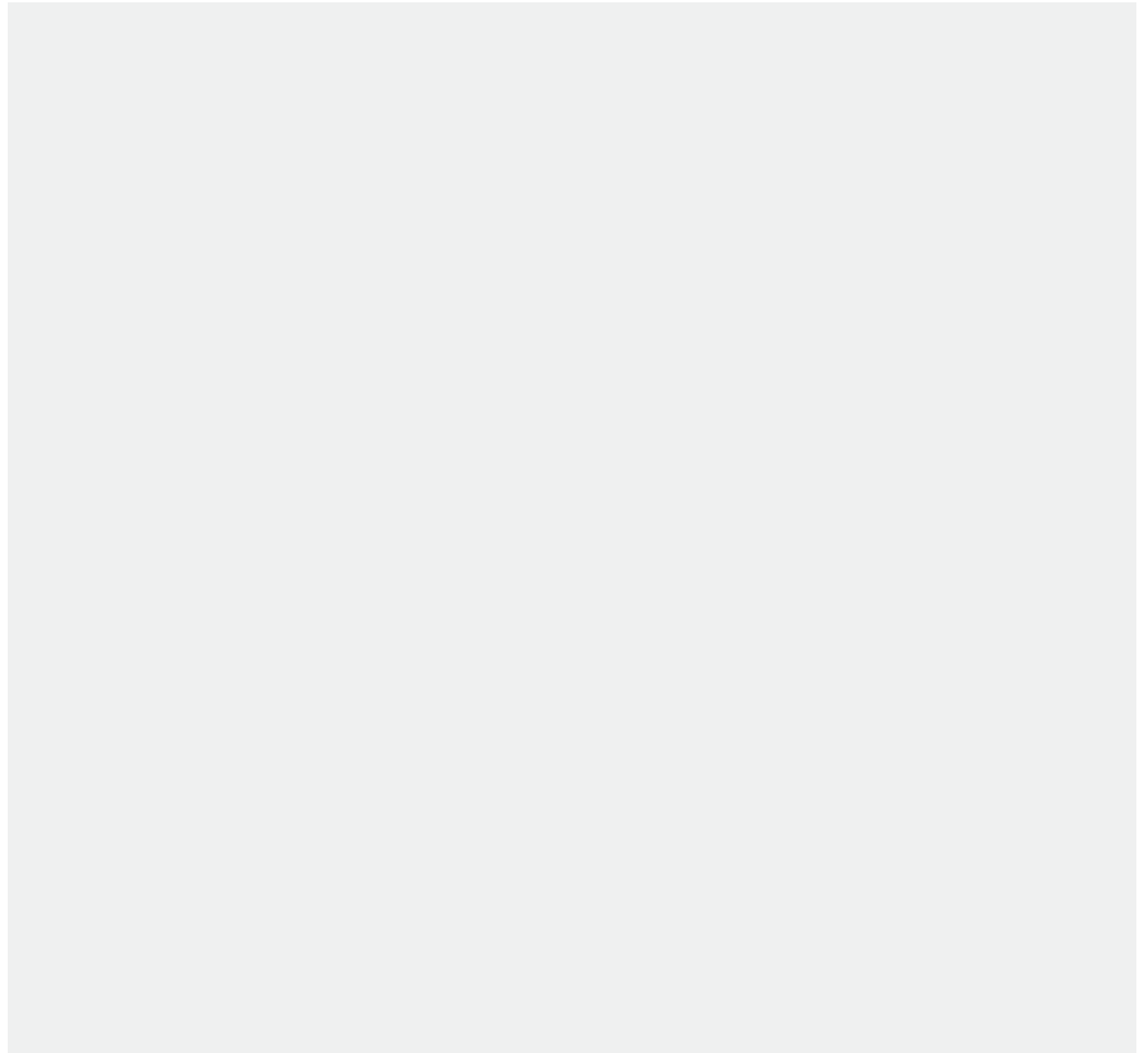


SwapClear USD LIBOR Conversion Quick Guide

LCH The Markets'
Partner

SwapClear



This conversion process is designed as a backstop to facilitate the conversion where participants have been unable to convert their USD LIBOR risk arising from LCH-cleared swaps in the market or otherwise. This document is designed to provide SwapClear participants with a high-level overview of the SwapClear USD LIBOR Conversion process, including timelines, operational design and trade booking considerations, and a summary of the reporting and analytical tools supporting the conversion process.

The following information should be supplemented with the USD LIBOR Conversion Operational Considerations deck available on the [SwapClear Knowledge Centre](#).

We encourage participants to contact LCH with questions or for additional information.

01. Timelines

LCH will perform the USD Conversion in a 2-tranche process, with a split by product type across two dates, and it intends to test the conversion process via Dress Rehearsals with its Members as per the below table.

Event	Event Date	Portfolio Snap Date
Dress Rehearsal #1*	Saturday 25th February 2023	EOD Friday February 24th, 2023 (UAT Environment)
Dress Rehearsal #2*	Saturday 1st April 2023	EOD Friday March 31st, 2023 (UAT Environment)
Tranche 1 Conversion	Saturday 22nd April 2023	EOD Friday April 21st, 2023
Tranche 2 Conversion	Saturday 20th May 2023	EOD Friday May 19th, 2023

**The Dress Rehearsal events are intended for Direct Member participation. Clients that are interested in participating should contact LCH to discuss the dress rehearsal in more detail.*

02. Conversion Scope

Tranche 1	Tranche 2
USD-LIBOR VNS (Variable Notional Swaps, aka "Amortizers"), where there is outstanding variability in the notional amount, fixed rate and/or floating rate spread	USD-LIBOR vs USD-Federal Funds basis swaps
	USD-LIBOR vs Fixed IRS*
	USD-LIBOR vs USD-LIBOR basis swaps
USD-LIBOR ZCS	USD-LIBOR vs USD-SOFR-OIS Compound basis swaps

**Includes trades with historical (but no longer outstanding) variability in their notional amount, fixed rate and/or floating rate spread.*

03. Conversion Out of Scope

Any USD LIBOR trade that either:

01. is fully fixed before the cessation date; or
 02. matures before the cessation date,
- will not be eligible for conversion.

04. Treatment of Basis Swaps

LCH will not undertake a mandatory basis swaps splitting exercise prior to conversion. Instead, as from 12th December 2022, SwapClear users have the ability to use the Unilateral Basis Splitting Tool in order to fully control and optimize their basis swaps portfolio both before and after the USD LIBOR conversion events. Any LIBOR/LIBOR and LIBOR/SOFR basis swap that is not unilaterally split and is outstanding at the point of conversion will be converted by LCH into a SOFR/SOFR basis swap.

For more information on the Unilateral Basis Swap Splitting Tool, please see the appendix.

05. Trade Booking Considerations

USD LIBOR trades outstanding at the point of initiation of the conversion weekend will be operationally terminated. LCH will create SOFR equivalent trades as conversion process outputs, which will retain the accrual periods on the original USD LIBOR contract and incorporate the ISDA/BISL Spread Adjustment to maximise cashflow continuity, i.e. the LIBOR floating rate will be replaced by the relevant compounded SOFR plus the non-compounded spread adjustment. Full details regarding trade booking considerations are below.

The following tables provide an illustrative mapping approach for converting a USD LIBOR vs Fixed swap into a SOFR OIS. For the avoidance of doubt, final FpML representation will be made available via the LCH Portal. The Operational Considerations deck contains additional details around other USD LIBOR structure types.

Swap Leg	Feature	Comment
Fixed Leg	All details to remain the same	
Floating Leg	Notional	Same as the original USD LIBOR trade
	Roll Convention	Same as the original USD LIBOR trade
	Effective Date	Same as the original USD LIBOR trade
	Maturity Date	Same as the original USD LIBOR trade
	Business Day Convention	Same as the original USD LIBOR trade, including Adjusted/Unadjusted specification.
	Spread	Any contractual spread will be applied on the RFR leg, same as it was on the original USD LIBOR trade (i.e. no adjustment). A spread adjustment (SA) will be populated on the SOFR leg (as defined by the original index/reset tenor of the USD LIBOR swap) in addition to any contractual spread. Treatment for stubs: the SOFR trade will carry over the regular period SA, not an interpolated SA. Note, LCH will cash compensate for the difference in spread value.
	Index	The new index will become the corresponding SOFR to the converted USD LIBOR and will be booked under the ISDA 2021 FRO label.
	Day Count Fractions	Same as the original USD LIBOR trade
	LIBOR Coupon Preservation	USD LIBOR coupons with all USD LIBOR fixings occurring between conversion date and permanent cessation date will be preserved via overlays.
	Fixings	As per vanilla OIS conventions (no offsets/lags/backward shifts). For USD LIBOR trades with non-standard fixing lags, these will be converted to standard fixing for the SOFR trade, i.e. 0 days. Any initial fixing applied to the original trade will not be carried across to the new SOFR swap.
	Fixing Centres	These will be as per the default convention for the SOFR index. Additional fixing centres will not be persisted onto the new SOFR trade.
	Payment Lag	To be derived from the underlying SOFR index payment offset convention, i.e. a 2-business-day payment lag will be applied.
	Payment Calendar	Same calendar(s) as the original USD LIBOR trade*
Fees with Future Payment Dates	Same as the original USD LIBOR trade	

**In case the parties included additional financial centres for roll/payment dates in the original trade (e.g. USNY/GBLO), the converted trade will persist all of such payment calendars.*

06. Trade Booking Considerations (Fixing & Payment Lags)

Currency	Feature	USD LIBOR Booking	SOFR Booking	Overlay USD LIBOR Leg	Overlay SOFR Leg
USD	Fixing Lag & Fixing Center	-2D/GBLO	0D/USGS	-2D/GBLO	0D/USGS
	Payment Lag	0D/USNY	2D/USNY	0D/USNY	2D/USNY

07. USD LIBOR Coupon Preservation

LCH will use overlay bookings to preserve representative LIBOR fixings before the index cessation date and any such representative periods. The following table provides the number of overlay bookings each account type can expect to receive based on the product. **This does not include the converted SOFR swap.**

08. Overlay Booking Model

Product Type	House	Client
IRS: LIBOR Flat	1-booking	2-booking
IRS: LIBOR + Spread	1-booking	2-booking
VNS	2-booking	2-booking
Zero Coupons	Dependent on whether ZC IRS trades require an overlay to preserve representative LIBOR fixing between conversion date and cessation date (1-booking is the maximum)	2-booking for ZCS with yet-to-be-fixed LIBOR
Periodic Compounders	1-booking	2-booking
LIBOR-LIBOR Basis Swap	Dependent on the number of LIBOR legs to preserve (2-bookings is the maximum)	Dependent on the number of LIBOR legs to preserve (4-bookings is the maximum)
LIBOR-SOFR Basis Swap	1-booking	2-booking
LIBOR-FF (AVG) Basis Swap	1-booking	2-booking

01. The 2-booking is two 0% fixed float swaps whereas 1 booking is a LIBOR vs SOFR basis swap.
02. House accounts receive overlays via a basis swap with the exception of VNS overlays, which will be fixed/float.

09. Coupon Preservation Considerations

01. The periodicity (e.g. semi-annual, annual, etc.) will be inherited from the floating leg of the original USD LIBOR swap. The fixed leg day count fraction will be inherited from the fixed leg of the original USD LIBOR swap.
02. The effective date of the overlay booking will match that of the original USD LIBOR trade, which will ease reconciliation.¹
03. The USD LIBOR/SOFR overlay booking matures at the point that the last representative USD LIBOR period prior to cessation has settled.
 - The USD LIBOR leg will replicate the USD LIBOR leg of the original trade exactly², but with a shortened maturity date.

10. Trade Date and Registration Date

Trade Date and Registration date for new SOFR trades, overlay trades and cash compensation swaps will be as below.

SOFR Trade Details	Tranche 1	Tranche 2
Registration Date	24th April 2023	22nd May 2023
Trade Date	21st April 2023	19th May 2023

11. Cash Compensation

Cash compensation will be provided and will be the difference between the NPV of the USD LIBOR trade (valued using the fallback methodology for any cashflow fixing post cessation date) and the NPV of the SOFR equivalent trade. The cash compensation will be provided at clearing account level and will be delivered to participants via an upfront fee on a new \$1 notional swap. Trade level breakdown will be available via REP315. Bookings will take place on Tranche 1: 22nd April 2023 and Tranche 2: 20th May 2023 and will be registered on the following Monday. Settlement will be on the Tuesday after the conversion weekend as USD is a PPS+1 currency.

01. The Margin Account Level is the parent account where the account and all affiliates are margined; the Clearing Account Level is the entity level of the account where clearing activity takes place and trades are booked against.

¹ZCS with a yet-to-be-fixed representative LIBOR fixing will receive overlays with an effective date as the start date of the last representative LIBOR period.

²For trades without any compounding feature, payments and payment timings will match exactly. For zero coupon swaps the fixing history is preserved and the payment follows BAU zero compounder settlement.

12. Booking Considerations of Cash Compensation Swaps

SOFR Trade Details	Tranche 1	Tranche 2
Trade Type	Fixed vs Float	
Registration Date	24th April 2023	22nd May 2023
Trade Date	21st April 2023	19th May 2023
Effective Date	24th April 2023	22nd May 2023
Maturity Date	25th April 2023	23rd May 2023
Payment Date	25th April 2023	23rd May 2023

13. Trade Booking and Reporting

Messaging Method	Direct Member	Clearing Broker	Client
Clearing Confirmed Message via ClearLink	✓	✓	
Portal (FpML/Trade Attribute Download)	✓	✓	✓
Reporting	✓	✓	✓
ATSS Sync (via MW)*	✓		✓

*ATSS Sync allows market participants to synchronize their portfolio population at MW and LCH. LCH will be responsible for communicating the details of the conversion events to MW for record keeping purposes. Those interested in this process must coordinate the setup with MW and LCH.

14. Reporting

Reports	Description
Report 72FB	Provides the NPV per cashflow under a conversion scenario. The report will break down the components contributing to the conversion compensation fee. It includes the NPV per cashflow of the original trade computed using the fallback assumption and the NPV of the converted SOFR trade.
Report 315	Provides a daily summary of the value of the trades under a pre and post conversion regime and of the computed indicative cash compensation fee under a conversion scenario at the trade level .
Report F8	Provides trade attributes of live trades.

15. SwapClear Portal and Knowledge Centre

Subject	Description	Access
Portal	<p>Enhanced portal screens provide visibility into the indicative impact of the conversion, enabling Members, Clients and Clearing Brokers to view their indicative converted swaps based on today's portfolio and the indicative compensation amounts.</p> <p>Conversion Trades – provides an indicative view of the SOFR transactions on a daily basis.</p> <p>Compensation Trades – provides an indicative view of all the compensation trades.</p> <p>Conversion FpML – provides an indicative view of conversion FpMLs on a daily basis.</p> <p>Compensation FpMLs – provides a final view of compensation FpMLs after conversion.</p> <p>Unilateral Basis Swap Splitting Tool – This new functionality provides the ability to split in-scope basis swap trades independently ahead of a conversion.</p> <p><i>These portal screens will be where final trade details/FpMLs can be accessed on the day of conversion.</i></p>	<p>PORTAL ACCESS Log in to the LCH Portal or email the Onboarding team at SwapClear.ClientOnboarding@lch.com to request access.</p> <p>If you do not have access to the Portal, please reach out to your internal super users, who will be able to grant access. Alternatively, feel free to contact Rates.ClientServices@lch.com, who will be able to advise on the relevant super users at your firm.</p> <p>Log in to the LCH Portal and navigate to the "SwapClear Portal." Once in the SwapClear Portal, open the "Apps" menu and expand the "RFR Conversion" drop-down to access the Conversion portal screens.</p>
LCH Knowledge Centre	The LCH Knowledge Centre hosts information on USD LIBOR conversion, recordings of USD LIBOR Briefing calls, reporting and product specifications, messaging samples and results from dress rehearsals.	LCH KNOWLEDGE CENTRE ACCESS Log in to the LCH Portal and navigate to "Knowledge Centre".

16. USD LIBOR Legacy Solution

SwapClear participants raised with LCH the demand for a continued clearing capability for bilateral Legacy USD LIBOR contracts or for cleared physical settlement transactions (as defined by ISDA) on swaption expiry, after completion of the USD LIBOR conversion process (Tranche 2 event over the weekend of 19th May 2023).

As a result, LCH announced on 8th November 2022 that SwapClear intends to support continued time-limited eligibility for legacy swaps submitted to LCH SwapClear for registration provided that certain conditions are met. In particular:

01. Our USD LIBOR Legacy solution envisages operating until 30th June 2025 (vs 31st December 2024 for non-USD Legacy) and the service to include VNS in the scope (not present in non-USD Legacy scope).
02. In-Scope Products: plain vanilla IRS and VNS with USD LIBOR as their Floating Rate Option.
03. Trade Date: from a legal perspective, for any USD LIBOR trades submitted for registration at LCH after the Tranche 2 conversion event, submitting parties will have to represent that the trade has the following features:
 - A. ISDA Supplement 70 applies to the trade (e.g. via Protocol adherence). Any future additional Supplements issued by ISDA that may be relevant will be taken into consideration and embedded in LCH's Rulebook as necessary.
 - B. the original trade date of the swap or the swaption/contract giving rise to the swap is no later than 30th June 23; and
 - C. the submitting parties were acting in compliance with the regulation applicable to them at the point of bilateral trade execution.

For additional information around the USD LIBOR Legacy Solution, please refer to the USD LIBOR Operational Considerations deck and the [Member Circular](#).

17. Fees

USD LIBOR FALLBACK FEES

Effective 31st January 2023, LCH will apply a **monthly** Fallback Fee for outstanding USD LIBOR contracts which have a maturity date after the USD LIBOR cessation date of 30th June 2023, as of the last good business day of that month.

The following charges will apply to cleared contracts in both SwapClear Clearing Member House and Client accounts.

January 2023	February 2023	March 2023	April 2023
USD 5.00	USD 5.00	USD 5.00	USD 5.00

01. FRAs will not be subject to Fallback Fees.
02. Any LIBOR-LIBOR basis swaps that may be voluntarily split into two interest rate swaps by LCH prior to a conversion cycle will not be charged twice.

USD LIBOR CONVERSION FEES

The Conversion Fee applies to cleared contracts that would be outstanding at the point of conversion and that would therefore require conversion to SOFR equivalents, i.e. the Conversion Fee amount will apply to SwapClear Clearing Member House and Client contracts that will require the conversion tool:

USD LIBOR
USD 30.00

A cap will apply in 2023 for all SwapClear Clearing Member House accounts (i.e. applied at Member Group level) as follows. Note, this cap applies across Conversion fees only and is not applicable for LIBOR Fallback Fees.

Platinum Tariff	Gold, Silver and Bronze Tariffs
USD 150,000	USD 100,000

01. For the avoidance of doubt, USD LIBOR, SGD SOR and THB THBFX will contribute to the 2023 Conversion Fee Cap.
02. Additional information around Fallback and Conversion Fees can be found here: [LCH Circular No 4217](#).

18. Appendix

UNILATERAL BASIS SWAP SPLITTING TOOL (UBST)

The Unilateral Basis Swap Splitting Tool allows participants to split their basis swap trades independently ahead of conversion (there is no mandatory basis swap splitting event), enabling new compression capabilities against outstanding IRS and OIS trade populations to be accessible earlier on in the process. This tool can be used both before and after the conversion events.

IN-SCOPE

01. USD-LIBOR vs USD-LIBOR basis swaps
02. USD-LIBOR vs USD-SOFR-OIS Compound basis swaps with a 0bd payment lag on the LIBOR leg*
03. USD-SOFR-OIS Compound vs USD-Federal Funds-OIS Compound basis swaps
04. All of the above product types, including those that 1) are fully fixed before the cessation date or fully fixed before the cessation date on the USD LIBOR leg only, or 2) mature before the cessation date

In-scope post-conversion

01. USD-SOFR-OIS Compound vs USD-SOFR-OIS Compound basis swaps
02. USD-SOFR-OIS Compounding vs USD-Federal Funds-OIS Compound basis swaps

**USD-LIBOR vs USD-SOFR-OIS basis swaps with a 2bd payment lag on the LIBOR leg is not eligible for unilateral basis swap splitting as USD-LIBOR vs Fixed with a 2bd payment lag on the LIBOR leg is not eligible for clearing*

OUT OF SCOPE

01. Any non-USD basis swaps
02. USD-LIBOR vs USD-Federal Funds (AVG) basis swaps (these will be converted to USD-SOFR-OIS Compound vs USD-Federal Funds (AVG) basis swaps)
03. USD-LIBOR vs USD-SOFR-OIS Compound basis swaps with a 2bd payment lag on the LIBOR leg*

**Not eligible for unilateral basis swap splitting as USD-LIBOR vs Fixed with a 2bd payment lag on the LIBOR leg is not eligible for clearing*

UBST PROCESS

01. The basis swap splitting will be run daily. Members and clients can submit a unilateral splitting request through a Non-Economic Amendment (NEA) submission via the LCH Portal or the ClearLink API.
02. Non-Economic Amendment requests for UBST have a cutoff time of 16:00 LDN/11:00 NY. Any Non-Economic Amendment (NEA) submission for the service after this time will be accepted, but it will be processed the following business day.

Additional details on the tool can be found in the Operational Considerations deck, available on the [Knowledge Centre](#).

Member Circulars that have been issued to date:

01. [LCH Consultation on Conversion of Outstanding Cleared USD LIBOR® Contracts | LCH Group](#)
02. [Rates Reform: USD LIBOR Fallback and Conversion Fees | LCH Group](#)
03. [LCH's Consultation on Conversion of Outstanding USD LIBOR® SwapClear Contracts | LCH Group](#)
04. [Statement on LCH's Solution for USD LIBOR® Contracts submitted for registration at LCH subsequent to the completion of LCH's Conversion Processes | LCH Group](#)

PRODUCT ELIGIBILITY ENHANCEMENTS

To support conversion of basis swaps that would remain outstanding at the point of conversion, the following eligibility changes went live on 12th December 2022:

01. USD-SOFR-OIS Compound vs USD-SOFR-OIS Compound basis swaps
02. USD-SOFR-OIS Compound vs USD-Federal Funds (AVG) basis swaps
03. Support for a spread on both legs for the following basis swap combinations
 - A. USD-LIBOR vs USD-SOFR-OIS Compound basis swaps
 - B. USD-SOFR-OIS Compound vs USD-SOFR-OIS Compound
 - C. USD-SOFR-OIS Compound vs USD-Federal Funds

ACCESSING THE LCH KNOWLEDGE CENTRE

The LCH Secure Area has been decommissioned and the Knowledge Centre is the new source of information. The Knowledge Centre can be accessed via the LCH Portal.


Once in the [LCH Portal](#), you can navigate to the "Knowledge Centre" tab to find information around USD LIBOR Conversion and other projects.

If you do not have access to the Portal, please reach out to your internal super users, who will be able to grant access. Alternatively, feel free to contact Rates.ClientServices@lch.com, who will be able to advise on the relevant super users at your firm.

If you have any questions, please contact the Client Services team at Rates.ClientServices@lch.com or your relationship manager.

WEBSITE

lch.com/swapclear

 @LCH_Clearing

DISCLAIMER

This document has been provided to you for informational purposes only and is intended as an overview of certain aspects of, or proposed changes to, the SwapClear, Listed Interest Rates, SwapAgent and/or any other service provided by LCH Group Holdings Limited ("LCH Group") or any of its group undertakings (group undertakings shall be construed in accordance with section 1161 of the Companies Act 2006; each an ("LCH Group Company").

LCH Limited is supervised by the Bank of England within the UK regulatory framework, registered as a derivatives clearing organisation with the U.S. Commodity Futures Trading Commission ("CFTC") and recognised as a third-country CCP under Regulation (EU) No. 648/2012 of the European Parliament and of the Council of 4 July 2012 on OTC derivatives, central counterparties and trade repositories ("EMIR"). LCH S.A. is regulated and supervised in France by the Autorité des Marchés Financiers, the Autorité de Contrôle Prudentiel et de Résolution and the Banque de France, authorised as an E.U. CCP under EMIR, registered as a derivatives clearing organisation with the CFTC and as a clearing agency with the U.S. Securities and Exchange Commission. LCH Limited and LCH S.A. also hold licenses or authorisations in other jurisdictions in which they offer their services. More information is available at www.lch.com.

The relationship of an LCH Group Company with its members is governed solely by its rulebook and certain other ancillary documentation, as applicable. This document does not, and does not purport to, contain a detailed description of any aspect of a service provided by an LCH Group Company or any other topics discussed in this document, and it has not been prepared for any specific person. This document does not, and does not seek to, constitute advice of any nature. You may not rely upon the contents of this document under any circumstance and should seek your own independent legal, investment, tax and other advice. The information and any opinion contained in this document does not constitute a recommendation or offer with respect to any derivative contract, financial instrument, security or service. No LCH Group Company makes any representation, warranty, condition or guarantee (whether express or implied) that the contents of this document are accurate, complete or up-to-date, and makes no commitment to offer any particular product or service. No LCH Group Company shall have any liability for any losses, claims, demands, actions, proceedings, damages, costs or expenses arising out of, or in any way connected with, the information contained in this document, except that each LCH Group Company accepts liability that cannot be excluded by applicable law.

Copyright © LCH Limited 2023. All rights reserved. SwapClear, CDSClear, ForexClear, RepoClear, EquityClear, SwapAgent and €GCPlus are registered trademarks of LCH.

The information contained in this document is confidential. By reading this document, each recipient agrees to treat it in a confidential manner and will not, directly or indirectly, disclose or permit the disclosure of any information in this document to any other person (other than its regulators or professional advisers who have been informed of the confidential nature of the information) without the prior written consent of the relevant LCH Group Company to whom such confidential information belongs.

