

Swaption outcomes with and without application of the terms of Supplement 70 to the 2006 ISDA Definitions

Notes:

- This matrix considers, at a high level, the outcomes for a Swaption depending on whether the terms of Supplement 70 to the 2006 ISDA Definitions (the “**IBOR Fallbacks Supplement**”) apply to the Underlying Swap Transaction.
- This matrix addresses the following scenarios:
 - *Scenario A*
 - The terms of the IBOR Fallbacks Supplement apply to the Underlying Swap Transaction because the Trade Date of the Swaption is on or after 25 January 2021 and the Swaption incorporates the 2006 ISDA Definitions; or
 - The terms of the IBOR Fallbacks Supplement apply to the Underlying Swap Transaction as the parties have adhered to the ISDA 2020 IBOR Fallbacks Protocol (the “**IBOR Fallbacks Protocol**”) or otherwise bilaterally incorporated the terms of the IBOR Fallbacks Protocol and the relevant Swaption is a “Protocol Covered Document” for the purposes of the IBOR Fallbacks Protocol.
 - *Scenario B*
 - The terms of the IBOR Fallbacks Supplement do not apply to the Underlying Swap Transaction because the Trade Date of the Swaption is prior to 25 January 2021 (even if the Swaption is exercised after such date) and the terms of the IBOR Fallbacks Supplement have not been applied to the Swaption whether pursuant to the terms of the IBOR Fallbacks Protocol or otherwise.
- This matrix only addresses Underlying Swap Transactions that reference a LIBOR Rate Option.¹
- This matrix should be read in conjunction with other materials published by ISDA on Swaptions on ISDA’s [Benchmark Reform and Transition from LIBOR – International Swaps and Derivatives Association \(isda.org\)](#). These include the [RFR Conventions and IBOR Fallbacks – Product Table](#), the [ISDA Guidance Note: Swaptions: ‘Agreed Discount Rate’ Supplement to the 2006 ISDA Definitions Published](#), the [Outline of \(I\) the Settlement of Certain Swaptions and \(II\) the Issues which arise from the Proposed Adjustment to Discounting by Certain Clearinghouses](#) and the [Table of Outcomes Before and After Supplement 64](#) (the latter three documents, the “**ISDA Swaptions Documents**”).
- This matrix does not set out, in detail, the basis on which the discount factor that is used to determine “present value” will be determined for a Relevant Swap Transaction. Market participants are encouraged to read the ISDA Swaptions Documents for more detail on this.
- If the parties have confirmed the terms of their transaction using an electronic confirmation provider, the terms of that provider should also be considered insofar as they relate to the Swaption.
- This matrix has been prepared on the basis that the Swaption has been entered into on or after 23 March 2016, i.e. the concept of “Mutually Agreed Clearinghouse” (“**MAC**”) had been introduced by Supplement 48 to the 2006 ISDA Definitions prior to the entry into of the Swaption. Some outcomes would be the same as those set out in this matrix, irrespective of whether the Swaption was entered into before 23 March 2016, but it depends on the date on which swaptions were entered into and the relevant specifications. The ISDA Swaptions Documents provide additional information regarding swaptions entered into prior to the publication of Supplement 48.
- The position for Collateralized Cash Price set out under the columns “On Exercise – Cash Settlement” is based on the assumption that the Trade Date of the Swaption is on or after 30 March 2020, i.e. the version of the 2006 ISDA Definitions that applies to the Swaption has been amended to include the terms of Supplement 64 that contemplate an “Agreed Discount Rate” (“**ADR**”). The ISDA Swaptions Documents provide additional information regarding swaptions that

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incorporate Supplement 48 and/or 58 but not Supplement 64 as well as swaptions entered into prior to the publication of Supplement 48 which are not addressed in this matrix.

- This matrix does not consider the outcome if parties re-negotiate and/or re-confirm the terms of the Underlying Swap Transaction in connection with the exercise of the Swaption. We note that in doing so, the parties may potentially include Supplement 70 in a Swaption that did not already include it.
- Any capitalised term used which is not defined in this matrix has the meaning given to it in the 2006 ISDA Definitions.
- Any section references are to sections in the 2006 ISDA Definitions.

Scenario A: The terms of the IBOR Fallbacks Supplement apply to the Underlying Swap Transaction

Pre-Index Cessation Effective Date (“ICED”)			Post-ICED		
On exercise – Cleared Physical Settlement (Section 15)	On exercise – Cash Settlement (Section 18)	On exercise – Physical Settlement (Section 15)	On exercise – Cleared Physical Settlement (Section 15)	On exercise – Cash Settlement (Section 18)	On exercise – Physical Settlement (Section 15)
<p>Relevant Swap Transaction has floating leg referencing the Floating Rate Option as amended by Supplement 70, i.e. with the new fallbacks. Buyer of the Swaption has the right to cause the Underlying Swap Transaction to become effective and to be cleared through the MAC or if a MAC is not specified in the Confirmation, a clearinghouse agreed by both parties at the time of exercise that accepts cash denominated in the same currency as the Relevant Swap Transaction as eligible collateral for margining purposes (Section 15.2(a)).² Some clearinghouses have indicated their intention to convert cleared LIBOR based swaps to RFR based swaps prior to the relevant ICED for each LIBOR (such date, a “Conversion Date”).³</p>	<p>The Cash Settlement Amount will be calculated using the Cash Settlement Method specified in the ISDA Settlement Matrix (unless otherwise specified in the related Confirmation). The outcome of applying any of the Cash Settlement Methods specified for the various LIBOR currencies in the ISDA Settlement Matrix⁴ would not depend on the incorporation of Supplement 70 because Supplement 70 does not implement fallbacks for the rates (e.g., GBP LIBOR ICE Swap Rate and USD LIBOR ICE Swap Rate) that could apply as the Settlement Rate. For Collateralized Cash Price, specifying a MAC affects the discount</p>	<p>Relevant Swap Transaction has floating leg referencing the Floating Rate Option as amended by Supplement 70, i.e. with the new fallbacks.</p>	<p>Relevant Swap Transaction has floating leg referencing the Floating Rate Option as amended by Supplement 70, i.e. with the new fallbacks. At the time of exercise, the Applicable Fallback Rate will apply. See column “On exercise – Cleared Physical Settlement – Pre-ICED” on the left for more details on the Buyer’s right for the Underlying Swap Transaction to be cleared. Some clearinghouses have indicated their intention to convert LIBOR based swaps to RFR based swaps on the Conversion Date.⁶ We understand that some clearinghouses may update their rules to accept LIBOR based swaps for clearing after the Conversion Date (and even after the relevant</p>	<p>The Cash Settlement Amount will be calculated using the Cash Settlement Method specified in the ISDA Settlement Matrix (unless otherwise specified in the related Confirmation). The Settlement Rate which is applied in certain Cash Settlement Methods to calculate the Cash Settlement Amount may have ceased to be published following an ICED. See the Appendix for further detail. For Collateralized Cash Price, specifying a MAC affects the discount factors that are used to determine “present value”. See column “On exercise – Cash Settlement – Pre-ICED” on the left for more detail.</p>	<p>Relevant Swap Transaction has floating leg referencing the Floating Rate Option as amended by Supplement 70, i.e. with the new fallbacks. At the time of exercise, the Applicable Fallback Rate will apply.</p>

<p>If the exercise date is prior to an ICED but after a Conversion Date, the terms of the relevant clearinghouse rules would apply to the Relevant Swap Transaction. We understand that some clearinghouses may update their rules to accept LIBOR based swaps for clearing after the Conversion Date but will convert them to RFR based swaps as part of their acceptance for clearing. Market participants should verify this with the relevant clearinghouse.</p> <p>If the Relevant Swap Transaction fails to clear, the MAC does not accept swaps with those terms for clearing or the parties have not specified a MAC and cannot agree on a clearinghouse at the time of exercise (Sections 15.2(c), (d) or (e)), Cash Settlement will apply to the Swaption and the Cash Settlement Amount will be calculated by using Collateralized Cash Price (see column “On exercise – Cash Settlement – Pre-ICED” on the right).</p>	<p>factors that are used to determine “present value”.</p> <p>If a MAC is specified in the Confirmation but an ADR is not, the discount factors that the MAC would apply to a valuation of the Relevant Swap Transaction will be used.⁵</p> <p>If an ADR is specified, then the Discount Rate will be the ADR, including:</p> <ul style="list-style-type: none"> (i) if an ADR is specified but not a MAC; and (ii) if both a MAC and an ADR are specified in the Confirmation and the ADR differs from the interest rate benchmark used by the MAC to calculate payments of interest on cash collateral denominated in the same currency, 		<p>ICED) but will convert them to RFR based swaps as part of their acceptance for clearing. Market participants should verify this with the relevant clearinghouse.</p> <p>If the Relevant Swap Transaction fails to clear, the MAC does not accept swaps with those terms for clearing or the parties have not specified a MAC and cannot agree on a clearinghouse at the time of exercise (Sections 15.2(c), (d) or (e)), Cash Settlement will apply to the Swaption and the Cash Settlement Amount will be calculated by using Collateralized Cash Price (see column “On exercise – Cash Settlement – Post-ICED” on the right).</p>		
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Scenario B: The terms of the IBOR Fallbacks Supplement do not apply to the Underlying Swap Transaction

Pre-ICED			Post-ICED		
On exercise – Cleared Physical Settlement (Section 15)	On exercise – Cash Settlement (Section 18)	On exercise – Physical Settlement (Section 15)	On exercise – Cleared Physical Settlement (Section 15)	On exercise – Cash Settlement (Section 18)	On exercise – Physical Settlement (Section 15)
<p>We understand that some clearinghouses accept a swap that does not incorporate Supplement 70 and simultaneously apply Supplement 70 (or convert it to an RFR based swap if the Conversion Date has occurred) as part of their acceptance for clearing. In these cases, the matrix above relating to a Swaption that incorporates Supplement 70 applies.</p>	<p>As noted above, the outcome of applying any of the Cash Settlement Methods specified for the various LIBOR currencies in the ISDA Settlement Matrix⁷ would not depend on the incorporation of Supplement 70 because Supplement 70 does not implement fallbacks for the rates (e.g., GBP LIBOR ICE Swap Rate and USD LIBOR ICE Swap Rate) that could apply as the Settlement Rate.</p> <p>However, note that if the relevant Cash Settlement Method is Cash Price, the incorporation of Supplement 70 could have an impact on the Cash Settlement Amount).</p>	<p>Relevant Swap Transaction has floating leg referencing the Floating Rate Option with no fallbacks dealing with a permanent cessation or non-representativeness.</p>	<p>We understand that some clearinghouses accept a swap that does not incorporate Supplement 70 and simultaneously apply Supplement 70 (or convert it to an RFR based swap if the Conversion Date has occurred) as part of their acceptance for clearing. In these cases, the matrix above relating to a Swaption that incorporates Supplement 70 applies.</p>	<p>The matrix above relating to a Swaption that incorporates Supplement 70 applies (however, note that if the relevant Cash Settlement Method is Cash Price, the incorporation of Supplement 70 could have an impact on the Cash Settlement Amount).</p>	<p>Relevant Swap Transaction has floating leg referencing the Floating Rate Option without updated fallbacks. If the relevant IBOR has ceased or is otherwise not published, the pre-Supplement 70 fallbacks will apply.</p>

Appendix: Non-availability of Settlement Rate

As set out above, Collateralized Cash Price is commonly used as the Cash Settlement Method. This is used in circumstances where the Relevant Swap Transaction fails to clear and is also the current cash settlement method for EUR and USD swaptions as per the ISDA Settlement Matrix (although older legacy EUR swaptions may apply Par Yield Curve – Unadjusted) (Sections 15.2 and 18.3(g)).

Collateralized Cash Price is calculated as the present value of an annuity equal to the difference between: (a) the amounts that would be payable by the Fixed Rate Payer pursuant to the Underlying Swap Transaction if the Fixed Rate were the “Settlement Rate”; and (b) the amounts payable by the Fixed Rate Payer pursuant to the Underlying Swap Transaction as set out in the swaption confirmation (Section 18.3(g)).

The Settlement Rate (as per the ISDA Collateral Cash Price Matrix for EUR and USD transactions as well as for GBP LIBOR transactions) will be the rate that appears on the relevant ICESWAP screen page designated for the purposes of displaying par swap rates for swaps in the currency in which the underlying swap is denominated for a period equivalent to the remaining term of the underlying swap (Section 18.2(f)). The Settlement Rate for JPY transactions (as per the ISDA Collateral Cash Price Matrix) will be the rate that appears on the Reuters Screen 17143 Page.

If such par swap rate does not appear on the relevant ICESWAP or Reuters Screen 17143 (as applicable) screen page or is no longer available for such currency/tenor (which is likely if an ICED has occurred), then the Settlement Rate will be determined on the basis of quotations from Cash Settlement Reference Banks. The Cash Settlement Reference Banks are directed to provide quotations for the swap rate for the relevant swap and accordingly, if the terms of Supplement 70 apply, have the ability to quote for the rate for a swap that has fallen back to the compounded RFR in the same currency plus spread.

ISDA is currently working on fallbacks to the “GBP-ISDA-Swap-Rate” (this is how the GBP LIBOR ICE Swap Rate is described) Floating Rate Option in the 2006 ISDA Definitions. Once these fallbacks are finalised, they will be replicated in other sections of the 2006 ISDA Definitions which refer to the GBP LIBOR ICE Swap Rate (for example, the Settlement Rate). The fallbacks for the “USD-ISDA-Swap Rate” Floating Rate Option in the 2006 ISDA Definitions will be finalised after ICE Benchmark Administration produces a SOFR Ice Swap Rate. Once the fallbacks are finalised and if they apply to a particular transaction, it should be possible to determine a Settlement Rate after an ICED for GBP LIBOR or USD LIBOR in accordance with the methodology set out in the fallbacks. If these fallbacks do not apply to a transaction, the Settlement Rate will be determined on the basis of quotations by Cash Settlement Reference Banks as set out above. If fewer than three quotations are provided, the Settlement Rate will be determined by the Calculation Agent.

ISDA understands that Refinitiv is consulting on the development of a TONA Tokyo Swap Rate and fallbacks for the JPY LIBOR Tokyo Swap Rate.⁸

Par-Yield Curve-Unadjusted is the current standard Cash Settlement Method for GBP LIBOR Swaptions under the ISDA Settlement Matrix. The Settlement Rate is also relevant to calculating Par Yield Curve – Unadjusted. The fallbacks to the Settlement Rate are the same as described above for Collateralized Cash Price.

¹ This matrix does not consider SGD-SOR-VWAP and THB-THBFIX-Reuters, both of which are LIBOR Rate Options that use U.S. Dollar LIBOR as the Applicable Rate. “LIBOR Rate Options” as used in this matrix should be construed as excluding these two Floating Rate Options.

² This is the position as set out under Supplement 64 to the 2006 ISDA Definitions. The position under Supplements 48 and 58 is not identical to that set out under Supplement 64.

³ See: [Supplementary Statement on LCH’s Solution for Outstanding Cleared LIBOR® Contracts | LCH Group](#); and [CME IBOR Conversion Proposal for Cleared Swaps \(cmegroup.com\)](#).

⁴ The relevant Cash Settlement Methods are: Zero Coupon Yield – Adjusted, Par Yield Curve – Unadjusted and Collateralized Cash Price (see Section 18.3 for more detail on the Cash Settlement Methods). If the relevant Cash Settlement Method is Cash Price, the incorporation of Supplement 70 could have an impact on the Cash Settlement Amount.

⁵ Note that this would not be the case for swaptions entered into prior to Supplement 58 (but, as noted above, this column assumes that the Trade Date for the relevant swaption is on or after 30 March 2020). See the ISDA Swaptions Documents for more detail regarding swaptions entered into prior to Supplement 58.

⁶ See: [Supplementary Statement on LCH’s Solution for Outstanding Cleared LIBOR® Contracts | LCH Group](#); and [CME IBOR Conversion Proposal for Cleared Swaps \(cmegroup.com\)](#).

⁷ The relevant Cash Settlement Methods are: Zero Coupon Yield – Adjusted, Par Yield Curve – Unadjusted and Collateralized Cash Price (see Section 18.3 for more detail on the Cash Settlement Methods). If the relevant Cash Settlement Method is Cash Price, the incorporation of Supplement 70 could have an impact on the Cash Settlement Amount.

⁸ See: [Tokyo Swap Rate consultation paper \(refinitiv.com\)](#).