भारतीय प्रतिभूति और विनिमय बोर्ड
Securities and Exchange Board of India

CIRCULAR

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To

All Recognized Clearing Corporations
All Recognized Stock Exchanges

Dear Sir/ Madam

Segregation and Monitoring of Collateral at Client Level

1. SEBI, vide circular no. SEBI/HO/MIRSD/DOP/CIR/P/2020/28 dated February 25, 2020, put in place a framework of 'Margin obligations to be given by way of Pledge/ Re-pledge in the Depository System' to mitigate the risk of misappropriation or misuse of client's securities available with the Trading Member (TM) / Clearing Member (CM) / Depository Participant (DP), including use of one client's securities to meet the exposure, margin or settlement obligations of another client or of the TM / CM.

2. In order to further strengthen the mechanism of protection of client collateral from (i) misappropriation/ misuse by TM/ CM and (ii) default of TM/CM and/or other clients, SEBI issued a consultation paper on May 10, 2021 requesting market participants to provide their comments/ views on the proposed framework for segregation and monitoring of collateral at client level.

3. In light of the public comments and discussions with the stakeholders, it has been decided to adopt the following framework for segregation and monitoring of collateral at client level.

Reporting Mechanism by TMs and CMs

4. With a view to providing visibility of client-wise collateral (for each client) at all levels, viz., TM, CM and Clearing Corporation (CC), a reporting mechanism, covering both cash and non-cash collateral, shall be specified by the CCs. Details in respect of the same are as under:

    a. The reporting structure shall entail disaggregated information (segment-wise and asset type wise break-up) of each client collateral in the following manner:

- TM shall report disaggregated information on collaterals up to the level of its clients to the CM.
- CM shall report disaggregated information on collaterals up to the level of clients of TM and proprietary collaterals of the TMs to the Stock Exchanges (SEs) and CCs in respect of each segment.

b. The details to be submitted in the report shall essentially cover the following information, in order to provide a holistic view of the entire client collateral at various levels up to the level of CC:

TM → CM	**CM → SE & CC**
Client collateral received by TM	Client collateral received by TM
Client collateral retained by TM	Client collateral retained by TM
Client collateral placed with CM	Client collateral placed with CM
	Client collateral retained by CM
	Client collateral placed with CC

c. The aforementioned information shall be required to be reported on a daily basis.

5. A web portal facility shall be provided by the CCs/ SEs to allow clients to view aforesaid disaggregated collateral reporting by TM/CM.

Collateral Deposit and Allocation

6. In case of securities collateral provided to CC through margin pledge/re-pledge in the Depository system, CC has visibility of the client to whom such securities belong to, and accordingly is able to assign the value of the securities collateral, based on applicable haircut, to that client's account.

7. Similarly, for other forms of collateral placed with the CC, the CCs shall provide a facility to CMs for upfront segment-wise allocation of collateral to a TM/ client or CM's own account. The CCs shall use such collateral allocation information to ensure that the collateral allocated to a client is used towards the margin obligation of that client only.

8. There shall be no change in the procedures pertaining to placing of securities as collateral through the margin pledge/re-pledge mechanism in the Depository system, and this collateral will be identified as belonging to a client or as being proprietary securities of the TM or CM, as the case may be, as per the existing procedures.

9. While depositing other forms of collateral i.e. Cash, Fixed Deposits (FDs), Bank Guarantees (BGs) or Government Securities provided through the SGL/CSGL route, etc, the CM shall allocate these collaterals into proprietary account of CM, and/or proprietary account of any TM clearing through the CM, and/or account of any of the clients (including Custodial Participants (CPs)) clearing through the CM, and/or of any of the clients trading through the TM who in turn is clearing through the CM, segment-wise.

10. In case of such collateral received by the CM from any TM, the CM shall not accept the same without the TM specifying break-up of such collateral into proprietary account of the TM and/or uniquely identified client account. Similarly, the CC shall not accept such collateral without the CM specifying appropriate break-up of such collateral into proprietary account of CM/ proprietary account of TM/ client account. The CM shall ensure that the sum of break-up of such collateral provided by TM is equal to the total value of such collateral provided by TM, and that the allocation of such collateral to any entity as reported to the CC does not exceed the allocation of collateral reported by the TM for that entity.

11. The amount of collateral allocated shall not exceed the amount of collateral received by the TM/CM from the client and reported as such under the reporting mechanism (refer Para 4), excluding the securities collateral re-pledged to CC through margin pledge mechanism. Further, the sum of client collateral retained by the TM/CM and client collateral passed on to CM/CC shall equal the amount of collateral received by the TM/CM from the client. Also, the allocation of collateral at CC shall not be lower than the amount of collateral (except securities collateral re-pledged to CC) reported as having been passed on by the CM to the CC. The CC shall have appropriate validations in place in respect of allocations and reporting done by CMs. Further, CMs shall also perform validations at their end in respect of allocations and reporting done by TMs.

12. An illustration is provided at **Annexure-1** regarding permitted and non-permitted allocation of collateral.

13. In case of BGs, the TM/CM may consider the unfunded portion of the BG as proprietary collateral. An illustration is provided at **Annexure-2**.

14. The allocation thus provided by the CM to CC and by TM to CM shall be considered as final by the CC and CM respectively for the purpose of granting exposure and utilization during default.

15. The TM/CM shall ensure that sufficient collateral is allocated to clients to cover their margin requirements. However, if the client margin applicable at the CC for a client in a segment exceeds the collateral allocated to the client plus the securities collateral re-pledged to CC (from that client's account) in the respective segment, then the proprietary collateral of the TM/CM shall be blocked (including re-pledged/pledged securities and allocated collateral). Such margin blocked from the proprietary collateral towards a client's margin shall be deemed to have been the collateral allocated to that client. This provision shall include deemed allocation of TM's proprietary collateral towards client margins and deemed allocation of CM's proprietary collateral towards TM/CP/client margins.

16. The members shall ensure that allocated collateral plus value of securities collateral re-pledged to the CC for a client is at all times greater than or equal to the minimum margin collection requirement for the respective client in the respective segment, since the amount of minimum margin collection requirement for a client may be different from the margin applicable at CC. CCs shall put in place effective deterrent mechanisms (penalty structure) in consultation with SEBI, which shall be applicable in cases where the allocated collateral plus the securities collateral re-pledged to CC in respect of a client, is falling short of minimum margin collection requirement in the respective segment.

17. Information regarding the collateral allocated by the CM shall be made available on a daily basis on the web portal facility to clients to view disaggregated collateral reporting by TM/CM (refer Para 5). Further, CC shall also provide a facility to the TMs of the clients to view such collateral allocation to the clients by the CM.

Collateral Valuation

18. CMs are required to maintain at least 50% of the total collateral in the form of cash or cash equivalents. At individual client level, a client may have allocation of cash equivalent, less than the value of non-cash collateral provided by the client. In other words, the minimum 50% cash equivalent collateral requirement may not be applied at the client level. For the purpose of monitoring of at least 50% cash-equivalent collateral at the level of CM, the excess cash-equivalent collateral of a client shall not be considered for other client or for proprietary account of TM/CM. However, the excess cash-equivalent collateral of proprietary account of TM/CM can be considered for clients trading/clearing through them, for the purpose of monitoring minimum 50% cash-equivalent requirement.

19. An illustration of the above requirement is provided at **Annexure-3**.

Blocking of Margins

20. The procedure for blocking of margins only specifies the order of blocking of collateral available with the CC. There shall be no change in the requirement of collection of upfront margins by the TM/CM. The TM/CM shall be required to ensure that sufficient collateral is allocated to clients to cover their margin requirements (refer Para 15 and 16).

21. The terms “Client Collateral”, “TM Collateral”, “CP Collateral” and “CM Collateral” shall mean the total of the allocated collateral value plus the value of demat securities collateral provided through margin pledge/re-pledge by any individual client, TM, CP and CM respectively to the level of CC. The TM/CM collateral shall mean the proprietary collateral of the TM/CM only and shall not include the collateral of any of their clients.

22. On receipt of a trade from a client account by the CC, the margin shall first be blocked from the value of the client collateral. If the client collateral is not sufficient, the residual margin shall be blocked from the TM proprietary collateral of the TM of such client. If the TM proprietary collateral is also not sufficient, then the residual margin shall be blocked from the CM proprietary collateral of the CM of such TM.

23. In case of a trade from the proprietary account of a TM, the margin shall first be blocked from the TM proprietary collateral, and in case such collateral is not sufficient, then the residual margin shall be blocked from the CM proprietary collateral.

24. Margins based on trades from proprietary account of the CM shall be blocked from the proprietary collateral of the CM only.

25. An illustration of blocking of margins is provided at **Annexure-4**.

26. For monitoring of the risk reduction mode (90% utilization or such applicable limit), the following procedure shall be adopted:

    a. TM level risk reduction mode: Client margin in excess of 90% of the client collateral shall be identified for each client under a TM. The total of such client margin in excess of 90% of the client collateral, plus the proprietary TM margin shall be assessed against the TM proprietary collateral for monitoring of TM level risk reduction mode.

b. CM level risk reduction mode: Sum of client margin in excess of 90% of the client collateral for each client under a TM plus the proprietary TM margin, in excess of 90% of TM proprietary collateral shall be calculated as TM margin in excess of 90% of TM collateral. Sum of such margin for each TM clearing through a CM, plus sum of client margin in excess of 90% of the client collateral for each client clearing through such CM, plus the proprietary CM margin shall be assessed against the proprietary CM collateral for monitoring of CM level risk reduction mode.

27. An illustration for monitoring of risk reduction mode is provided at **Annexure-5**.

28. In case of CP trades executed by TMs, the margin shall be blocked in the following order- (i) CP collateral through the executing TM, if any, (ii) residual margin from the proprietary collateral of the executing TM, and (iii) residual margin from the proprietary collateral of the CM of the executing TM. Upon confirmation of such trades by CM of the CP, the margin so blocked prior to the confirmation shall be released, and shall be blocked in the following order- (i) CP collateral through the confirming CM, and (ii) residual margin from the proprietary collateral of the confirming CM. In case of CP trades, the requirement to ensure that sufficient collateral is allocated to clients to cover their margin requirements shall be on the confirming CM. However, if the trade is confirmed under the auto approval facility provided by the CC, then margin shall be directly blocked in the following order- (i) CP collateral through the confirming CM, and (ii) residual margin from the proprietary collateral of the confirming CM.

Change of Allocation

29. CMs shall be permitted to change the allocation of collateral deposited with the CC, subject to the value allocated to any client not exceeding the value of actual collateral received from that client (excluding the securities collateral re-pledged to CC through margin pledge mechanism). However, such change of allocation shall be permitted subject to adequacy of available collateral with the CC after the change vis-à-vis the margin obligation. An illustration is provided at **Annexure-6**.

30. CC shall also provide notification of such change of allocation of collateral to the concerned client, in respect of whom the allocation has been changed, pursuant to the change of allocation.

Client Margin Reporting

31. There shall be no change in the client margin reporting process.

Settlement

32. There shall be no change in the settlement process.

Withdrawal of Collateral

33. Subject to the CM not being in default and fulfilling all obligations on a going concern basis, the CM may place requests for withdrawal of collateral to the CC.

34. After validation of such requests, if the collateral is found to be releasable, the CC shall release the collateral to the CM. CM may return the collateral to TM/CP/Clients or utilize collateral of the entities who are in default.

35. CC shall also provide notification of such withdrawal of allocation of collateral to the concerned clients, in respect of whom the allocation has been withdrawn, pursuant to the withdrawal of allocation.

Default Management Process

36. The default management process by the CCs in case of default by a CM shall take place in four stages:

    a. Stage 1: Completion of settlement to non-defaulting CMs
    b. Stage 2: Portability or immediate return of collateral
    c. Stage 3: Close-out of positions and provisional appropriation of collateral
    d. Stage 4: Identification of defaulting clients and final appropriation of collateral

Stage 1: Completion of settlement to non-defaulting CMs

37. CC shall utilize available financial resources to complete settlement in a timely manner and complete the pay-outs to the non-defaulting members.

Stage 2: Portability or immediate return of collateral

38. CC shall put in place a mechanism/ process for TMs/clients/CPs of defaulting CM to establish that they are not in default to the defaulting CM and have deposited collateral to the extent of allocation (including deemed allocation). This process shall be completed within a pre-specified time period. On identification of such non-

defaulting TMs/clients/CPs, CC shall provide them opportunity for either porting of their positions and collateral to another CM or immediate return of their collateral.

39. Portability of Positions and Collateral:
    a. Entities desirous of availing the facility of portability shall be required to have established alternative trading/clearing arrangements with other TMs/CMs other than the defaulting CM.

    b. If any pay-out is due to such entities, such pay-out shall be made to the entities. As a result, the amount of such pay-out shall be added to the pay-in shortfall of the defaulting CM.

40. Immediate return of collateral:
    a. Collateral of such entities shall only be utilized to the extent of losses due to liquidation of their respective positions, and the remaining collateral shall be returned, along with the pay-out due to such entities, if any. As a result, the amount of such pay-out shall be added to the pay-in shortfall of the defaulting CM.

41. In some circumstances, it may be desirable to liquidate the positions and even the collateral, since both are subject to risks. Under such circumstances, not closing out positions/collateral to allow for portability may lead to accumulation of losses. Considering the nature of positions, market conditions and such other risk assessment, the CC may at any stage decide to not provide the facility of portability. If the CC decides to not provide the opportunity for portability, the CC shall crystalize the profits/losses on close-out of positions and the value of collateral arrived at after liquidation of the same.

Stage 3: Close-out of positions and provisional appropriation of collateral

42. For the remaining entities after Stage 2, i.e., entities other than the ones who could avail the opportunity of either porting or immediate return of collateral in Stage 2, following process shall be followed:

    a. CC shall close out all open positions of the defaulting CM, including the positions of TMs/clients/CPs clearing through such CM.

    b. CC shall first utilize the CM/TM/Client/CP collateral for meeting any losses in close-out of respective positions. It is clarified that TM/Client/CP collateral shall include both allocated collateral (including deemed allocated collateral) and the

value of securities collateral provided through margin pledge/re-pledge to the level of CC.

c. In case of any shortfall in collateral of any entity under the CM, any excess proprietary collateral of the TM / CM of such entity shall be used. This shall follow the same order of utilization as in case of blocking of margins. Any shortage in the proprietary collateral of the TM / CM shall be met by applying the default waterfall of the CC.

d. With regard to the defaulted settlement obligations, following process shall be followed:

   i. Any pay-out made to the non-defaulting clients in Stage 2 shall be added to the defaulted obligations.

   ii. The defaulted obligations (including pay-out in Para (i) above) shall be first adjusted with the proprietary obligation of the defaulting CM to the extent of funds/securities payable for the proprietary trades.
      - Any shortage in the proprietary collateral of the defaulting CM shall be met by applying the default waterfall of the CC.
      - Any excess proprietary collateral of the CM shall also be used for meeting the defaulted obligations.

   iii. Remaining defaulted obligations shall be attributed pro-rata: funds pay-in shortfall shall be attributed pro-rata among TM/clients/CP having funds payable and securities pay-in shortfall shall be attributed pro-rata among TM/clients/CP having deliverable positions in the security. Such losses shall be recovered from the collateral of the TM/clients/CP available, if any.
      - Any shortage in the collateral of such TM/clients/CP shall be met by applying the default waterfall of the CC.

   iv. In case of any defaulted obligations attributed to a TM in Para (iii) above (and in turn to its clients), the process enunciated above at Para (ii) and (iii) above for a defaulting CM and its constituents shall apply, *mutatis mutandis*, to the TM.

e. The aforesaid pro-rata attribution of shortages shall be provisional. The actual attribution of shortages to clients shall be done in Stage-4.

f. In case there is any profit to a TM/client/CP during the close-out process, such close-out profit shall be considered as pay-out due to the TM/client/CP.

43. An Illustration on the procedures to be followed in the Stage-2 and the Stage-3 are given at **Annexure-7**.

Stage 4: Identification of defaulting clients and final appropriation of collateral

44. The procedure for verification and settlement of claims of constituents of defaulting CM shall be as follows:

a. The process for identification of defaulting TM/CP/clients and the return of collateral of non-defaulting TM/CP/clients shall be administered by the appropriate committee viz., Member and Core Settlement Guarantee Fund Committee (MCSGFC) of the Exchange or the CC.

b. The amount that can be claimed by the non-defaulting TM/CP/clients from the CC shall be limited to the allocated collateral (including deemed allocated) and the value of securities collateral provided through margin pledge/re-pledge to the level of CC, plus the pay-out (including profit if any during close-out) due to the constituent, less the losses in close-out of positions of the constituent.

c. The MCSGFC of the CC/Exchange shall implement the relevant procedures for verification and settlement of claims of the non-defaulting TM/CP/clients of the defaulting CM.

d. The constituents actually in default shall be identified and the pro-rata attribution of shortages performed in Stage-3 shall be replaced by the actual attribution of shortages. If there has been any excess collateral appropriated at Stage-3 due to pro-rata attribution, such excess appropriation shall be corrected, and the constituents shall be returned the collateral in full along with the pay-out due to such entities. This amount shall be recovered from the constituents who have higher shortage (pursuant to actual attribution) than the one attributed on pro-rata basis. If such clients do not have sufficient collateral, then the default waterfall of the CC (including its Core Settlement Guarantee Fund (Core SGF), as per the specified order of waterfall) shall be applied.

e. For any collateral of a client retained by TM/CM, and not allocated to that client's account, the Exchange or the CC shall initiate suitable actions before appropriate court of law for liquidating the assets (movable and immovable) of the defaulter member as per the existing provisions. Further, eligible clients will

also have the access to compensation from the Investor Protection Fund, as per the existing provisions.

45. Illustration on procedures to be followed in Stage-4 are provided at **Annexure-8**.

Default of TMs to CMs

46. The following procedure shall be adopted in case of default of TM to CM:

    a. The CM shall continue to meet its obligations towards its other constituents, as well as the CC.

    b. The CM shall close-out all open positions of the defaulting TM (including clients under the TM).

    c. Under the supervision of the CC, the CM shall appropriate the collateral towards losses. The losses in closing-out open positions and the settlement obligations due from clients of the TM shall be appropriated first from the allocated collateral (as per allocation provided by TM to CM, including deemed allocated) and securities collateral provided through margin pledge/ re-pledge to the level of CM/CC of respective clients. Any residual losses as well as the losses in closing-out open positions and the settlement obligations of the TM proprietary account shall be appropriated from the TM proprietary collateral. In case of TM proprietary collateral being insufficient, the losses shall not be appropriated from any other constituent of the CM or any constituent of the defaulting TM.

    d. After the above utilization towards losses in closing-out open positions of the defaulting TM (and clients under the TM) and net settlement shortfall, all remaining collateral/funds received from the defaulting TM (lying with CM/CC) shall be provided by the CM to the Stock Exchanges.

    e. Since the TM will be leading to default, the Stock Exchanges shall institute relevant applicable procedures against the TM as per existing regulatory provisions, byelaws, rules and regulations of the Stock Exchanges.

Violations

47. Any false allocation by members shall be treated as a violation and disciplinary action shall be taken against the members.

48. The aforementioned framework for segregation and monitoring of collateral at client level shall be applicable to all segments and product classes at Stock Exchanges/ Clearing Corporations.

49. The provisions of the circular no. SEBI/HO/MIRSD/DOP/CIR/P/2020/28 dated February 25, 2020 shall, accordingly, be amended to the extent mentioned above. All other provisions specified in the said circular dated February 25, 2020 shall remain unchanged.

50. The provisions of Paragraphs 4 and 5 of this circular shall come into force with effect from October 01, 2021, and other provisions of this circular shall come into force with effect from December 01, 2021.

51. Stock Exchanges and Clearing Corporations are directed to:

    a. take necessary steps to put in place systems for implementation of the circular, including necessary amendments to the relevant bye-laws, rules and regulations;

    b. bring the provisions of this circular to the notice of their members and also disseminate the same on their websites; and

    c. communicate to SEBI, the status of implementation of the provisions of this circular in the Monthly Development Report.

52. This circular is issued in exercise of the powers conferred under Section 11(1) of the Securities and Exchange Board of India Act 1992, read with Section 10 of the Securities Contracts (Regulation) Act, 1956 to protect the interests of investors in securities and to promote the development of, and to regulate the securities market.

53. This circular is available on SEBI website at www.sebi.gov.in at “Legal Framework→Circulars”.

Yours faithfully

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Annexure-1: Allocation of collateral

Illustration 1:

Consider a self-clearing member (SCM) who has received the following cash collateral from its clients:

Client	**Cash Received (Rs)**
Client-1	2 crore
Client-2	3 crore
Client-3	1 crore
Client-4	1 crore
Total	**7 crore**

The member places Rs 6 crore with the CC – Rs 4 crore out of client funds and Rs 2 crore out of proprietary funds. Rs 3 crore worth of client collateral is maintained in the specified client bank account of the member. Few illustrations of allocations and whether permitted or not are provided below:

Sl.	**Allocation**		**Comments**
1	Prop	2 Cr	Permitted, since total Rs 4 cr is allocated among clients and allocations to individual clients do not exceed the respective collateral provided by them.
	Client-1	1 Cr	
	Client-2	1 Cr	
	Client-3	1 Cr	
	Client-4	1 Cr	
2	Prop	2 Cr	Permitted, since total Rs 4 cr is allocated among clients and allocations to individual clients do not exceed the respective collateral provided by them.
	Client-1	2 Cr	
	Client-2	2 Cr	
3	Prop	2 Cr	Permitted, since total Rs 4 cr is allocated among clients and allocations to individual clients do not exceed the respective collateral provided by them.
	Client-2	3 Cr	
	Client-3	0.5 Cr	
	Client-4	0.5 Cr	
4	Prop	3 Cr	Not permitted, client collateral allocated as proprietary. Total collateral received from clients does not equal amount with the member plus amount allocated.
	Client-1	2 Cr	
	Client-3	1 Cr	
5	Prop	2 Cr	Not permitted, allocation to Client-3 is in excess from the collateral received from the client.
	Client-2	2 Cr	
	Client-3	2 Cr	
6	Client-1	2 Cr	Permitted, proprietary collateral can be allocated as client collateral provided the allocated amount does not exceed the actual collateral received from the client.
	Client-2	3 Cr	
	Client-3	0.5 Cr	
	Client-4	0.5 Cr	

7	Client-1	4 Cr	Not permitted, although proprietary collateral can be allocated as client collateral, such collateral cannot exceed the actual collateral received from the client
	Client-3	1 Cr	
	Client-4	1 Cr	

Illustration 2:
Suppose a SCM receives the following collateral from clients:

Client	Collateral Type	Value (Rs)
Client-1	Cash	1 crore
Client-2	Approved securities	2 crore
Client-2	Non-approved securities	2 crore

The member re-pledges the approved securities to the CC. The non-approved securities cannot be provided to the CC. The member provides Rs 1 crore cash collateral of Client-1 and Rs 5 crore proprietary cash collateral to the CC. The member may allocate the collateral as follows:

Client	Value (Rs)
Client-1	1 crore
Proprietary	5 crore

Thus, only the collateral provided to the CC (excluding securities provided through the margin pledge mechanism) shall be allocated. To clarify, Client-2 would still get the benefit of eligible securities collateral re-pledged to CC, however the value for the same shall be assigned by the CC to the account of Client-2, and therefore no collateral allocation shall be done by the member. The non-approved securities collateral would be retained by the member.

If the Client-2 wishes to trade in such a manner that the margin would exceed Rs 2 crore, the member may allocate the proprietary collateral to the client, as follows:

Client	Value (Rs)
Client-1	1 crore
Client-2	2 crore
Proprietary	3 crore

Annexure-2: Treatment of unfunded portion of BG

Consider an example of a SCM with two clients. Suppose the SCM receives the following cash collateral from each of the clients:

Client	**Cash Received (Rs)**
Client-1	1 crore
Client-2	1 crore

Suppose the SCM provides the cash received to a bank and obtains a Bank Guarantee of Rs. 4 crore and provides it to CC. Then, the CM shall allocate the BG as follows:

Entity	**BG Allocation (Rs)**
Client-1	1 crore
Client-2	1 crore
SCM – Proprietary	2 crore

Annexure-3: Monitoring of the minimum 50% cash-equivalent collateral requirement

Consider the following example of collateral provided by various entities under a CM.

Entity	Cash-equivalent (A)	Non-cash (B)	Excess cash-eq. If(A>B,A-B,0)	Excess noncash If(B>A,B-A,0)
CM Prop	100	40	60	0
TM-1 Prop	0	0	0	0
TM-1 Cli-1	200	250	0	50
TM-1 Cli-2	70	10	60	0
TM-1 Cli-3	70	100	0	30
TM-2 Prop	300	200	100	0
TM-2 Cli-4	70	90	0	20
TM-2 Cli-5	50	100	0	50

Considering TM-1, the excess cash-equivalent collateral of TM-1 Cli-2 cannot be used to offset the excess non-cash collateral of TM-1 Cli-1 and TM-1 Cli-3. Therefore, there will be excess non-cash collateral to the extent of 80 (50 for Cli-1 and 30 for Cli-3) under TM-1.

Considering TM-2, the excess proprietary cash-equivalent collateral of TM-2 can be used to offset the excess non-cash collateral of TM-2 Cli-4 and TM-2 Cli-5. Therefore, there will be no excess noncash collateral under TM-2.

Summary of excess cash-equivalent and excess non-cash collateral under CM prop, TM-1 and TM-2 would be as under:

Entity	Excess Cash-eq	Excess noncash
CM Prop	60	-
TM-1	-	80
TM-2	30	-

The excess cash-equivalent collateral of TM-2 cannot be used to offset the excess non-cash collateral of TM-1. However, the excess cash-equivalent collateral of CM Prop can be used to offset excess non-cash collateral of TM-1. Therefore, the overall excess non-cash collateral will be 20, for TM-1.

Entity	Excess noncash
TM-1	20

The benefit of this excess non-cash collateral (20) will not be available under TM-1. The entities who will get benefit would be identified through a suitable mechanism by the CCs. In this example, suppose the CC applies FIFO rule and it is assumed that Cli-1 has pledged the non-cash collateral before Cli-3. Therefore, the Cli-1 will receive benefit for its entire collateral (so the effective value of collateral of Cli-1 will be 200+250=450). On the other hand, Cli-3 will not receive benefit of non-cash collateral to the extent of 20 (so the effective value of collateral of Cli-3 will be 70+80 = 150).

Annexure-4: Blocking of margins

Suppose the total collateral (allocated collateral plus securities collateral placed through margin pledge/ re-pledge to CC) available against various entities are as given below.

Entity	Collateral (Rs)
CMTM Prop	1000
TM-1 Prop	500
TM-1 Cli-1	300
TM-1 Cli-2	300

- Trade-1: TM-1 Cli-2 trades with margin requirement of Rs 100. Blocking of margin shall be as follows:

Entity	Collateral (Rs)	Blocking (Rs)
CMTM Prop	1000	0
TM-1 Prop	500	0
TM-1 Cli-1	300	0
TM-1 Cli-2	300	100

- Trade-2: TM-1 Cli-1 trades with margin requirement of Rs 600. Blocking of margin shall be as follows:

Entity	Collateral (Rs)	Blocking (Rs)
CMTM Prop	1000	0
TM-1 Prop	500	300
TM-1 Cli-1	300	300
TM-1 Cli-2	300	100

- Trade-3: TM-1 Cli-2 trades with revised margin requirement for Cli-2 of Rs 600. Blocking of margin shall be as follows:

Entity	Collateral (Rs)	Blocking (Rs)
CMTM Prop	1000	100
TM-1 Prop	500	500
TM-1 Cli-1	300	300
TM-1 Cli-2	300	300

- Trade-4: TM-1 Cli-2 trades with revised margin requirement for Cli-2 of Rs 900. Blocking of margin shall be as follows:

Entity	Collateral (Rs)	Blocking (Rs)
CMTM Prop	1000	400
TM-1 Prop	500	500
TM-1 Cli-1	300	300
TM-1 Cli-2	300	300

In the above examples, the collateral of Rs 500 blocked from the TM1-Prop, and the collateral of Rs 400 blocked from CMTM Prop, shall be deemed to be allocated to TM-1 Cli-1 and TM-1 Cli-2. The deemed allocation would be as follows:

Client	Margin (Rs)	Blocked from client collateral (Rs)	Deemed allocation from TM-1 Prop (Rs)	Deemed allocation from CMTM Prop to TM-1 Prop (Rs)
TM-1 Cli-1	600	300	300	400
TM-1 Cli-2	900	300	600	

To clarify, the deemed allocation from CMTM Prop to TM-1 Prop is Rs 400, therefore the total TM-1 Prop collateral (including deemed allocated) would be Rs 900 (Rs 500 + Rs 400). Out of this, the excess client margin would be considered to be deemed allocated to the respective client.

Annexure-5: Monitoring of risk reduction mode

Suppose the total collateral (allocated collateral plus securities collateral placed through margin pledge/ re-pledge to CC) available against various entities, along with their margin obligations, are as given below.

CM	TM	Client	Collateral (Rs)	Margin (Rs)	CliMrgn>90% (Rs)
CM-1	-	Prop	1200	800	-
CM-1	TM-1	Prop	500	400	-
CM-1	TM-1	Client-1	800	780	60
CM-1	TM-1	Client-2	500	450	0
CM-1	TM-1	Client-3	400	380	20
CM-1	TM-2	Prop	500	200	-
CM-1	TM-2	Client-4	1000	920	20
CM-1	TM-2	Client-5	1000	880	0

<u>TM level monitoring</u>

In the above table, “CliMrgn>90%”, or client margin in excess of 90%, has been calculated as margin for the client less 90% of the client collateral. Risk reduction mode monitoring for TM shall be based on assessment of [TM Prop Margin + CliMrgn>90%] against the [TM Prop collateral]. Accordingly, margin utilization percentage of TM1 and TM2 would be as under:

- Margin utilization percentage of TM1 = [400 + (60 + 0 + 20)] /500 = 96%
- Margin utilization percentage of TM2 = [200 + (20 + 0)] /500 = 44%

In other words, for TM1, margin of Rs 30 is in excess of 90% of its prop collateral, while there is no excess margin for TM2 against its prop collateral. The same has been tabulated below:

TM	Total CliMrgn>90% (Rs)	Prop Margin (Rs)	90% of TM prop collateral (Rs)	TMMrgn>90% (Rs)
TM-1	80	400	450	30
TM-2	20	200	450	0

<u>CM level monitoring</u>

In the above table, “TMMrgn>90%”, or TM Margin in excess of 90%, has been calculated as [CliMrgn>90% + TM Prop margin] in excess of 90% of TM prop collateral. Risk

reduction mode monitoring for CM shall be based on assessment of [CM Prop Margin + TMMrgn>90%] against the [CM Prop Collateral]. Accordingly, margin utilization percentage of CM1 would be as under:

- Margin utilization percentage of CM1 = [800 + (30 + 0)]/1200 = 69.1%

Annexure-6: Change of allocation

Suppose a SCM has following collateral:

Entity	Cash (Rs)
SCM Prop	200
Cli-1	200
Cli-2	200

Out of the total available cash of Rs 600, suppose the SCM has provided an FDR of Rs 400 to the CC (with Rs 200 cash remaining with the member). Suppose, the FDR provided to the CC is allocated by the SCM as follows. Here, the SCM has chosen not to allocate any collateral to Cli-2 in the total collateral placed with the CC:

Entity	Collateral allocated (Rs)
SCM Prop	200
Cli-1	200

Suppose the margin requirement is as follows:

Entity	Collateral (Rs)	Margin blocked (Rs)
CM Prop	200	160
Cli-1	200	150

<u>Change in allocation: Example 1</u>

The member shall be permitted to change the allocation as follows (i.e. the member chooses to consider the cash retained with it to be as Rs 50 belonging to Cli-1 and Rs 150 belonging to Cli-2):

Entity	Collateral (Rs)
CM Prop	200
Cli-1	150
Cli-2	50

<u>Change in allocation: Example 2</u>

The member shall not be permitted to change the allocation as follows (i.e. the member chooses to consider the cash retained with it to be as Rs 100 belonging to each client):

Entity	Collateral (Rs)
CM Prop	200
Cli-1	100
Cli-2	100

This allocation shall not be permitted since Cli-1 has a margin requirement of Rs 150.

Annexure-7: Procedures to be followed in Stage-2 and Stage-3

Consider an example of a SCM defaulting in the derivatives segment. An illustration of the cash settlement obligations of prop/clients and attribution of shortage is provided below (the available collateral shown against different entities comprises of both allocated collateral (including deemed allocated) and value of demat securities collateral provided through margin pledge/re-pledge to the level of CC):

Entity	(Pay-in)/ Pay-out (Rs)	Collateral (Rs)	Position closeout loss (Rs)	Remaining Collateral (Rs)
Prop	(3 crore)	10 crore	4 crore	6 crore
Client-1	(3 crore)	10 crore	3 crore	7 crore
Client-2	(3 crore)	15 crore	4 crore	11 crore
Client-3	2 crore	15 crore	2 crore	13 crore
Client-4	2 crore	3 crore	1 crore	2 crore
Net Pay-in	**5 crore**			
Shortfall	**5 crore**			

<u>Scenario 1: All pay-out clients establish not being in default</u>

1. Suppose Client-3 and Client-4 establish within the pre-specified time period that they are not in default, do not have debit balance/dues towards the member and have not received the pay-out due.
2. The remaining collateral of Client-3 and Client-4 (Rs 13 crore and Rs 2 crore respectively), along with the pay-out for the clients (Rs 2 crore each), shall be provided to the clients.
3. The settlement shortfall would now be Rs 9 crore (Rs 5 crore shortfall in net pay-in, plus Rs 4 crore of pay-out made to Client-3 and Client-4).
4. The settlement shortfall of Rs 9 crore shall be first adjusted with the SCM proprietary pay-in obligation of Rs 3 crore. Excess remaining proprietary collateral of SCM (Rs 3 crore) shall also be used towards the settlement shortfall.
5. Remaining settlement shortfall of Rs 3 crore shall be attributed pro-rata to clients having pay-in, i.e., settlement shortfall of Rs 1.5 crore each shall be attributed to Client-1 and Client-2 and appropriated from their collateral.

<u>Scenario 2: One pay-out client establishes not being in default</u>

1. Suppose Client-3 establishes within the pre-specified time period of not being in default, not having debit balance/dues towards the member and not having received the pay-out due.

2. The remaining collateral of Client-3 (Rs 13 crore), along with the pay-out (Rs 2 crore), shall be provided to the Client-3.
3. The settlement shortfall would now be Rs 7 crore (Rs 5 crore shortfall in net pay-in, plus Rs 2 crore of pay-out made to Client-3).
4. The settlement shortfall of Rs 7 crore shall be first adjusted with the SCM proprietary pay-in obligation of Rs 3 crore. Excess remaining proprietary collateral of SCM (Rs 3 crore) shall also be used towards the settlement shortfall.
5. Remaining settlement shortfall of Rs 1 crore shall be attributed pro-rata to clients having pay-in, i.e., settlement shortfall of Rs 0.5 crore each shall be attributed to Client-1 and Client-2 and appropriated from their collateral.

Scenario 3: One pay-out client and one pay-in client establish not being in default

1. Suppose Client-1 and Client-3 establish within the pre-specified time period of not being in default, not having debit balance/dues towards the member and not having received the pay-out due, where applicable.
2. The remaining collateral of Client-1 and Client-3 (Rs 7 crore and Rs 13 crore respectively) shall be provided to them. The pay-out due to Client-3 (Rs 2 crore) shall also be provided to Client-3.
3. The settlement shortfall would now be Rs 7 crore (Rs 5 crore shortfall in net pay-in, plus Rs 2 crore of pay-out made to Client-3).
4. The settlement shortfall of Rs 7 crore shall be first adjusted with the SCM proprietary pay-in obligation of Rs 3 crore. Excess remaining proprietary collateral of SCM (Rs 3 crore) shall also be used towards the settlement shortfall.
5. Remaining settlement shortfall of Rs 1 crore shall be attributed to Client-2 (since it is established that Client-1 is not in default, no shortage shall be attributed to Client-1).

Annexure-8: Procedures to be followed in Stage-4

Illustration 1:

Suppose an SCM had no proprietary positions, and the net pay-in obligations were based on five clients. There was a pay-in shortfall of Rs 300, against the net pay-in of Rs 600. Suppose none of the clients could establish within the pre-specified time period of not being in default, not having debit balance/dues towards the member and not having received the pay-out due. Assume there is no position close-out loss. The pay-in shortfall of Rs 300 would be attributed during the Stage 3 on a pro-rata basis from the clients having pay-in obligations. This would be utilized from their available collateral (the available collateral shown against different entities comprises of both allocated collateral (including deemed allocated) and value of securities collateral provided through margin pledge/re-pledge to the level of CC).

Entity	(PI) / PO (Rs)	Collateral (Rs)	Utilized Collateral (Rs)	Remaining Collateral (Rs)
Client-1	150	200	0	200
Client-2	150	100	0	100
Client-3	-300	300	100	200
Client-4	-300	300	100	200
Client-5	-300	300	100	200

Suppose the actual client defaults and position of payables/receivables are identified as follows:

Entity	Findings	Claim
Client-1	Did not receive 150 payout	Pay-out of 150 Return of collateral of 200
Client-2	Did not receive 150 payout	Pay-out of 150 Return of collateral of 100
Client-3	Did not make any pay-in	-
Client-4	Did not make any pay-in	-
Client-5	Had made a pay-in of 300	Return of collateral of 300

Accordingly, the remaining collateral of defaulting clients shall be utilized to fulfil the claims of non-defaulting clients. The additional realization and claim settlement is tabulated below:

Entity	Additional utilization of collateral	Claim Settled
Client-1	-	Pay-out of 150 Return of collateral of 200

Client-2	-	Pay-out of 150 Return of collateral of 100
Client-3	Additional collateral of 200 utilized	-
Client-4	Additional collateral of 200 utilized	-
Client-5	-	Return of collateral of 100 (from realized) Return of collateral of 200 (from remaining)

In the event of the remaining collateral of Client-3 and Client-4 not being sufficient (say, due to excess losses in liquidation of positions), the default waterfall of the CC shall be applied for such losses.

Illustration 2:

The following illustration demonstrates the limit on maximum admissible claim against the collateral at the CC by the TM/clients/CP of the defaulting CM. The CC shall recognize the claim of the clients up to the collateral allocated by the CM, plus the value of securities re-pledged till the level of the CC, plus the collateral deemed to be allocated based on the margin requirement of the client. Some examples are tabulated below:

Entity	Collateral provided to member	Margin	Collateral allocated by member at CC	Value of Securities Re-pledged to CC	Collateral deemed allocated (due to margins)	Maximum Admissible claim against collateral at CC
Client-1	1000	800	700	300	0	1000
Client-2	1000	0	400	600	0	1000
Client-3	1000	0	400	400	0	800
Client-4	1000	800	0	0	800	800
Client-5	1000	0	0	0	0	0
Client-6	0	200	100	0	100	0

In the last example (Client-6), the CM shall not be permitted to allocate collateral or permit client to trade beyond the available collateral. In case of such violations, the claim shall not be admissible, and the collateral (allocated and/or deemed so) shall be treated as proprietary collateral of the CM.

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