Outlines Related to Expansion of Cross Margining Covered Trades and Others in IRS Clearing Service

Nov 2, 2023
Japan Securities Clearing Corporation

I. Purpose

JSCC puts in place required frameworks in its IRS Clearing Service, such as an addition of 3-Month TONA Futures Contracts to the cross margining covered trades for an enhancement of collateral burden reduction effect and arrangements for a reduction of rejections of clearing requests and a reduction of collateral operation burdens.

II. Outline

Item	Description	Remarks
1. Cross Margining with Interest Rate Futures Contracts		
(1) Addition of Cross Margining Covered Trades	・ The Interest Rate Futures Contracts are added to the covered trade of the existing cross margining framework in IRS Clearing Service.	・ Cross margining is a framework of offsetting risks across silos for a reduction of collateral burden.
(2) Cross Margining Covered Trades		
i) Eligible Trades to be Added	・ The Interest Rate Futures Contracts to be added to the cross margining covered trades are the JSCC-designated contract months of the Interest Rate Futures Contracts JSCC clears.	・ Currently, the cross margining covered trades are IRS and the 1st and 2nd contract months of JGB Futures Contracts, both physical settlement futures contracts and cash settlement futures contracts, JSCC clears.
ii) Types of Margin Covered	・ Margins subject to the cross margining are Initial Margin and Intraday Margin related to IRS positions, and the margin related to the positions in JGB Futures Contracts and Interest Rate Futures Contracts.	・ In the same manner as the current framework, the Variation Margin for IRS positions and VM for the positions in JGB Futures Contracts and Interest Rate Futures Contracts will not be covered under the cross margining.

Item	Description	Remarks
		・ In the same manner as the current framework, the Intraday Margin requirement will be obtained by adding/subtracting the recalculated Variation Margin equivalent for the IRS position of each IRS Clearing Participant obtained by using the latest market data to/from the recalculated Initial Margin equivalent obtained by using the latest market data for the positions in IRS and the cross margined JGB Futures Contracts and Interest Rate Futures Contracts of the relevant IRS Clearing Participant as of noon each business day .
iii) Scope of Users	・ An IRS Clearing Participant or Customer (either Affiliate or Client; the same applies hereinafter) which trades in Interest Rate Futures Contracts as a JGB Futures Clearing Participant or as a person who trades in futures through a JGB Futures Clearing Participant in the same corporate group will be eligible as the cross margining user.	・ Same as the scope of the users of the cross margining with JGB Futures Contracts under the current framework. ・ See Annex 1 for the illustration of the expected utilization cases.
(3) Cross Margining Request and Acceptance, Handling of Notifications/Reports of Cross Margined Interest Rate Futures Contracts	・ A request for cross margining with Interest Rate Futures Contracts may be submitted by the date that is 2 business days preceding the last trading day. ・ As to the position related to Interest Rate Futures Contracts for which cross margining is requested and accepted, neither position transfer request nor correction reporting, such as the close-out quantity report, is accepted.	・ Otherwise, the rules related to the notification of using cross margining and the cross margining request/acceptance are the same as the current framework.
(4) Initial Margin Calculation Method		

Item	Description	Remarks
i) Base IM	・ Generate scenarios based on the market data fluctuations during past 1,250 days (reference period) with respect to the position of each IRS Clearing Participant and the position related to the cross margined JGB Futures Contracts and Interest Rate Futures Contracts as of 4:00 p.m. on each business day, and stress event scenarios based on historical market events. Then, obtain NPV fluctuations when moving today's market data based on each scenario. Required Initial Margin before add-on shall be the amount to cover average of worst 1% of such NPV fluctuations.	・ Yield curves related to Interest Rate Futures Contracts and whether or not the Convexity adjustment would be required to derive the scenarios for the period before listing of Interest Rate Futures Contracts and the adjustment method will be the subject of the continued study. ・ For the cross margined Interest Rate Futures Contracts, JSCC generates the historical scenarios based on the fluctuations in the settlement price of that product. ・ The historical scenarios for the period before the listing of Interest Rate Futures Contracts are generated by obtaining theoretical price of the Interest Rate Futures Contracts from TONA-OIS yield curve. ・ As market fluctuation value of Interest Rate Futures Contracts for stress event scenarios, the settlement prices derived from TONA-OIS will be used for the period before the listing, and actual settlement prices will be used after the listing. ・ The stress event scenarios are reviewed quarterly. JSCC will consider, in the quarterly review process after the launch, whether or not JSCC would add any new stress scenario for Interest Rate Futures Contracts.

Item	Description	Remarks
ii) Liquidity Charge	・ The framework of the calculation of the liquidity charge related to the cross margined Interest Rate Futures Contracts will be the same as the current liquidity charge framework for IRS, wherein the liquidity charge will be obtained against the basis risk between the yield curve related to Interest Rate Futures Contracts and TONA-OIS.	・ JSCC expects to obtain PV01 (risk amount) by using the yield curve structured based on the settlement prices related to Interest Rate Futures Contracts. ・ JSCC considers risk offset between tenors in the same manner as the current framework. As the correlation coefficient between tenors, daily fluctuations of the basis between Interest Rate Futures curve and TONA-OIS curve for 6 months (125 business days) and the correlation coefficient at 24 points in time in the past when the correlation fluctuated significantly shall be considered. However, JSCC will use the correlation coefficient related to the daily fluctuations of TONA-OIS curve for the period before the listing of Interest Rate Futures Contracts because basis between Interest Rate Futures Contracts and TONA-OIS cannot be observed. ・ The specific dates of the 24 points in time in the past when the correlation fluctuated significantly will be designated by JSCC in a public notice. Such dates are subject to change as necessary in the course of quarterly review process.
(5) Clearing Fund Calculation Method	・ For the IRS Clearing Fund requirement calculation, Expected Stressed Loss Share will be obtained by i) obtaining the Risk	・ Follows the current framework. ・ For the market fluctuation value of Interest Rate

Item	Description	Remarks
	Amount Exceeding Collateral, including cross margined JGB Futures Contracts and Interest Rate Futures Contracts positions, and ii) prorating the sum total of such Risk Amount Exceeding Collateral for the top 2 Clearing Participants according to the Initial Margin requirement, excluding add-ons according to the Net Capital and credit standing, of each Clearing Participant.	Futures Contracts in the stress scenarios, the value of the interest rate fluctuations in TONA-OIS yield curve will be used for the period before the listing, and the value of the interest rate fluctuations in Interest Rate Futures Contracts yield curve will be used after the listing. ・ In the same manner as the stress event scenarios related to Base IM, the above-mentioned stress event scenarios will be reviewed in the course of quarterly review process after the launch.
(6) Liquidation Scheme of Cross Margined Portfolio upon Default	・ Upon default of a cross margining user that is an IRS Clearing Participant, JSCC will promptly grasp the portfolio composition of the relevant cross margining user, i.e., IRS and the cross margined JGB Futures Contracts and Interest Rate Futures Contracts, and take required risk hedge measures. Upon default of a JGB Futures Clearing Participant requesting cross margining or upon default of an IRS Clearing Broker accepting the cross margining request, the cross margining user Clients may transfer their positions related to IRS and their positions related to the cross margined Interest Rate Futures Contracts to another Clearing Participant with an advance agreement with such Clearing Participant.	・ Follows the current framework. ・ For 10Y JGB Futures (cash settlement futures contracts) and Interest Rate Futures Contracts remaining unliquidated through paired liquidation on the last trading day, the difference obtained based on the last settlement price will be paid/received between JSCC. ・ See Annex 2 for the illustration of the default settlement scheme related to the Clients' position liquidation.
(7) Loss Compensation Framework	・ Upon default of a cross margining user, when the amount of loss related to the position of such cross margining user in JPY denominated IRS and the cross margined JGB Futures Contracts and Interest Rate Futures Contracts is more than the Loss	・ The handling described on the left will be adopted because Interest Rate Futures Contracts are under the JGB Futures Clearing Qualification.

Item	Description	Remarks
	Compensation Financial Resources up to the 4th priority resources related to IRS Clearing Service allocated to the JPY denominated IRS, such excess loss shall be prorated according to the final loss in the JPY denominated IRS and the sum of the final losses related to the cross margined JGB Futures Contracts and Interest Rate Futures Contracts position. Then, the loss amount allocated to the JPY denominated IRS shall be covered by the 5th priority Loss Compensation Financial Resources in IRS Clearing Service, and the loss amount allocated to JGB Futures Contracts and Interest Rate Futures Contracts shall be covered by the cross margining special clearing charge in the JGB Futures Clearing Service.	・ See Annex 3 for the specific illustration concerning the loss compensation framework.
(8) Fee	・ No fee will be charged for the time being.	
2. Addition of New Criteria related to Judgment of Successful Clearing upon Clearing of New Trades		
(1) Outline of Treatment	・ To reduce number of rejections of the trades submitted for clearing, JSCC clears trades even if the amount sufficient to cover the Margin Required to Clear related to a Clearing Participant or a Customer has not been deposited with JSCC so long as the criteria prescribed by JSCC are met.	・ Judgment of successful clearing in the post clearing process, i.e, Compression and Position Transfer, is out of the scope of the treatment mentioned on the left. ・ For the clearing to be successful, both parties to the IRS Transaction submitted to JSCC for clearing need to satisfy the Clearing Requirements in the same manner as the current framework.
(2) Criteria	・ The treatment described in 2. (1) shall apply when all of the	

Item	Description	Remarks
	following conditions are met: i) Notional Amount of the trade submitted for clearing is less than the threshold prescribed by JSCC;	・ The threshold for the Notional Amount shall be as per "Appendix" for the time being. ・ In case of a Package Trade, Notional Amount of each trade comprising the Package Trade needs to be less than the threshold prescribed by JSCC.
	ii) The amount of shortfall in the Margin Required to Clear of the Clearing Participant submitted the trade for clearing is equal to or less than the cap prescribed by JSCC. A Clearing Broker may allocate the cap to each Customer within the amount of cap prescribed by JSCC, and the judgment of successful clearing when there is a shortfall in the Margin Required to Clear related to a Customer shall be made based on the amount taking into consideration the cap allocated by the Clearing Broker. When there is any change in the cap allocation, it shall apply from the next JSCC Business Day;	・ The cap shall be JPY 1 bil. for the time being. ・ In case of a Package Trade, the shortfall in Margin Required to Clear considering all trades comprising the Package Trade should be equal to or less than the cap prescribed by JSCC. ・ On the implementation date, the cap is allocated entirely to the Clearing Participant's Proprietary Account. ・ When there is a shortfall in the Margin Required to Clear related to a Customer, if Customer Buffer may be allocated to the account of the Customer, the Customer Buffer allocation shall precede the handling of 2. (1).
	iii) The margin call for the Intraday Margin requirement and the margin call for the Initial Margin requirement calculated based on the Cleared Contracts as of 7:00 p.m. has been satisfied;	
	iv) The Clearing Participant is not in breach of the "criteria concerning raising required Initial Margin amount" under GUIDELINES CONCERNING CREDIT STANDING OF CLEARING PARTICIPANTS, ETC. IN IRS CLEARING BUSINESS.	・ In case of a Customer, its Clearing Broker is not in breach of the "criteria concerning raising required Initial Margin amount."

Item	Description	Remarks
(3) Treatment at Margin Calculation	・ The trade cleared according to the treatment of 2. (1) shall be included in the subsequent Intraday Margin and Initial Margin requirement calculations.	
3. Partial Revision of Customer Buffer Framework (1) Outline of Revision	・ The Customer Buffer framework currently in place will be partially revised from viewpoints of reduction of the collateral operation burden on Clearing Brokers and Customers as well as increase of opportunities of an allocation of Customer Buffer to Customers' Margin shortfall. The revision includes an expansion of the scope of Margin subject to the buffer allocation.	・ The Customer Buffer framework is a framework of allocating the collateral posted by a Clearing Broker in advance (Customer Buffer) in case of a shortfall in a Customer's Margin Required to Clear for the purpose of reduction of number of rejections of clearing requests.
(2) Details of Revision	i) An allocation of Customer Buffer is also allowed in case where the amount sufficient to cover a Customer's Intraday Margin requirement has not been deposited or delivered. ii) If there is an excess in the allocated Customer Buffer in a Customer Account at the time of Intraday Margin calculation or before the start of the clearing from 5:30 p.m., such excess will be returned to the Clearing Broker's Buffer Account.	・ Under the current framework, Customer Buffer is allocated only when the amount sufficient to cover a Customer's Margin Required to Clear has not been deposited or delivered. ・ An allocation of Customer Buffer when the amount sufficient to cover a Customer's Intraday Margin has not been deposited or delivered to JSCC shall be an option of the Clearing Broker.

III. Implementation Timing

Implementation is aimed at March 4, 2024.

Appendix: Notional Amount Threshold

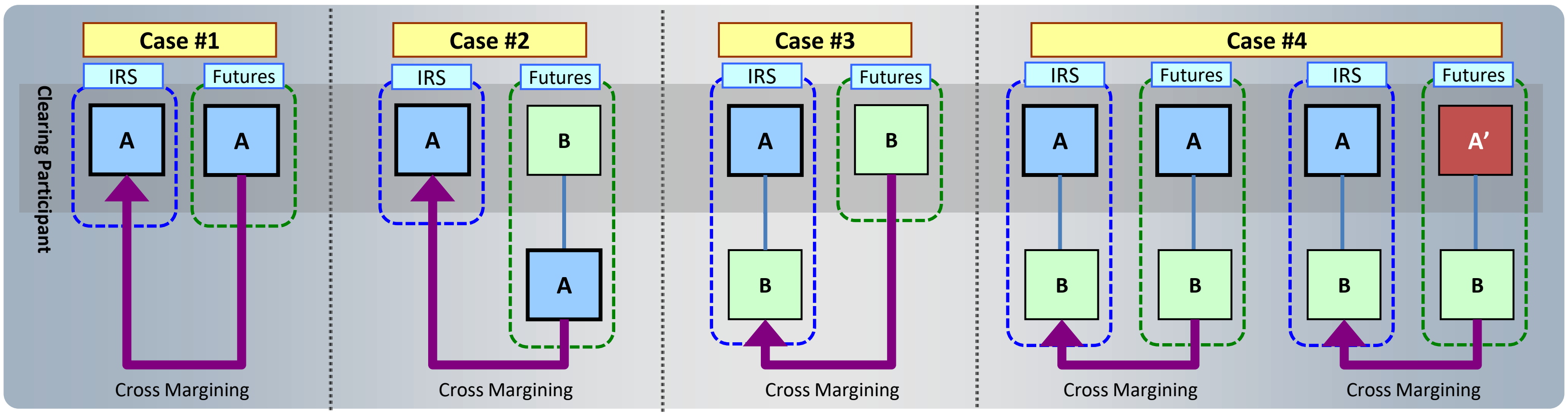
Remaining Number of Days			Notional Amount (in JPY 0.1 bil.)
Greater Than		Equal to or Less than	
	-	46	6,400
46	-	107 (3 months)	2,100
107 (3 months)	-	198 (6 months)	1,200
198 (6 months)	-	381 (1 year)	1,100
381 (1 year)	-	746 (2 years)	460
746 (2 years)	-	1,842 (5 years)	240
1,842 (5 years)	-	3,668 (10 years)	170
3,668 (10 years)	-	10,973 (30 years)	120
10,973 (30 years)	-		67

Scope of Cross Margining Users - Same as Current Cross Margining Framework

Annex1

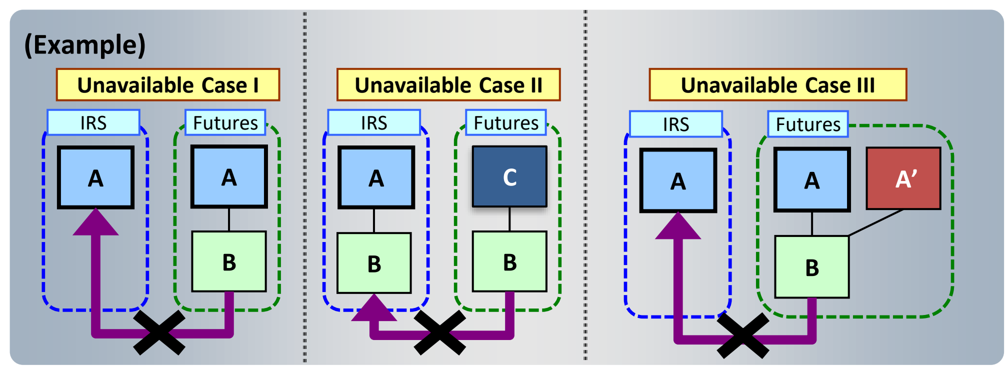
Cases Where Cross Margining is Available

- ➢ Cross margining is available only for positions held by the same entity.
- ➢ For a Customer's position under Case #4 below, cross margining is available on condition that the Clearing Participants and the JGB Futures Clearing Participant are in the same corporate group.



Cases Where Cross Margining is Not Available

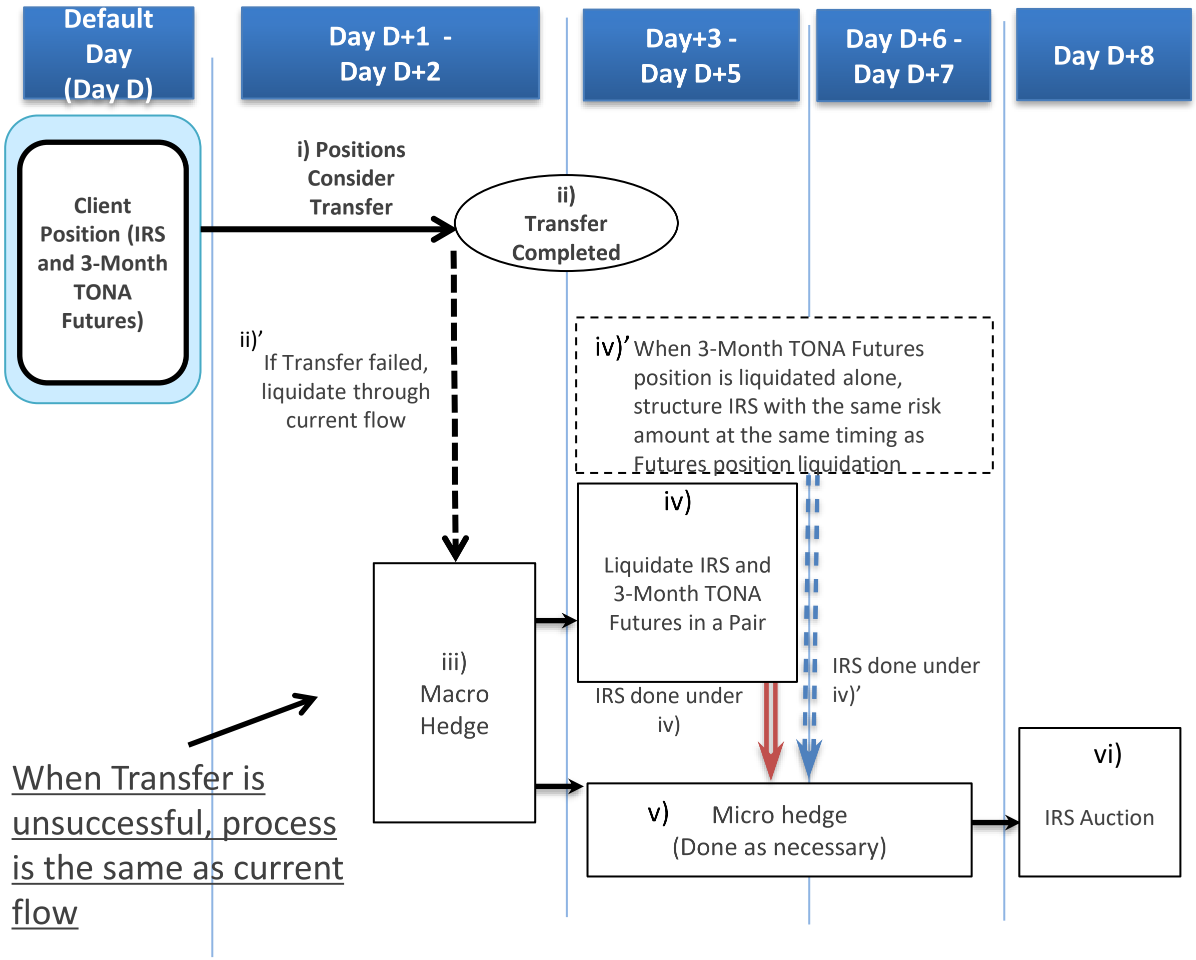
- × Cross margining is not available for positions between different entities. (Unavailable Case I).
- × Cross margining request via a Clearing Participant not in the same corporate group (Participant C in the chart on the left) is not allowed. (Unavailable Case II)
- × Cross margining request via multiple brokers is not allowed. (Unavailable Case III)



Default Settlement Scheme with Client Position Transfer (Illustration)

Annex2

■ Shown below is the illustration of the Client position liquidation scheme upon default of IRS Clearing Participant that is the Clearing Broker for a cross margining user Client.



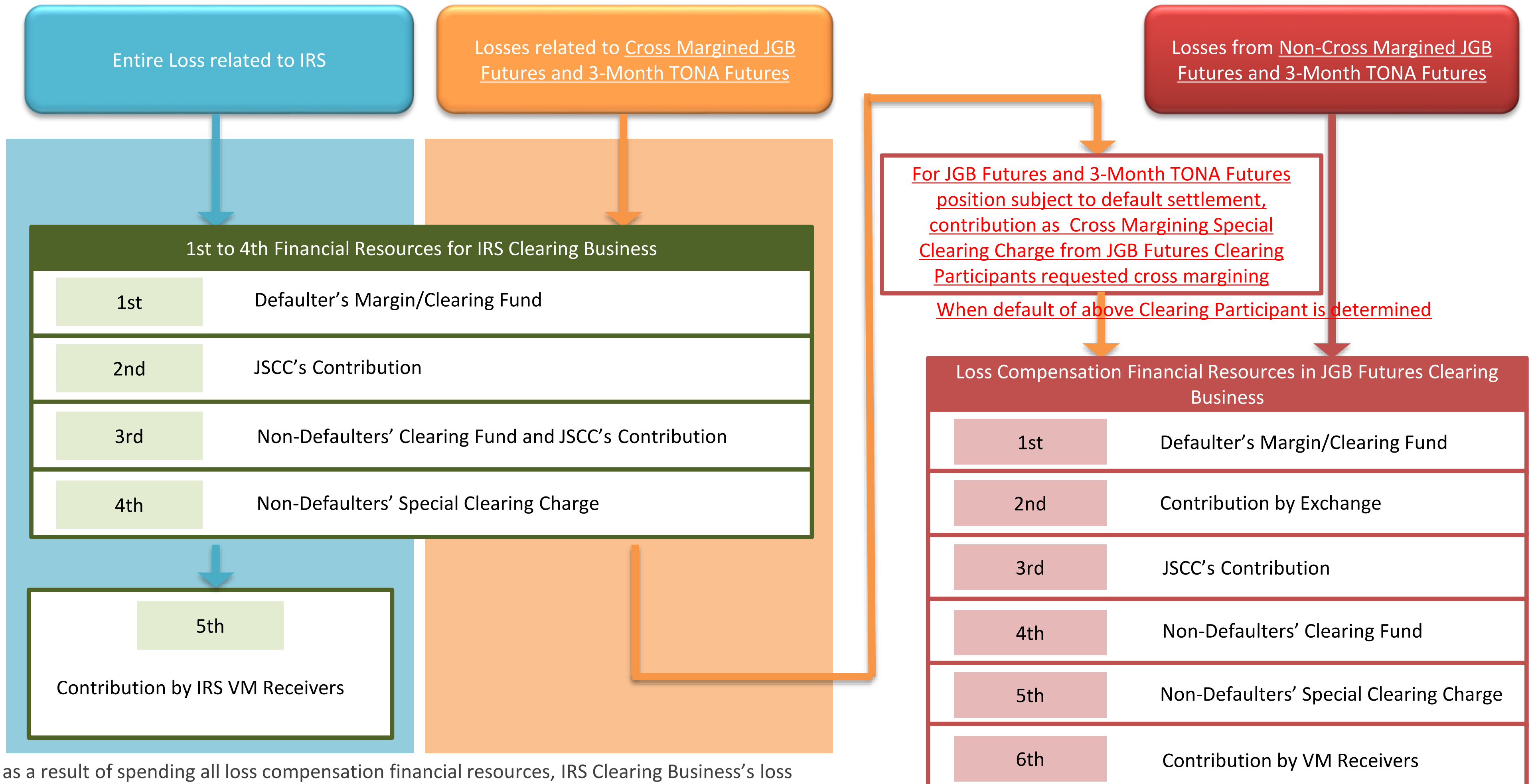
(Case where default occurs after the close of Clearing on Day D)

	Outlines (Client Position Transfer Process are Underlined)
i)	• Consider Client Position Transfer.
ii)	• With a consent of transferee, transfer will successfully complete if predetermined conditions are met.
ii)'	• If transfer is failed, liquidate position by following the current liquidation flow of cross margined position.
iii)	• DMC will check risk amount of the paired position of IRS and 3-Month TONA Futures subject to liquidation and execute macro hedge.
iv)	• Solicit quotes for a pair of IRS-3 and Month TONA Futures and liquidate position of 3-Month TONA Futures (hedge transaction, closing transaction). (To secure time for liquidation when position cannot be liquidated in a pair, aim to implement this process by Day D+5.)
iv)'	• If 3-Month TONA Futures position remains after iv), liquidate 3-Month TONA Futures position by structuring IRS with the same risk amount at the same timing as the liquidation of 3-Month TONA Futures (offsetting purchase/sale).
v)	• Execute micro hedge, as necessary, for portfolio comprised only of IRS as a result of iv) and iv)'. (Hedge will be executed in parallel with the process iv) and iv)' depending on a case.)
vi)	• Liquidate entire IRS position, including hedge transactions, through IRS auction process.

Loss Compensation Framework upon Default of Cross Margining User

Annex3-1

- Waterfall shown below is expected for 3-Month TONA Futures to be newly added to cross margining covered trade, following the current framework.



- If, as a result of spending all loss compensation financial resources, IRS Clearing Business's loss compensation financial resources are not sufficient to cover JSCC's expected loss amount, there will be a consultation among JSCC and Clearing Participants for responsive actions, in the same manner as the current framework.

Treatment When Loss Compensation Financial Resources up to 4th Priority are not Sufficient to Cover Loss

Annex3-2

- As mentioned in the previous slide, upon default of a cross margining user, loss arising from liquidation of IRS and cross margined JGB Futures and 3-month TONA Futures will be covered by the loss compensation financial resources up to 4th priority for IRS Clearing Business for which Margin/Clearing Fund commensurate with the cross margined position are deposited. If the loss compensation financial resources up to 4th priority for IRS Clearing Business are not sufficient to cover the loss, remaining loss needs to be allocated to each Clearing Business.
- Allocation of loss exceeding the IRS financial resources up to 4th priority to each Clearing Business will be determined by prorating such loss according to the loss amount in each product. <u>For JGB Futures and 3-Month TONA Futures, sum of P/L for these products will be used because both products are covered under JGB Futures Clearing Qualification</u>.

Case where IRS Financial Resources up to 4th Priority is Sufficient

IRS P/L: ▲50 <u>Sum of P/L of cross margined JGB Futures and 3-Month TONA Futures</u>: ▲50	Total P/L ▲100
IRS Financial Resources up to 4th Priority: 120	

Cover entire loss with IRS Financial Resources up to 4th Priority

Case where IRS Financial Resources up to 4th Priority is Not Sufficient

IRS P/L: ▲150 <u>Sum of P/L of cross margined JGB Futures and 3-Month TONA Futures</u>: ▲50 (JGB Futures: ▲70, 3-Month TONA Futures: +20)	Total P/L ▲200
IRS Financial Resources up to 4th Priority: 120	

IRS Financial Resources up to 4th Priority not sufficient to cover entire loss
Uncovered loss is ▲80

Uncovered loss of ▲80 is prorated according to loss amount in each product

A) Loss related to IRS: ▲60　(=▲80×｛▲150/(▲150+▲50)｝)

B) <u>Loss related to cross margined JGB Futures and 3-Month TONA Futures</u>: ▲20
(=▲80×｛▲50/(▲150＋▲50)｝)

IRS loss A) is covered by 5th priority financial resources for IRS Clearing Business
Loss of JGB Futures and 3-Month TONA Futures B) is covered by financial resources for JGB Futures Clearing Qualification