

APPROVED BY THE MARKET RISK ADVISORY COMMITTEE
FOR CFTC CONSIDERATION
JULY 21, 2020



Report on CCP Discounting Transition Tabletop Exercise

Market Risk Advisory Committee
Interest Rate Benchmark Reform Subcommittee

July 21, 2020

Background on CCP Discounting Transition Tabletop Exercise

- On December 11, 2019, the CFTC's Market Risk Advisory Committee (MRAC) voted to hold a tabletop exercise regarding CME Clearing (CME) and LCH Limited's (LCH's) single-step proposals for the transition of discounting and price alignment interest for certain products to the secured overnight financing rate (SOFR), scheduled for October 2020. The MRAC's Interest Rate Benchmark Reform Subcommittee (Subcommittee) was tasked with the planning and execution of the exercise. Due to COVID-19, the Subcommittee opted to have a "virtual" table top discussion because of the complexities associated with conducting a "virtual" trading simulation.
- The five-hour interactive discussion among Subcommittee members on June 2, 2020 used scenario analysis to identify areas that could strengthen the current discounting transition proposals. Scenarios considered were the following:
 1. Processes at Both CCPs go According to Plan
 2. Failed Auction for Discounting Risk Swaps
 3. Operational Failure
 4. Member Default
 5. FCM Not Operationally Prepared for CCP Discounting Transition
 6. Prefunding Needs / Risk Limits
 7. COVID-19 Related Interruptions
- The Subcommittee drew upon insights gained from the tabletop exercise to provide recommendations to CCPs, other market participants, and Regulators to improve likelihood of a successful discounting transition in October 2020.

SECTION 1

Tabletop Objectives and Key Recommendations

Key Objectives

Understand Issues

1. Enhance understanding, especially between stakeholder groups, of expected transition period execution.
2. Expose misunderstandings between stakeholder groups.
3. Explore how participants would react to/address problem scenarios, in particular, interactions between those reactions.
4. Highlight (but not reconcile) differences between current proposals from CME and LCH.
5. Inform CME and LCH about market awareness of technical differences, similarities, and interactions between their approaches.
6. Flag potential weaknesses in each plan and overall market preparedness based on scenario analysis.

Address Issues

1. Help CCPs develop actions that can be taken to address identified problems.
2. Advise MRAC on any actions the CFTC can take to improve execution of the discounting transition in October 2020.
3. Determine if any relief / guidance should be requested of other US regulators.

Key Issues and Insights from the Tabletop Exercise

Key Issues

- There is a lack of understanding among market participants about precise timing of discounting transition milestones, as well as dynamics of CME and LCH auction processes.
- An auction in which some or all of allotted discounting risk swaps are not liquidated despite end user's election to offload these swaps could be potentially disruptive to the pricing and liquidity of SOFR instruments leading to a negative outcome for the market overall.
- Lack of congruency between CCP-mandated dates by which market participants must finalize elections to offload discounting risk swap compensation may create confusion or perceived advantages for certain market participants.
- Major differences between the CCP plans may create significant operational and market risk for participants over the discounting transition period.

Key Insights from Tabletop

- Enhanced education regarding discounting transition is needed for all involved parties.
- Risk mitigation strategies ahead of discounting transition should be considered; examples include trade compression and re-couponsing.
- Internal preparation and proactive engagement by all impacted stakeholders in industry preparations is critical to produce a positive outcome for the market.

Recommendations from the MRAC Subcommittee

Recommendations for CCPs

- Produce detailed playbooks which could be shared with stakeholders to document step by step processes for successful and fallback scenarios (including auction failure scenario) and a list of reports the CCPs will make available to FCMs and clients.
- Establish clear list of factors that would impact go/no-go decision for transition, potentially including readiness attestations from FCMs and key vendors.
- Intensify industry education regarding discounting transitions and tailor such education to different constituencies and sophistication levels.
- Consider a CME and LCH dress rehearsal to occur in tandem on the same day (to include auction process and compensation) with industry participants, prior to October.

Recommendations for Futures Commission Merchants (FCMs)

- Intensify client outreach and education to improve transparency and information flow regarding discounting transition consequences, elections and milestones.
- Understand roles and responsibilities regarding facilitation of client elections and flows.
- Consider lessons learned from €STR/EONIA transition in July 2020 (which will not involve an auction process).

Recommendations for Buy-Side Participants

- Ensure operational and trading readiness for elections process and potential scenario where parties that opt out of discounting risk swap compensation nevertheless receive residual or full allotment of such swaps.
- Consider strategies to de-risk discounting risk swaps auction process ahead of transition and prepare for liquidation in the market.
- Consider lessons learned from €STR/EONIA transition in July 2020 (which will not involve an auction process).

Recommendations for Regulators

- Consider implications of Part 43 and other global real-time public reporting requirements for discounting risk swaps vis-a-vis potential concerns that broader market transparency into auction portfolios may disincentivize aggressive bidding and therefore potential benefits of the auctions. Also consider implications of reporting / not reporting on transactions that are purely intended to give effect to cash compensation payment.
- Confirm treatment and consider relief from tax and accounting implications of pre-hedging auction related exposures.
- Consider other areas for no action or interpretive relief that would facilitate discounting transition, potentially including relief in the uncleared market for swaptions and amendments to credit support annexes (CSAs) as proposed by the ARRC in its June 16th letter to Division of Swap Dealer and Intermediary Oversight.

SECTION 2

Overview of CME and LCH Planned Approaches

Summary of CME's Planned Approach

- CME Group has worked with market participants and industry groups to develop a plan for transitioning price alignment and discounting for USD OTC cleared swaps from the daily Effective Federal Funds Rate (EFFR) to SOFR.
- **Scope:** Cleared US Dollar interest rate swap products at CME (IRS, OIS, FRAs, Basis, ZCS, Swaptions).
 - CME SOFR index swaps are excluded from the transition as they are already using SOFR discounting and price alignment.
 - CME believes market practitioners should continue to evaluate a future date for transitioning additional IRS currencies that contain a US Dollar-funding component, taking into consideration potential impacts on adjacent FX forward and cross-currency swap markets.
- **Transition Date:** Close of Business October 16th, 2020.
- **Transition Process:** Following the standard EOD cycle using EFFR discounting/PA on Friday, CME will generate a discounting transition report that provides the NPV of all trades under SOFR discounting and corresponding cash adjustment amounts needed to account for the change in discounting rate.
- **Re-Hedging Process:**
 - By changing the discounting curve, CME effectively moves the discounting risk of all participants from EFFR to SOFR.
 - To mitigate re-hedging costs CME will book a mandatory series of EFFR/SOFR basis swaps to participants' accounts.
 - These basis swaps will approximately restore participants back to their original discounting risk profile at the portfolio level, and will be booked at closing curve levels (\$0 NPV).
- **Auction:** On Monday October 19th, CME will facilitate an auction for participants looking for an efficient way to unwind their basis swaps.
- Further information on CME's proposal can be found [here](#).

Summary of LCH's Planned Approach

- In support of the ARRC Paced Transition Plan, LCH plans to transition to SOFR discounting for USD products as follows:
 1. LCH plans to change the discounting and PAI/PAA¹ on all SwapClear USD-discounted products (including inflation, MXN and non-deliverable currencies²) from Fed-Funds to SOFR;
 2. LCH plans to apply cash and swap compensation to all accounts with open USD-discounted positions (including inflation, MXN and non-deliverable currencies²) on the conversion date;
 3. Client accounts will be able to elect for cash-only compensation by notifying LCH via their Clearing Broker;
 4. A cash settlement (auction) process will be used to close out the unwanted compensating swaps. A separate mid-setting auction will be held the same day to provide reference for cash compensation calculations across the whole service.
 5. LCH is targeting a conversion date of October 16th, 2020.
- The above process has been designed to meet the industry-wide objective to transition the cleared swap market to SOFR without compromising market stability or causing unnecessary disruption.
- The design is intended to be resilient in a wide range of scenarios, operationally tractable yet with a reasonable degree of flexibility for customers with specific needs.
- Key design decisions have been subject to extensive consultation with LCH members and clients and have been communicated broadly to the market.
- Further information on LCH's proposal can be found [here](#).

1. Price Alignment Interest/Price Alignment Amount

2. The eight non-deliverable currencies are KRW, CNY, INR, BRL, COP, CLP, THB, TWD

Differences Between the Plans

	CME	LCH
Option to Not Receive Discounting Risk Swaps	No	Yes
Timing of Auction	Monday, October 19 th	Friday, October 16 th
Cash Compensation SOFR Valuation Methodology (EOD on Friday, October 16th)	Calculated using EOD SOFR curve	Calculated using levels from mid-setting auction

Timeline of Key Milestones in Discounting Transition



APPENDIX

Review of Tabletop Scenario Analysis

Scenario 1: Processes at Both CCPs go According to Plan

Topic	Viewpoints	CME Response	LCH Response
Auction Portfolio Transparency	<ul style="list-style-type: none"> • Market-Maker expressed concerns about auction winners having their positions known to the market (“winners’ curse”). 	<ul style="list-style-type: none"> • <u>Neither size nor direction</u> to be disclosed prior to the auction. • <u>Size</u> will be disclosed to participating bidders under NDA at time of auction. • Only auction winners will know direction of portfolio. • To further protect auction bidders, CME may request relief from real-time reporting requirements. 	<ul style="list-style-type: none"> • Indicative <u>size and direction</u> of the auction portfolio intended to be made public in mid-Sept with a refresh at the beginning of October. Final size and direction to be confirmed on 10/15 (based on positions as of EOD 10/14). • Size and direction of the risk would then be known and therefore priced into the market well in advance of the auction, which should ensure that the auction price is a true market price.
Competitive Dynamics	<ul style="list-style-type: none"> • Asset Manager questioned if publicly known max loss limits for each auction would disincentivize aggressive bids inside this limit. • Other asked if differences between EOD curves on 10/16 would provide dealers with incentives to transfer exposures between CCPs. 	<ul style="list-style-type: none"> • Max loss limit is a client-specific limit based on portfolio of exposures similar to a limit order concept; dealers can only see the net max loss limit. • Due to friction costs, it is unlikely one could recognize significant gain by transferring exposures between CCPs. 	<ul style="list-style-type: none"> • Revenue opportunity inherent in auction should incentivize economic bids inside of max loss limit. • Loss limits will be set based on refreshed liquidity data so should merely protect against bad/off market bids.
Risk Taking Capacity	<ul style="list-style-type: none"> • Asset Manager described a finite daily risk-taking capacity from dealer community, and questioned how potential auction size compares to this limit. 	<ul style="list-style-type: none"> • Difficult to estimate auction size until after opt-out decision are finalized. 	<ul style="list-style-type: none"> • Difficult to estimate auction size until after opt-out decision are finalized (size to be made public soon thereafter).
Decision Making Timeline	<ul style="list-style-type: none"> • End User noted that it was unfair for opt-out decision at LCH to be finalized in September, when auction bidders have several weeks to finalize their views on bidding. • Asset Manager felt that LCH should delay its September 4 opt-out notification deadline. 	<ul style="list-style-type: none"> • Clients will have until October 2nd to finalize decisions to auction off discounting risk swaps. • Clearing firms will have until October 9th to finalize client elections and auction agreements. 	<ul style="list-style-type: none"> • Earlier deadline for opting out of discounting risk swaps promotes transparency around size of auction portfolio and auction participant readiness, but LCH is willing to consider delaying the publication date if required.

Scenario 2: Failed Auction for Discounting Risk Swaps

Participants who wish to offload discounting risk swaps may receive some or all of their allotted swaps due to insufficient demand in the auctions, potentially creating additional market disruption

Topic	Viewpoints	CME Response	LCH Response
Operational Capacity to Process Risk Compensation	<ul style="list-style-type: none"> End User and Asset Manager noted that the possibility of a failed or partial-fill auction necessitates that buy-side market participants should build the operational capacity to process discounting risk swaps. 	<ul style="list-style-type: none"> Partial fill auction is not possible in CME's process. Operational readiness is important part of CME's client checklist. CME will host dress-rehearsal to test operational readiness. 	<ul style="list-style-type: none"> Operational readiness is important part of LCH's client checklist. LCH will host dress-rehearsal to test operational readiness.
Economic Risk	<ul style="list-style-type: none"> Asset Manager noted that market volatility implied in a failed auction could result in offloading allocated risk compensation at significant costs relative to market rates. Market-Maker proposed that clients concerned about receiving significant and unwanted discounting risk swaps may consider 're-couponing' their positions prior to the auction. 	<ul style="list-style-type: none"> Clients can choose to hedge discounting risk swap exposures prior to auction date. Netting benefits of auction across tenor buckets may be realized to lessen risk of a failed auction. 	<ul style="list-style-type: none"> Discounting risk swaps are intended to mitigate economic risk.
Compliance-Related Issues	<ul style="list-style-type: none"> Asset Manager and Other expressed concern about how dealers might be able to provide liquidity if they have prior knowledge regarding auction results. 	<ul style="list-style-type: none"> Masking size and direction of the auction to the greatest extent possible incentivizes aggressive bidding and improves probability of a successful auction. 	<ul style="list-style-type: none"> Transparency on auction size intended to be provided to the broader market, eliminating "prior knowledge" issue.

Scenario 3: Operational Failure

Operational failure may provide challenges to booking of cash and/or discounting risk swaps, and could impair auction processes

Topic	Viewpoints	CME Response	LCH Response
Increased Testing Opportunities	<ul style="list-style-type: none"> • Market-Maker inquired if there would be a dress rehearsal to test various operational processes. 	<ul style="list-style-type: none"> • There will be an extended testing period prior to the discounting switch, likely to last two months. • Testing will be done in two phases: one focused on the booking of cash and risk compensation, and the other focused on auction mechanics. 	<ul style="list-style-type: none"> • LCH has executed tests and will continue to do so until October. • Further dress rehearsal exercises planned for August and September.
Reliance on 3 rd Party Vendors	<ul style="list-style-type: none"> • Market-Maker asked if there was any reliance on 3rd party vendors and if so, what is their likely state of readiness. 	<ul style="list-style-type: none"> • CME has been working closely with external vendors to ensure readiness, though they are not directly dependent on vendors for the auction process. 	<ul style="list-style-type: none"> • LCH has been working closely with external vendors to ensure readiness, though they are not directly dependent on vendors for the auction process.
'Go / No-Go' Decision and Contingency Plans	<ul style="list-style-type: none"> • End User asked if one CCP's inability to go forward with October discounting transition would impact the other CCP's ability to execute their transition. • Market-Maker asked if either CCP had considered a backup date, in case unable to execute the discounting transition in October. 	<ul style="list-style-type: none"> • CME noted that EOD Friday is the 'point of no return' (i.e. once cash and discounting risk swaps are processed, the auction must proceed on Monday). • CME intend to consult on potential backup dates and procedures. 	<ul style="list-style-type: none"> • It is possible for LCH to proceed while CME reschedules to a backup date, though market feedback has been clear it is suboptimal for CCPs to conduct their transitions at materially different times. • Have not determined a backup date, but would need more than a week. May need to reconfirm client opt-out elections, depending on cause of delay.

Scenario 4: Member Default

Member default could necessitate a default auction, which may impair ability or risk appetite of other members to participate in discounting risk swaps auctions

Topic	Viewpoints	CME Response	LCH Response
Potential to Delay Discounting Switch	<ul style="list-style-type: none">• Facilitator asked if a member or client default could occur at the same time as the auction, or if that might necessitate a delay of the discounting switch altogether.• Market-Maker and End User proposed that each CCP create a transition playbook that prescribes how timing and magnitude of defaults could impact discounting transition.• Market-Maker noted that market may not have capacity to handle default auction and discounting risk swap auction concurrently.	<ul style="list-style-type: none">• Noted that if the default occurred prior to the 'cut-off time' (EOD 10/16), CME can communicate with members to understand if there is sufficient appetite to continue discounting transition.• If the auction continues, the defaulting member would be excluded from participating.• Simultaneous execution of a default auction and discounting transition could present market safety and soundness concerns.	<ul style="list-style-type: none">• Clearing member default immediately prior to / on Auction Date could pose significant risk of delaying the discounting transition, though a client default is viewed as less compromising to the timeline.• The focus of the discounting transition is a successful auction, and it's difficult to see how this could happen if LCH is also auctioning off a member portfolio. Note LCH process is intended to be single day.

Scenario 5: FCM Not Operationally Prepared for CCP Discounting Transition

FCM operational constraints may impact clients as well as auction dynamics

Topic	Viewpoints	CME Response	LCH Response
Transferring Positions Between FCMs	<ul style="list-style-type: none">• End User proposed that positions can be moved between FCMs if clients are given sufficient notice of a particular FCMs operational constraints.• End User noted that if an FCM is not operationally capable of executing the discounting transition, they may not be operationally capable of migrating client positions.	<ul style="list-style-type: none">• CME does not foresee operational issues as the discounting transition will leverage existing workflows.• Willing to work with clients to migrate positions leading up to auction.• It is prudent for clients to have alternative FCM relationships ready and available.	<ul style="list-style-type: none">• LCH has discussed with FCMs and not expecting operational issues.• FCM responsibilities on behalf of their clients are only to facilitate election of discounting risk swap opt-out (no ongoing FCM intervention required although members of FCM group will be bidders in the auction).
FCM Responsibilities in the event of failed or partial-fill auction	<ul style="list-style-type: none">• Market-Maker asked who is responsible for discounting risk swap liquidation in the event the CCP auction does not provide complete offloading of risk compensation.	<ul style="list-style-type: none">• This would become a bilateral conversation between the client and their FCMs.	<ul style="list-style-type: none">• This would become a bilateral conversation between the client and their FCMs.

Scenario 6: Prefunding Needs / Risk Limits

Client receipt of discounting risk swaps may have margin requirements, and client participation in discounting risk swaps auctions may have client risk limit implications

Topic	Viewpoints	CME Response	LCH Response
FCM Knowledge of Client Exposures	<ul style="list-style-type: none"> • Facilitator asked how client exposures will be communicated to FCMs in order to facilitate prefunding needs / risk limits. 	<ul style="list-style-type: none"> • Clearing member firms will receive detailed client exposure reports from CME. • Note that discounting risk swaps are booked 'at-market', and no IM or VM will be calculated for these swaps on the transition date. • Auction costs to participants unwinding their discounting risk swaps are booked as fees. 	<ul style="list-style-type: none"> • Detailed reports will be provided in advance, including "what if" IM requirement analysis. • Note that discounting risk swaps are booked 'at-market', and therefore have no VM impact. • Auction costs to participants unwinding their discounting risk swaps are booked as fees.
Client Bidding in Auction	<ul style="list-style-type: none"> • Facilitator asked if client bidding activity in the auctions are subject to FCM approvals. 	<ul style="list-style-type: none"> • On October 9th, clients that intend to bid in the auction will need to get pre-approval from clearing member firms. • Approximate max size of auction will be known and communicated to auction bidders to facilitate approvals. • Clients bidding in the auction must go through FCMs. 	<ul style="list-style-type: none"> • Clients not able to bid in the auctions directly.

Scenario 7: COVID-19 Related Interruptions

Operational and economic challenges of transition may be exacerbated with parties working remotely

Topic	Viewpoints	CME Response	LCH Response
Business Continuity Planning	<ul style="list-style-type: none">• Facilitator asked if CCPs feel comfortable executing discounting transition if their respective teams are working remotely.• Market-Makers noted that key person risk may exist with certain traders or operations experts that should be mitigated.	<ul style="list-style-type: none">• Employees have been predominantly working remotely since March 2020, and planning for a considerable portion to still be working remotely in October.• Noted that plan held up well during volatile markets earlier in the year when teams were largely working remotely.	<ul style="list-style-type: none">• Largely working from home currently, and have undergone several successful releases during this period.• Feels comfortable executing discounting transition in current environment if required.

Members of the Market Risk Advisory Committee Interest Rate Benchmark Reform Subcommittee (May 11, 2020)

	<u>Member</u>	<u>Primary Representative</u>	<u>Position Title</u>
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3.	Barclays	Tyler Wellensiek	Managing Director and Head of Official and Financial Institutions Rates Sales
4.	BlackRock	Jack Hattem	Deputy CIO, BlackRock Obsidian Fund
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10.	CME Group	Agha Mirza	Managing Director and Global Head of Interest Rate Products
11.	CoBank ACB	James Shanahan	Vice President – Financial Regulatory Compliance

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	<u>Member</u>	<u>Primary Representative</u>	<u>Position Title</u>
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18.	HSBC	Neil Middleton	US CRO, GBM and CMB and CRO, US Swap Dealer
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21.	JP Morgan	Marnie Rosenberg	Managing Director and Global Head of Clearinghouse Risk & Strategy

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