yes, describe the material changes and how they compared to a BAU period. Note: Activation of emergency and/or contingency funding plans that were already in place prior to the COVID Period should be considered a material change.
3. Did the firm face any unexpected challenges raising cash via funding resources? If yes, describe.
4. Did the firm experience any material regional and/or cross-currency specific funding issues? If yes, describe.
5. Did the firm observe materially large cost and/or availability changes in the firm’s funding sources? If yes, summarize and differentiate by secured vs. unsecured, term vs. overnight, equity vs. debt, retail vs. wholesale, as materially applicable to the firm’s business model.
6. Did the firm make any material changes to its funding management policies and procedures?
  - a. If yes, describe.
  - b. If yes, indicate if these material changes were permanent or temporary.
7. Did the firm use specialized monitoring tools to monitor funding resources on a real-time, intraday, and/or end of day basis? If yes, describe, including the names of any tools purchased from third-party vendors.
8. Did the firm share material funding resources across affiliates, including clearing member affiliates? If yes, describe, including any measures the firm takes to make sure funding resources are not “double-counted”<sup>27</sup> across affiliates.

## L. Funding Demand

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1. Did specific market segments or counterparty types experience materially high and out of the ordinary funding demands? If yes, describe and identify (e.g., CCP, house vs. client/counterparty accounts, counterparty types, initial margin vs variation margin, as applicable).
2. Rank the aggregate demands that forced draws on funding resources, from largest (1) to smallest (3), separately for cleared derivatives, uncleared derivatives, and

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<sup>26</sup> Funding = liabilities or equity obligations that source liquid assets

<sup>27</sup> For example, if the emergency funding plans of two separate subsidiaries of a parent both rely on the same source of parent funding in the same stress scenario, would the parent be able to provide the funding resource to both subsidiaries at the same time?

- cleared securities, and for all three markets combined. If not applicable to the firm, leave blank. Do not rank two funding demand types as a “tie”; report each rank 1 to 3 only once, or leave blank if not applicable to the firm.
- a. intraday flows
  - b. end of day flows
  - c. cumulative flow demands over time
3. Rank<sup>28</sup> the flow demands from **Appendix C** that forced draws on funding resources by type, from maximum demand on funding resources (1) to minimum demand (13). If not applicable to the firm, leave blank. Do not rank two flow demand types as a “tie”; report each rank 1 to 13 only once, or leave blank if not applicable to the firm.
  4. In percentage terms estimate the change in demand on average firm funding resources due to margin calls overall and then separately for cleared derivatives, uncleared derivatives, and cleared securities businesses.
    - a. From February 2020 to March 2020
    - b. From March 2020 to April 2020
    - c. From February 2020 to April 2020
  5. Does the firm have any suggestions for ways to improve the ability of market participants to manage and mitigate funding risk stemming from margin calls? If yes, explain.

### M. Liquidity<sup>29</sup> Supply

1. Briefly summarize the firm’s liquidity management strategy, both for BAU and stress periods. Describe and differentiate by the investment strategy government vs. corporate, secured vs. unsecured, term vs. overnight, equity vs. debt, etc. as materially applicable to the firm’s business model.
2. Did the firm make any material changes to its liquidity resources and/or cash management/liquid asset investment strategies during the COVID Period? If yes, describe the material changes and how they compared to a BAU period. Note: Activation of emergency and/or contingency liquidity plans that were already in place prior to the COVID Period should be considered a material change.

<sup>28</sup> When comparing flow demands on funding, rank the magnitude of the flow only. This is slightly different than the question about “flow stress” above in Section C. Flow stress is related to both the magnitude and volatility of the flows (especially unexpected volatility); here, the question is related to what flow demands actually forced draws on funding resources. Therefore, only magnitude of the flow demand matters for the purposes of this question, not any volatility (expected or unexpected) of the flow demand.

<sup>29</sup> Liquidity = generally, high quality liquid assets that may be converted quickly into cash with no to minimal loss in value

3. Did the firm experience or observe any material issues converting high quality liquid assets into cash? If yes, describe.
4. Did the firm experience any material regional and/or cross-currency specific liquidity issues? If yes, describe.
5. Did the firm’s liquidity resources suffer materially large changes in value and/or rate of return? If yes, summarize and differentiate by government vs. corporate, secured vs. unsecured, term vs. overnight, equity vs. debt, etc. as materially applicable to the firm’s investment and cash management model.
6. Did the firm make any material changes to its liquidity management policies and procedures?
  - a. If yes, describe.
  - b. If yes, indicate if these material changes were permanent or temporary.
7. Did the firm use specialized monitoring tools to monitor liquidity resources on a real-time, intraday, or end of day basis? If yes, describe, including the names of any tools purchased from third-party vendors.
8. Did the firm share material liquidity resources across affiliates, including clearing member affiliates? If yes, describe, including any measures the firm takes to make sure liquidity resources are not “double-counted”<sup>30</sup> across affiliates.

## N. Liquidity Demand

1. Did specific market segments or counterparty types experience materially high and out of the ordinary liquidity demands? If yes, describe and identify (e.g., CCP, house vs. client/counterparty accounts, counterparty types, initial margin vs variation margin, as applicable).
2. Rank the aggregate demands that forced draws on liquidity resources, from largest (1) to smallest (3), separately for cleared derivatives, uncleared derivatives, and cleared securities, and for all three markets combined. If not applicable to the firm, leave blank. Do not rank two liquidity demand types as a “tie”; report each rank 1 to 3 only once, or leave blank if not applicable to the firm.
  - a. intraday payments/flows
  - b. end of day payments/flows
  - c. cumulative payment/flow demands over time

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<sup>30</sup> For example, if the liquidity plans of two separate subsidiaries of a parent both rely on the same liquidity resource held at the parent in the same stress scenario, would the parent be able to provide the liquidity resource to both subsidiaries at the same time?

3. Rank<sup>31</sup> the flow demands from **Appendix C** that forced draws on liquidity resources by type, from maximum demand on liquidity resources (1) to minimum demand (13). If not applicable to the firm, leave blank. Do not rank two flow demand types as a “tie”; report each rank 1 to 13 only once, or leave blank if not applicable to the firm.
4. In percentage terms estimate the change in demand on average firm liquidity resources due to margin calls overall and then separately for cleared derivatives, uncleared derivatives, and cleared securities businesses.
  - a. From February 2020 to March 2020
  - b. From March 2020 to April 2020
  - c. From February 2020 to April 2020
5. Does the firm have any suggestions for ways to improve the ability of market participants to manage and mitigate liquidity risk stemming from margin calls? If yes, explain.

## O. Additional Feedback

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1. Does the firm have any additional lessons learned during the COVID Period that might improve the stability, resiliency, and robustness of the cleared or uncleared derivative or securities market ecosystems? If yes, explain.

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<sup>31</sup> When comparing flow demands on liquidity, rank the magnitude of the flow only. This is slightly different than the question about “flow stress” above in Section C. Flow stress is related to both the magnitude and volatility of the flows (especially unexpected volatility); here, the question is related to what flow demands actually forced draws on liquidity resources. Therefore, only magnitude of the flow demand matters for the purposes of this question, not any volatility (expected or unexpected) of the flow demand.

## Data Tables: Intermediaries

All questions below refer to the “COVID Period”: **February 1, 2020 through April 30, 2020**

### A. General Submission Instructions

- Provide daily data for the COVID Period
- Report all values in USD equivalents
- As much as possible, report data by asset class listed in **Appendix A**
  - Report multiple comingled asset classes if data cannot be reported separately by asset class. Valid comingled asset classes are also listed in **Appendix A**
- Report the fair market value of non-cash margin collateral as the pre-haircut value
- See Glossary for defined terms

### B. Non-Cleared/Uncleared Tables

**Table NCT1.** Regulatory and discretionary end-of-day and intraday net variation margin call totals. Report cash margin separately from non-cash for end-of-day margin. Report end-of-day calls as gross of (separate from) the same day’s intraday calls.<sup>32</sup>

**Table NCT1.a.** Report net variation margin posted/paid by the firm as negative whole numbers. Report net variation margin collected/received by the firm as positive whole numbers. Report end-of-day calls as gross of (separate from) the same day’s intraday calls.<sup>33</sup> **Firm may elect to only report EOD values (and not break out ITD values) if necessary to meet the reporting deadline.**

**Table NCT2.** Posted and collected regulatory initial margin total daily balances (not day over day changes) and intraday initial margin calls. Report all initial margin balance values as positive whole numbers, both posted and/or received. Report end-of-day calls as gross of (separate from) the same day’s intraday calls.<sup>34</sup>

**Table NCT2.a.** End of day initial margin, cash and non-cash

**Table NCT2.b.** End of day initial margin, by counterparty type

<sup>32</sup> For example, intraday call of \$1 and same day end of day call of \$3. Depending on the contractual agreement, the end of day call \$3 may or may not provide credit for the \$1 intraday call already met earlier in the day. For purpose of this survey report the end of day call assuming it does not provide credit for the earlier \$1 intraday call (report gross). In this example, the day’s total call is \$4 (\$1 ITD and \$3 EOD, separately). Report \$1 for ITD and \$3 for EOD.

<sup>33</sup> See Footnote 32.

<sup>34</sup> See Footnote 32.

Table NCT2.c. End of day initial margin, non-cash collateral type

Table NCT2.d. Intraday initial margin, cash and non-cash

**Table NCT3.** Posted and received discretionary initial margin total daily balances (not day over day changes) and intraday initial margin calls. Report all initial margin balance values as positive whole numbers, both posted and/or received. Report end-of-day calls as gross of (separate from) the same day's intraday calls.<sup>35</sup>

Table NCT3.a. End of day initial margin, cash and non-cash

Table NCT3.b. End of day initial margin, by counterparty type

Table NCT3.c. End of day initial margin, non-cash collateral type

Table NCT3.d. Intraday initial margin, cash and non-cash

**Table NCT4.** SIMM backtesting. Compares one-day and/or ten-day SIMM-projected hypothetical profit and loss<sup>36</sup> values against actual profit and loss<sup>37</sup> values for any noncleared derivative portfolios utilizing SIMM for regulatory uncleared margin with an exceedance<sup>38</sup>. If the firm only has records of one- or ten-day profit and loss exceedances, only provide one- or ten-day exceedances. Report only one- or ten-day values if that is all that is available, but report both if available. If only one set of results is available, the firm does not need to scale<sup>39</sup> the results just to report both. Provide data only for noncleared derivative portfolios where the actual profit or loss exceeded SIMM-computed hypothetical profit or loss. Report by the SIMM risk factor and/or combined risk factors listed in **Appendix I**. Report the count of all portfolios with exceedances as positive whole numbers. Report the count of all SIMM portfolios (with or without exceedances) as positive whole numbers.

Table NCT4.a. Report noncleared derivative portfolios only where the firm's actual profit exceeded SIMM-computed hypothetical profits in any amount. Report the summed profits (from the firm's point of view) for all such portfolios combined as positive whole numbers. Report the sum of [portfolio-level actual firm profit **minus** portfolio-level regulatory initial margin collected] only where [portfolio-

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<sup>35</sup> See Footnote 32.

<sup>36</sup> Profit and loss from the point of the view of the firm.

<sup>37</sup> Profit and loss from the point of the view of the firm.

<sup>38</sup> Exceedance = actual profit or loss exceeded SIMM-computed hypothetical profit or loss for a given portfolio in any amount, no matter how small (\$1 or more). Conflicts over the universe of in-scope transactions, risk bucketing, or SIMM vs. the standard grid calculations are not considered exceedances; they are considered "disputes" for purposes of this survey. "Exceedances" assume the two parties both applied SIMM, agreed on material risk bucketing, and agreed on the list of transactions in the portfolio.

<sup>39</sup> Adjusted by the square root of 10.

level actual firm profit **minus** portfolio-level regulatory initial margin collected] is positive.<sup>40</sup>

**Table NCT4.b.** Report noncleared derivative portfolios only where the firm’s actual losses exceeded SIMM-computed hypothetical losses in any amount. Report the summed losses (from the firm’s point of view) for all such portfolios combined as negative whole numbers. Report the sum of [portfolio-level regulatory initial margin posted **plus** portfolio-level actual firm losses] only where [portfolio-level regulatory initial margin posted **plus** portfolio-level actual firm losses] is negative.<sup>41</sup>

**Table NCT5.** Top 10 counterparties by total regulatory initial margin collected<sup>42</sup> by the firm

**Table NCT5.a.** Measure the “top 10 counterparties by total regulatory initial margin collected by the firm” per asset class reported. Report all end of day initial margin balance values as positive whole numbers. Report end of day net variation margin calls as whole numbers.

**Table NCT6.** Disaggregation of the daily change in regulatory initial margin collected<sup>43</sup> into market volatility and position change components

**Table NCT6.a.** Report total daily changes in regulatory initial margin balances collected, and the daily changes in regulatory initial margin balances collected disaggregated into three components: changes due to market movements, changes due to position changes, and changes due to any other reason (a

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<sup>40</sup> For portfolios where actual firm profits exceeded SIMM-projected firm profits (see “exceedance” in Footnote **Error! Bookmark not defined.**), this calculation tallies the amount of actual firm profits at the portfolio level not covered by regulatory initial margin collected by the firm at the portfolio level, then summed. For this calculation, firm profits are positive whole numbers and regulatory initial margin balances are positive whole numbers. The question seeks to understand how much of the firm’s profits may not have been collateralized by regulatory initial margin collected.

<sup>41</sup> For portfolios where actual firm losses exceeded SIMM-projected firm losses (see “exceedance” in Footnote **Error! Bookmark not defined.**), this calculation tallies the amount of actual firm losses at the portfolio level not covered by regulatory initial margin posted by the firm at the portfolio level, then summed. For this calculation, firm losses are negative whole numbers and regulatory initial margin balances are positive whole numbers. The question seeks to understand how much of the firm’s counterparties’ profits (and by corollary, the firm’s losses) may not have been collateralized by regulatory initial margin posted.

<sup>42</sup> “Regulatory initial margin collected” only refers to counterparties posting IM to the firm (likely to a segregated triparty account by rule) to offset the risk of the counterparty’s non-performance. “Regulatory initial margin collected” **does NOT** refer to when regulatory initial margin is posted to a counterparty to offset the risk of the firm’s non-performance, but then some amount is returned to the firm (for whatever reason). Technically the firm is “collecting” some of its own posted margin in this scenario, but these flows and balances should be excluded for this analysis. Focus only on the pools of margin the firm requires counterparties to post to the firm due to the noncleared/uncleared margin rules.

<sup>43</sup> See Footnote 42.

catchall field). Report values as whole numbers. For avoidance of doubt, the total daily change in regulatory initial margin balances collected for day T is the total regulatory initial margin balance collected on day T minus the total regulatory initial margin balance collected on day T-1. Do not net these values against the regulatory initial margin balance *posted to* counterparties. The total daily changes in regulatory initial margin balances collected should match values that could be calculated from day over day changes in regulatory initial margin balances reported in Table NCT2.a. However, the three disaggregation columns in Table NCT6.a should definitely add up to the “Total Daily Change in Regulatory IM Collected” column.

### C. Cleared Tables

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**Table CT1.** Net variation margin call totals. Report end-of-day calls as gross of (separate from) the same day’s intraday calls.<sup>44</sup> Report net variation margin posted/paid by the firm as negative whole numbers. Report net variation margin collected/received by the firm as positive whole numbers.

Table CT1.a. Total net end of day variation margin calls. Gross-basis clients, net-basis clients, and house accounts. CCP requirements and actual end of day variation margin transferred.

Table CT1.b. Total net intraday variation margin calls. Gross-basis clients, net-basis clients, and house accounts. CCP requirements and actual intraday variation margin transferred.

**Table CT2.** Initial margin total daily balances (not day over day changes). Report end-of-day calls as gross of (separate from) the same day’s intraday calls.<sup>45</sup>

Table CT2.a. End of day initial margin balances. Gross-basis clients, net-basis clients, and house accounts. CCP requirements and actual end of day initial margin balances. Report all initial margin balances as positive whole numbers, both posted and/or received.

Table CT2.b. End of day initial margin balances for the top 10 counterparties as measured by initial margin required by CCPs, per asset class reported. Gross-basis clients, and net-basis clients. CCP requirements and actual end of day initial margin balances. Report all initial margin balances as positive whole numbers, both posted and/or received.

Table CT2.c. Net intraday initial margin calls. Gross-basis clients, net-basis clients, and house accounts. CCP requirements and actual net intraday initial margin calls. Report net intraday initial margin posted/paid by the firm as negative

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<sup>44</sup> See Footnote 32.

<sup>45</sup> See Footnote 32.

whole numbers. Report net intraday initial margin collected/received by the firm as positive whole numbers.

**Table CT3.** Excess margin posted to CCPs by the firm, and excess margin posted to the firm by clients and held at the firm. Report all excess margin balances as positive whole numbers, both posted and/or received.

Table CT3.a. Excess margin. Gross-basis clients, net-basis clients, and house accounts. Held at CCP, or held at the firm.

**Table CT4.** CCP intraday margin call counts. Report all margin call counts as positive whole numbers.

Table CT4.a. Count of margin calls initiated by CCPs. Gross-basis clients, net-basis clients, and house accounts. Variation and initial margin.

## D. Funding Tables

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**Table FT1.** Funding supply

Table FT1.a. Estimate the average par and/or redemption value of the firm's outstanding and committed undrawn funding resources<sup>46</sup> from external, unaffiliated parties, by week (during February, March and April), in USD equivalents, for each funding resource type listed in **Appendix F**. Report values as positive whole numbers.

Table FT1.b. Estimate the average par and/or redemption value of the firm's committed undrawn funding resources from external, unaffiliated parties, by week (during February, March and April), in USD equivalents, dedicated for use only by the cleared derivatives, uncleared derivatives, and/or cleared securities businesses. Report values as positive whole numbers.

## E. Liquidity Tables

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**Table LT1.** Liquidity supply

Table LT1.a. Estimate the average fair market value of the firm's total unencumbered liquidity resources during the COVID Period, by week (during February, March and April), in USD equivalents, for each liquidity resource type listed in **Appendix G**.

Table LT1.b. Estimate the average fair market value of the firm's unencumbered liquidity resources during the COVID Period, by week (during February, March and April), in USD equivalents, dedicated for use only by the cleared derivatives,

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<sup>46</sup> Firms do not need to provide estimates for potential, hypothetical funding dependent on uncommitted market access, such as hypothetical debt offerings or equity issuance. However, firms should report existing funds drawn from the market by type (secured debt, unsecured debt, or equity) since the draw has already been made and is committed.

uncleared derivatives, and/or cleared securities businesses, for each liquidity resource type listed in **Appendix G**.

## Glossary

Term	Definition
Ad-Hoc	Unscheduled margin calls
AGV	FSB Analytical Group on Vulnerabilities
APC	Anti-procyclical, anti-procyclicality
Backtesting	One-day and ten-day hypothetical SIMM-projected profit or loss compared to actual profit or loss
BAU	Business as usual
BCBS	Basel Committee on Banking Supervision, see <a href="https://www.bis.org/bcbs/">https://www.bis.org/bcbs/</a>
BIS	Bank for International Settlements, see <a href="https://www.bis.org/">https://www.bis.org/</a>
CCP	Central Counterparty Clearing Houses. An entity that interposes itself between counterparties to contracts traded in one or more financial markets, becoming the buyer to every seller and the seller to every buyer
Cleared	A security or derivative settled through a CCP, where the CCP becomes the buyer to each seller and the seller to each buyer for clearing members
Clearing member	A member firm or member person of a CCP
Client, customer or counterparty	Client, customer, or counterparty are used interchangeably for purposes of this survey
Client-cleared or counterparty-cleared business	Transactions novated by an intermediary clearing member and cleared by a CCP on behalf of a non-affiliate client or counterparty
COVID Period	<b>February 1, 2020 to April 30, 2020</b>
COVID, COVID-19	Coronavirus disease 2019, contagious disease and global pandemic caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) virus
CPMI	Committee on Payments and Market Infrastructures, see <a href="https://www.bis.org/cpmi/about/overview.htm">https://www.bis.org/cpmi/about/overview.htm</a>

Term	Definition
Dealer	See Intermediary
Derivative	A financial contract or instrument, the value of which is directly dependent upon (i.e., “derived from”) the value of one or more underlying assets, reference rates, securities, indices, debt instruments, commodities, other derivative instruments, or any agreed upon pricing index or arrangement
Discretionary initial margin	Initial margin required to be collected or posted by the firm or its counterparties in excess of minimum regulatory initial margin requirements. Discretionary margin also includes accounts that are not subject to regulatory margin requirements.
Discretionary variation margin	Variation margin required to be paid, received, collected or posted by the firm or its counterparties in excess of minimum regulatory initial margin requirements. Discretionary margin also includes accounts that are not subject to regulatory margin requirements.
eBIS	Secure web-based solution facilitating the exchange of information between BIS-based groups and the BIS community located world-wide, see <a href="https://www.ebis.org/">https://www.ebis.org/</a>
EOD	End of day, generally for purposes of this survey in relation to margin calls
Excess margin	Margin received/posted exceeding the minimum required amount
DF	Default Fund. A fund comprising pre-funded financial resources provided by participants to allocate losses arising in the event that one or more participants defaults on their obligations, and resources provided by the defaulting party (or parties) are not sufficient to cover such losses
Flow stress	Cash flow or settlement stress relating to the ability to transfer cash, assets, liabilities, equity, physical assets, commodities, etc. to external parties or affiliates. See Footnote 10
Flows	Transfer of cash, assets, liabilities, equity, physical assets, commodities, etc. to external parties or affiliates. See Footnote 9
FSB	Financial Stability Board, see <a href="https://www.fsb.org/">https://www.fsb.org/</a>
Funding	Liabilities or equity obligations that source liquid assets
G20	The Group of Twenty, see <a href="https://www.g20.org/">https://www.g20.org/</a>
GF	Guaranty fund. Typically part of the resource waterfall for CCPs. See Default Fund

Term	Definition
Gross-basis counterparties	Intermediary counterparties margined on a gross basis
G-SIB	Global Systemically Important Banks, see <a href="https://www.fsb.org/work-of-the-fsb/market-and-institutional-resilience/post-2008-financial-crisis-reforms/ending-too-big-to-fail/global-systemically-important-financial-institutions-g-sifis/">https://www.fsb.org/work-of-the-fsb/market-and-institutional-resilience/post-2008-financial-crisis-reforms/ending-too-big-to-fail/global-systemically-important-financial-institutions-g-sifis/</a>
Haircut	A reduction in fair market value on an asset posted as collateral, typically expressed as a percentage. Larger haircuts are generally applied to riskier or more volatile assets. For example, a 5% haircut means the asset's market value would be reduced by 5% when used to meet margin calls.
IA, Independent amount	Similar in function and purpose to Initial Margin. Generally, in reference to upfront margin/collateral posted in regards to non-cleared legacy transactions settled prior to the non-cleared margin rules compliance dates.
IM, Initial Margin	Similar in function and purpose to Independent Amount. Initial margin is collateral designed to cover potential losses during the period between a defaulter's final variation margin payment and when the remaining/surviving party hedges, novates or replaces the defaulter's position
Intermediary	A firm in the business of offering, buying, selling, or otherwise dealing or trading securities, market making in securities or derivatives, and/or entering into derivative transactions with CCPs, other dealers, or its customers for its own account or on behalf of its clients, customers and counterparties. Includes but not limited to swap dealers, broker/dealers, banks acting as intermediaries, or similar. Also referred to as a "firm" throughout the survey.
IOSCO	International Organization of Securities Commissions, see <a href="https://www.iosco.org/">https://www.iosco.org/</a>
ISDA	International Swaps and Derivatives Association, see <a href="https://www.isda.org/">https://www.isda.org/</a>
ISO	International Organization for Standardization, see <a href="https://www.iso.org/">https://www.iso.org/</a>
ITD	Intraday flows
JSGM	Joint Steering Group on Margin (composed of BCBS, CPMI, IOSCO members)

Term	Definition
JWGM	Joint Working Group on Margin, working for and with the JSGM
LEI	Legal Entity Identifier, see <a href="https://www.gleif.org/en/about-lei/introducing-the-legal-entity-identifier-lei">https://www.gleif.org/en/about-lei/introducing-the-legal-entity-identifier-lei</a>
Liquidity	Generally, high quality liquid assets that may be converted quickly into cash with no to minimal loss in value
NBFI	Non-bank financial intermediaries/intermediation
Net-basis counterparties	Intermediary counterparties margined on a net basis
Non-cleared	See Uncleared
QIS	BIS Quantitative Impact Study, see <a href="https://www.bis.org/bcbs/qis/">https://www.bis.org/bcbs/qis/</a>
Regulatory initial margin	Minimum initial margin required to be collected or posted by laws and regulations applicable to the firm and its counterparties
Regulatory variation margin	Minimum variation margin required to be paid, received, collected or posted by laws and regulations applicable to the firm and its counterparties
SCAV	FSB Standing Committee on the Assessment of Vulnerabilities, see <a href="https://www.fsb.org/about/organisation-and-governance/members-of-standing-committee-on-assessment-of-vulnerabilities/">https://www.fsb.org/about/organisation-and-governance/members-of-standing-committee-on-assessment-of-vulnerabilities/</a>
SCN	FSB Steering Committee Group on Non-Bank Financial Intermediation (NBFI), see <a href="https://www.fsb.org/work-of-the-fsb/financial-innovation-and-structural-change/non-bank-financial-intermediation/">https://www.fsb.org/work-of-the-fsb/financial-innovation-and-structural-change/non-bank-financial-intermediation/</a>
Settlement flow	Payments related to the contractual settlement of financial contracts, including but not limited to coupon payments, security purchases, upfront payments, ongoing derivative payments, option exercise payments, etc. Generally, <u>excludes</u> margin call payments and flow.
SIMM	ISDA Standard Initial Margin Model for non-cleared OTC derivatives, see <a href="https://www.isda.org/category/margin/isda-simm/">https://www.isda.org/category/margin/isda-simm/</a>
Structural flow timing mismatches	Contractual flow timing mismatches lasting at least one day. For example, ongoing agreements to pay a CCP on T+0 but not receive related, offsetting payments from external counterparties until T+1 is a structural flow timing mismatch, because the firm must pay out to external counterparties before offsetting flows are received. See Footnote 12

Term	Definition
Top X Counterparty	Determined by amount of initial margin received by the firm in USD equivalents, in descending order
Uncleared	A security or derivative settled bilaterally instead of cleared via a CCP
Uncleared margin rules	Minimum global standards for margin requirements for non-centrally cleared derivatives, see <a href="https://www.bis.org/bcbs/publ/d499.htm">https://www.bis.org/bcbs/publ/d499.htm</a>
VM, Variation Margin	Payments or collateral paid, received, posted or collected to cover changes in the fair market value of a transaction or a portfolio of transactions. VM is typically exchanged daily in cash, paid by the party with a mark-to-market loss to the party with a mark-to-market gain.
Volatility and volume impact decomposition	Decomposing margin changes into components, including position changes, volume, volatility, and/or model changes

## Appendix A: Asset Classes

Category	Asset Class
Co-Margined	Multiple Asset Classes Co-Margined – Any Asset Class
Co-Margined	Multiple Asset Classes Co-Margined – Derivatives Only
Derivatives	Commodities
Derivatives	Credit
Derivatives	Equity
Derivatives	Exchange-traded (cleared futures and/or options) <sup>47</sup>
Derivatives	Foreign Exchange
Derivatives	Interest Rates
Derivatives	Other
Funding	Repurchase Agreements
Funding	Security Lending
Other	Other
Securities (cash)	All other securities ex-equity
Securities (cash)	Equity

<sup>47</sup> List cleared futures and options under “Exchange-traded” instead of the discrete asset class. For example, US Treasury futures are “Derivatives – Interest Rates”. However, report US Treasury futures under “Derivatives – Exchange-traded”

## Appendix B: Client, Customer or Counterparty Types

Asset manager
Bank or bank subsidiary
CCP
Government entity
Hedge fund/leveraged speculator
Insurance company
Non-financial institution
Non-bank other financial institution
Pension fund

## Appendix C: Flow Types

Flow Category	Flow Type
Derivative CCPs	Initial margin flows
Derivative CCPs	Variation margin flows
Derivative CCPs	Settlement flows
Derivative CCPs	Default or guaranty fund flows
Security CCPs	Initial margin flows
Security CCPs	Variation margin flows
Security CCPs	Settlement flows
Security CCPs	Default or guaranty fund flows
Uncleared Derivatives	Initial margin and/or independent amount flows
Uncleared Derivatives	Variation margin flows
Uncleared Derivatives	Settlement flows
Uncleared Securities	Settlement flows
Other	All other aggregated flows unrelated to the a) cleared or uncleared, and/or b) derivative or securities businesses

## Appendix D: Factors

Anti-procyclicality tools
Change in haircut applied to posted collateral
Change in model parameters
Change in posted collateral value
Creditworthiness
Directionality of risk positions
Entity type/classification
Failure to pay or delay in payment of margin call
Market volatility
Position size/materiality
Products/asset classes traded
Trading strategy
Transaction volume

## Appendix E: Margin Call Flow Types

Flow Category	Flow Type
Derivative CCPs	Initial margin flows
Derivative CCPs	Variation margin flows
Derivative CCPs	Default or guaranty fund flows
Security CCPs	Initial margin flows
Security CCPs	Variation margin flows
Security CCPs	Default or guaranty fund flows
Uncleared Derivatives	Initial margin and/or independent amount flows
Uncleared Derivatives	Variation margin flows

## Appendix F: Funding Resource Types

Secured debt
Unsecured debt
Repurchase agreements
Secured lending
Equity & preferred stock
Committed, secured, and undrawn financing lines from unaffiliated third parties (report remaining undrawn balance available)
Committed, unsecured, and undrawn financing lines from unaffiliated third parties (report remaining undrawn balance available)

## Appendix G: Liquidity Resource Types

Central bank reserves/deposits
Insured cash deposits in an unaffiliated depository institution
Money market instruments
Other
Sovereign debt
Uninsured cash deposits in an unaffiliated depository institution
Vault cash

## Appendix H: Margin Collateral Types

Cash
Corporate debt
Equities/ETFs
Letters of credit
Mortgage-backed securities
Precious metals
Sovereign agencies
Sovereign debt, domestic
Sovereign debt, foreign
Supranational debt

## Appendix I: SIMM Risk Factors

All SIMM Risk Combined
Commodity Risk
Credit Non-Qualifying Risk
Credit Qualifying Risk
Equity Risk
Foreign Exchange Risk
Interest Rate Risk