AMC Repo Clearing Limited

Risk Management Framework

March 2025

Table of Contents

1 Introduction

AMC Repo Clearing Limited (ARCL), is a Limited Purpose Clearing Corporation, recognised by SEBI under the Stock Exchanges and Clearing Corporations (SECC) Regulations, 2018, for providing clearing and settlement services as well as settlement guarantee for tri-party repo in corporate debt securities. RBI has granted Certificate of Authorization under the Payment and Settlement Systems (PSS) Act, 2007, to ARCL, to offer Central Counterparty Services (CCP) services and also to act as a tri-party repo agent for tri-party repo transactions in corporate debt securities.

RBI has issued Repurchase Transactions (Repo) (Reserve Bank) Directions, 2018, and as amended in November 2019, with the objective of developing a liquid repo market. As per the RBI issued Repurchase Transactions (Repo) (Reserve Bank) Directions, 2018, tri-party repo means a repo contract where a third entity (apart from the borrower and lender), called a Tri-party Agent, acts as an intermediary between the two parties to the repo to facilitate services like collateral selection, payment and settlement, custody and management during the life of the transaction.

The Risk Management Framework describes how ARCL manages risk while providing efficient and effective clearing and settlement services to the markets it serves. This Framework explains how ARCLs' governance model to facilitate risk management. It also defines the ability to employ recovery tools and facilitate an orderly wind-down.

2 Types of Risk

The different types of risk for ARCL are:

Market Risk – The market risk covers the risk arising due to adverse change in the prices of the underlying collateral.

Credit Risk – The credit risk is the risk of counterparty defaulting to honour its settlement obligations.

Liquidity Risk – It is the risk that ARCL is unable to maintain sufficient financial resources to cover its exposures under normal and stressed conditions.

Operational Risk – It is the risk of loss resulting from inadequate or failed internal processes, systems, and people, or from external events.

Information Technology and Cyber Security Risk – It is the risk that ARCL is unable to maintain technology capabilities or services to support its operations, and is unable to detect, defend against, and respond to cyber security threats and incidents.

Legal Risk – It is the risk of loss that results from a lack of awareness, misunderstanding or unexpected application of the laws and regulations that apply ARCL's business, products, services, and relationships.

General Business Risk – It is the risk of potential impairment to ARCL's financial position resulting from a decline in revenues or an increase in expenses.

Investment Risk - Investment risk refers to the risk of loss faced by the clearing corporation when it invests its own funds and core settlement guarantee fund or its participants' assets.

Clearing Bank Risk – AMC Repo Clearing Ltd. uses the commercial bank model for settlement. Clearing banks act as a pass through for settlement of funds. All settlements are done through these Clearing Banks. Any failure at clearing bank will impact settlement of funds.

3 Governance

The Board of the company oversees the management of the risks. The governance structure at ARCL includes the Board, the Risk Management Committee, the Regulatory Oversight Committee and the Management team and its employees.

4 Member and Participants

Repurchase Transactions (Repo) (Reserve Bank) Directions, 2018, and as amended in November 2019, has specified the eligible entities for participating in Repo Market. For participation in Tri-party repo platform, eligible entities (as prescribed by RBI) can register with AMC Repo Clearing Ltd. as "Clearing Member" or "Participant" subject to fulfillment of criteria. The eligibility criteria for Clearing Member and Participant are available on ARCL Website. For latest eligibility information please refer to following link: https://www.arclindia.com/spages/Downloads/MembershipCriteria.pdf

5 Limit for Members/Participants

Member/Client limits are fixed to manage settlement risk related to borrower and lender default. For the borrower,limits are set to ensure daily settlements, reduce concentration, credit, and liquidity risk, and manage the availability of the Core SGF Fund. Limit fixing methodology for setting up member/participants limits is given below:

- Entities are categorized into different categories based on financial, non-financial (Credit rating) parameters,regulatory support & regulatory overview, specific to the sector the entity belongs to. Stronger entities shouldbe categorized into the top category.
- Maximum lending limits is fixed for entities belonging to the top category, having strong regulatory support,liquidity resources, regulatory overview, and financial strength.
- Maximum borrowing limits is fixed based on the expected Core SGF availability.
- Clearing Member / Clients will be categorised into Category-A (top category) and Category-B based on financial criteria and non-financial criteria to assign maximum permissible borrowing limit and maximum permissible lending limit. Such assignment of limits to members is necessary for managing liquidity risk anddefault risk of its members. While fixing limits, various criteria viz. liquidity resources available at ARCL's disposal, Core Settlement Guarantee Fund (Core SGF) and the risk profile of members are considered. Category A entities are strong entities and will be allotted the maximum limits for lending and borrowing. For assigning limits to Category-B entities (other than Category-A entities), ARCL will follow methodology based on various financial and non-financial parameters.

6 Issuer and ISIN Selection Criteria

The following selection criteria is used while considering the issuer whose bonds would be accepted as eligible collateral for tri-party repo.

6.1 Equity & Debt Listed Issuers

1. Positive Net Worth in the last three financial years as per the audited financial statements.

2. Profit making in the last three financial years as per the audited financial statements.
3. Long term credit rating from AAA to AA. Lowest of the rating in the last three years shall be considered.

6.2 Additional Criteria for Only Debt Listed Issuers

1. Equity of one or more associate companies of the group who is an eligible issuer should be listed on stock exchange in respect of only debt listed entities.
2. Point No. 1 of **Additional Criteria** is not applicable for only debt listed Public Sector Units of Central Government.

6.3 Ratings Watch

- If the bonds are put under "Rating Watch" (except Positive Outlook), then the issuer of such bonds will be suspended from the eligible list.

6.4 Review of Eligible Issuers List

- The eligible issuers list will be reviewed with various Committees and based on their recommendation the issuers list will be finalized. The review of the eligible issuers list will be done on a half yearly basis.

6.5 ISIN Selection Criteria

The listed bonds (NCDs) issued by the issuers meeting the above criteria and having the ratings from AAA to AA will be accepted as eligible collateral. At present, bonds with following characteristics will not be accepted as eligible collateral:

- Tier-I bonds issued by Banks, NBFC & other institutions.
- Perpetual Debt.
- Convertible bonds (Optional or Compulsorily).
- Securities with below AA credit rating.
- Unsecured bond below AAA credit rating.
- Structured Bonds
- Floating Rate Bonds other than market linked benchmarks namely G-Sec, T-Bill, MIBOR and Repo Policy Rate.
- Debt securities having structured obligations (SO rating) and/ or credit enhancements (CE rating) will not be accepted as eligible securities. Except securities where Credit enhancement is provided from Central Government.

For the latest eligibility information please refer to the following link:

https://www.arclindia.com/spages/Collateral/TypesofInstruments.pdf

6.6 Subordinate Bonds (Excluding Tier-I Bonds) Selection Criteria

The criteria for inclusion of Subordinate bonds is given below:

- Subordinated Bonds (excluding Tier-I bonds) issued by AAA rated Banks/PFIs, AAA rated Insurance companies and AAA rated NBFCs promoted by AAA rated PSUs/GOI.
- Separate basket for subordinate bonds (excluding Tier-I bonds).
- Higher hair cut compared to regular AAA bonds

6.7 Certificate of Deposits and Commercial Papers

Eligibility Criteria for inclusion of Commercial Papers (CPs) and Certificate of Deposits (CDs) as eligible collateral is given below:

- CDs and CPs issued by eligible issuers.
- Listed CPs of only AAA rated eligible Issuers.
- CDs of all eligible issuers issued by Scheduled Commercial Banks (SCBs) and PFIs.

7 Exposure Limits

7.1 Issuer Limit

ARCL specifies the following cumulative limit for an issuer across all members/participants.

Sr. No	Type of Issuers	Limit
1	Banks - Public & Private Sector Banks	Lower of 10% of Net Worth or Rs.10,000 crs
2	Public Financial Institutions	Lower of 10% of Net Worth or Rs.10,000 crs
3	Public Sector Undertakings	Lower of 10% of Net Worth or Rs.10,000 crs
4	Private Corporates include NBFCs and HFCs	Lower of 10% of Net Worth or Rs.5,000 crs

To address the concentration risk of issuer at a member/participant level, ARCL has implemented:

Category	Details
For PSU, Bank and PFI AAA rated issuers	**Higher of** • 25% of the total borrowing limit OR • Rs. 25 crores
Other than above AAA rated issuer and all AA+ issuer	**Higher of** • 20% of the total borrowing limit OR • Rs. 25 crores
For AA rated issuer	Limit per issuer is Higher of • 10% of the base borrowing limit OR • Rs. 25 crs
AA rated instruments	• Maximum of 50% of base borrowing limit

7.2 Member / Participant wise ISIN Level Limit

Borrowing Limits	Details
Total borrowing limit <= Rs. 125 Crores	• Issue (ISIN) limit of Rs. 25 Crores
Total borrowing limit > Rs. 125 Crores	For PSU, Bank and PFI AAA rated issuer ISIN level limit **Lower of** • 25% of total borrowing limit OR • Rs. 250 Crores
Total borrowing limit > Rs. 125 Crores	For issuer other than mentioned above ISIN level limit **Lower of** • 20% of total borrowing limit OR • Rs. 200 Crores

8 Risk Management

8.1 *Haircut*

ARCL has prescribed following haircuts for securities based on rating and residual maturity of the security forrepo tenor up to 7 days.

Instrument	Rating	Residual Maturity <= 5 Years	Residual Maturity > 5 years <= 10 Years	Residual Maturity > 10 Years
NCD and FRB	AAA	7.50%	10%	15%
NCD and FRB	AA+	10%	15%	20%
NCD and FRB	AA	15%	20%	25%
Tier II Subordinate Bonds	AAA	10%	15%	20%

Instrument	Rating	Haircut in %
Commercial Paper	A1+	4%
Certificate of Deposit	A1+	4%

8.2 *Margin from Lender*

ARCL levies an initial margin of 0.5% of the transaction value on the Lender for repo tenor upto 7 days. The Initial Margin shall be collectedon an upfront basis in cash.

8.3 *Mark-to-market*

ARCL does mark-to-market on a daily basis of the collateral provided by the members/clients and will make a margin call only if the value of such securities falls short of the outstanding borrowing position of the clearing member/participant. Further, ARCL may require its members/clients to provide additional collateral in case there is a sudden increase in the volatility of the bond or change in the ratings of the bonds. ARCL may also impose additional collateral requirement at any time during the day. The clearing member/client is required to replenish the shortfall as MTM margin if the collateral balance is inadequate to cover the requirements on account of existing borrowing. Mark-to-market margin shall be payable by members/clients and shall be paid on the next business day or such other time stipulated by AMC Repo depending on the event that has led to the deterioration in the value of collateral and value of MTM. Mark to market margin in case of borrowers will be collected in form of eligible securities.

8.4 *Order Level Risk Management*

There is order level risk management. Only those lending orders that satisfy the margin requirement vis-a-vis cashcollateral deposited by the Clearing Member/Client will be accepted, subject to it is within the overall lending limits of the specific entities. Only those borrow orders that satisfy collateral requirement will be accepted subjectto it is within the overall borrowing limits of the specific entities.

9 Types of Risk Monitored

9.1 *Liquidity Risk*

ARCL manages the liquidity risk (i.e., fund settlement shortage) by means of the following resources.

- Credit lines with banks
- Own Funds
- Core Settlement Guarantee Fund

9.2 Operational Risk

Robust product designing, development of process using the process available with the outsourced Clearing Corporation and Exchange for operations, using business continuity related and cyber security related arrangement of these outsource units ensures risk in this area is kept under control.

The ARCL has prepared separate Operational Risk Management (ORM) Policy according to the principles of sound management of operational risk published by Bank for International Settlement (BIS) in June 2011 & Reserve Bank of India's guidance notes on management of operational risk. The framework has majorly incorporated the principles as mentioned in the reference publications.

9.3 Information Technology and Cyber Security Risk

ARCL has laid down various IT related policies that establish guidelines for the use of information technology within an organization.

ARCL maintains cyber security & cyber resilience policy which laid down principles that grade, provide direction to & drive executive management decisions by establishing common & shared goals for consistent & appropriate protection of the organization's information assets from cyber threats.

9.4 Legal Risk

Clearing and settlement procedures covering novation, netting, settlement finality etc. are supported under the Payment and Settlement Systems Act, 2007 of RBI, and under the Securities Contracts (Regulation) (Stock Exchanges and Clearing Corporations) Regulations (SECC) 2018 and the Securities Contracts Regulation Act (SCRA) 1956. Further, ARCL Byelaws, Rules and Regulations also clearly articulate the activities provide a sound legal basis for all aspects of ARCL operations, risk management and default procedures.

9.5 General Business Risk

- In terms proviso of regulations 38 (2) of SECC regulations 2018, Clearing Corporation cannot itself undertake any unrelated businesses or activities.
- The investments of its Owned Funds and Core Settlement Guarantee Fund shall be made within SEBI prescribed investment framework
- ARCL on quarterly basis, monitor the liquid net assets funded by equity capital equal to a minimum of six months of current operating expenses.
- ARCL has a viable recovery and orderly winding down plan and ensures that it holds sufficient liquid net assets funded by equity to implement this plan.

9.6 Clearing Bank Risk

Criteria like net worth, capital adequacy requirement, asset quality, operational capabilities, reach and presence etc. has been prescribed for empanelment of Clearing Banks. In addition, the Clearing Banks have to enter into an Agreement with the Clearing Corporation, wherein the obligations of the clearing banks are clearly defined.

As part of the settlement process, ARCL will ensure completion of pay-in of funds before the pay-out. The timelines for pay-in and pay-out will be kept minimal to reduce any risk of clearing bank failure. Further, ARCL monitors the performance of the clearing banks against the prescribed criteria on a periodic basis.

9.7 Investment Risk

Investment will be done within the framework prescribed by SEBI. The investment policy of AMC Repo Clearing Ltd. is in accordance with the principles for investment laid down by SEBI.

Further, to prevent concentration of investments in a single bank, single bank exposure limit will be defined in the Investment policy.

10 Core SGF

ARCL has established a Core SGF based on stress events to meet any loss arising on account of default of members. The contribution to Core SGF is as per SEBI Circular.

- Issuers contribution (at the rate equivalent to 0.5 basis points of the issuance value of debt securities per annum based on the maturity of debt securities)
- Clearing Member/Participants primary contribution based on the risk the CM/Participant brings to the system.
- ARCL contribution from its profit

Note: The contribution from clearing members/participant is currently not applicable.

11 Shortage Handling

ARCL shall initiate all measures that are prudent, practicable and necessary to meet the funds shortage to ensure that the deals are settled, and all the non-defaulting Clearing Members/Participants receive funds due to them.

11.1 Lender commits shortage in the ready leg

The shortage of funds will be met from the line of credit arrangements made by ARCL with clearing banks / own funds / Core SGF, to complete the settlement for members/clients. Subsequently, position, if required, will be auctioned and any adverse difference between the traded repo rate and the auction rate will be collected from the initial margin contribution of the concerned lender who has committed shortage.

11.2 Borrower commits shortage in the forward leg

Shortage of funds will be met from the line of credit arrangements made by ARCL with clearing banks / own funds / Core SGF, to complete the settlement for members. In case borrower fails to repay the shortage amount within the stipulated time as specified by ARCL, the collateral given by the shortage member will be liquidated and the proceeds will be utilized to repay the line of credit.

12 Back testing

ARCL conducts back testing on daily basis to ensure adequacy of following:

- Adequacy of Haircut
- Adequacy of Margin
- Adequacy of Core Settlement Guarantee Fund
- Adequacy of Liquidity Resources

13 Default Waterfall Mechanism

In case of a default by a borrower, the collateral placed by it will be liquidated through the sale or auction as statedabove and any loss from such sale or auction will be met through haircut kept. Similarly, in case a lender defaultsthe initial margin collected should normally be adequate to meet the shortfall.

In case of any residual loss i.e. the realization of collateral value is less than the outstanding obligation of borroweretc. as stated above, such loss would be absorbed by the Core SGF as per the default waterfall structure defined by SEBI as under:

a) monies of defaulting member/participant (including defaulting member's primary contribution to Core SGF)
b) Insurance, if any.
c) Issuers contribution to Core SGF.
d) ARCL resources (equal to 5% of MRC).
e) Core SGF in the following order:
   I. Penalties.
   II. Previous financial years profit of ARCL transferred to Core SGF.
   III. Remaining Core SGF: ARCL contribution and non-defaulting members/participants primary contribution toCore SGF on pro-rata basis.
   IV. Remaining profit of ARCL transferred to Core SGF.
   V. Remaining ARCL resources (excluding higher of INR 100 Crore or capital requirement towards orderly Winding Down of Critical Operations and Services).*
f) Remaining ARCL resources to the extent as approved by SEBI.
g) Capped additional contribution by non-defaulting members/participants. **
h) Any remaining loss to be covered by way of pro-rata haircut to payouts. ***

* INR higher of INR 100 Crore or capital requirement towards orderly Winding Down of Critical Operations and Services to be excluded only when remaining Clearing Corporation resources are more than INR 100 Crores.

**

i. ARCL shall call for the capped additional contribution only once during a period of thirty calendar days regardless of the number of defaults during the period. The period of thirty calendar days shall commence from the date of notice of default by ARCL to market participants.

ii. ARCL shall have relevant regulations/provisions for non-defaulting members to resign un-conditionally within the abovementioned period of thirty calendar days, subject to member closing out/settling any outstanding positions, paying the capped additional contribution and any outstanding dues to SEBI. No further contribution shall be called from such resigned members/participants.

iii. The maximum capped additional contribution by non-defaulting members/participants shall be lower of 2 times of their primary contribution to Core SGF or 10% of the Core SGF on the date of default.

iv. In case of shortfall in recovery of assessed amounts from non-defaulting members/participant, further loss can be allocated to layer 'VII' with approval of SEBI."

*** In case loss allocation is effected through haircut to payouts, any subsequent usage of funds shall be with prior SEBI approval. Further, any exit by ARCL post using this layer shall be as per the terms decided by SEBI in public interest.

The above provisions of default handling shall be applicable to the Participants as if they were the clearing members.