



Interoperability: NSE Clearing

NSE Clearing – The robust CC

Operationally

Asset Class	NSE WFE Ranking CY 2018
Equity	2
Stock Options	9
Stock Futures	2
Index Options	1
Index Futures	12
Currency Options	2
Currency Futures	1

For Equity: Number of trades; For Derivatives: Number of contracts traded

We are world-class.

- We clear among the highest number of trades in the world.
- 100% equity derivatives, 90% cash, 50%+ currency derivatives locally.
- Even with this volume, we settle T+2 and perform realtime risk management
- Committed to continuous improvement, investments in major technology upgrades

.. and financially

Track Record

- Financially strongest securities clearing corporation
- Proven, robust risk management
- Clearing Members: 1153 Cash, 335 F&O, 140 Currency

Recognition

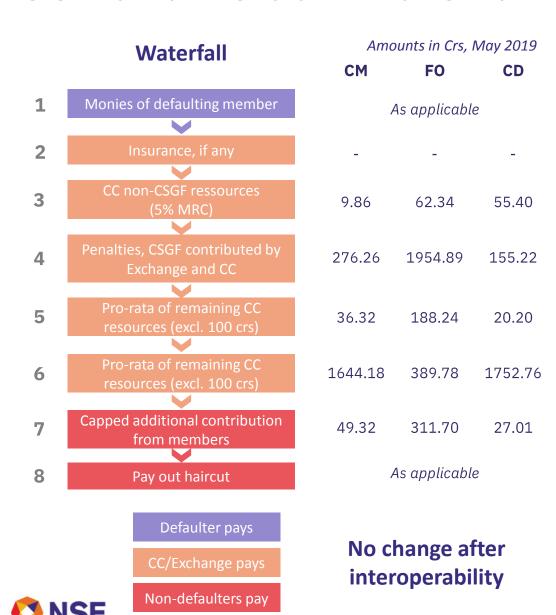
- AAA rated since 2008,
- QCCP by SEBI,
- TC-CCP by ESMA and TC-CPP by Temporary Recognition Regime of the UK

Financial Strength

- Core SGF of 2800 Crores without taking member contributions so far
- Minimum required corpus only about 1600 Crs.
- 4700+ settlements completed
- Daily average settlements ~2500+ Crores funds,
 ~8000 Crores securities; ~1800 Crores lines of credit
- Handle approx. 1 lakh crore of collateral



SGF and Default Waterfall



Strength of Core SGF and Waterfall

NCL has 2800 Crores across all segments in the layer 4 (i.e. the Core SGF) as against an the highest recorded minimum required corpus of about 1600 Crores across segments, which represents the loss in extreme market conditions. Thus the Core SGF has a high buffer built in over and above the required corpus. Further, the penalties and interest earned on Core SGF is put back into Core SGF resulting in growth of the corpus.

Layer 2: Insurance in default waterfall

The strength of default waterfall comes from pre-funded resources and not contingent claims. The clearing members are affected in layer-7 and 8 alone and should assess the strength of all prior layers put together. NCL has a large buffer in the Core SGF over the required corpus.

Layer 4: Members contribution to the Core SGF

NSE/NCL has funded the contribution of members towards Core SGF which will be utilized in case of default without requiring members to contribute. Due to the large buffer built into the Core SGF; there is no need in foreseeable future to call for contributions of members, even if the required corpus size grows from 1600 Crores.

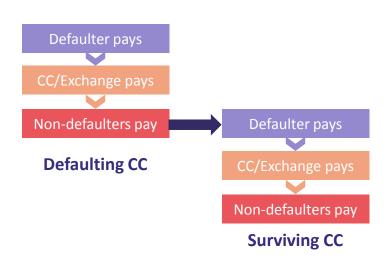
Layer 7: Capping of liability

Although not collecting, NCL computes the contribution requirement of members and downloads the same for information purpose only on a monthly basis to the members. The capped additional contribution in layer 7 will be this amount only. This amount is based on the risk brought by individual members to the system and starts from Rs. 1 lakh onwards.

Layer 8: Haircut

After exhaustion of additional liability, all members have to take haircut to payout in accordance with default waterfall specified by SEBI. Even if layer 7 is made zero, that simply means the haircut takes place earlier. Hence a risk-based capped liability is better than a fixed capped liability.

Inter CC default



Amounts in Crs, FY 2019

Parameter	Amount
Net worth	1249.70
Total revenue	380.86
Operating Revenue	141.89
Total expenses	112.23
Profit after Tax	172.51
Total Core SGF	2800.00

When will an Inter-CC default occur?

In case a large default wipes out the entire waterfall of a CC ("defaulting CC"), haircut on account of residual loss will get transferred to the other interoperable CCs ("Surviving CC").

How will Inter-CC default be managed?

The surviving CC will implement its own default waterfall. The CCs will need to provide margin as per standard requirements and an additional risk-based collateral to each other. This will be the first line of defense in case of default by a CC.

Why does it make sense to be associated with stronger CC?

- When faced with same amount of default, the risk of non-defaulting members having to fund the default or receive haircut is higher in case of a CC with lower default management resources.
- Further, the loss absorbing capacity of surviving CC through the defaulter+exchange/CC resources will be higher in case of a CC with higher default management resources.



NCL: Financial Strength



Safety

Governance	 Independent board with 2/3^{rds} public interest directors who are eminent personalities with industry and regulatory backgrounds Risk and oversight committees with independent external experts
Credit Risk	 Robust real-time risk management systems. Prudential norms for collateral such eligibility, haircut, limits and diversification requirements beyond the minimum regulatory mandate.
Liquidity Risk	 Prudent empanelment criteria for clearing banks Committed lines of credit: 1800 Crores
Operational Risk	 High degree of automation Robust change and project management processes Warm DR site with dedicated personnel and RTO of 40 minutes with regular testing Capacity management considering buffer on peak load ISO 27001 Information Security Standard Availability of the systems (target and observed) at 100%



Review of fees and charges

Clearing charges	No clearing charges to members currently No proposal under consideration for levy of charges to clearing members
Intraday collateral release charges	Nil
Charges for securities pledge (direct to NCL)	Nil
Revised NMASS interface user charges	Nil
Interest on cash collateral	Proposal under consideration



NCL: Transition to interoperability

SEAMLESS TRANSFER
to Interoperability at NCL

- EASE of Integration
- NO CHANGE for members
 - Same identifiers/codes
 - Same reports/formats/ structure
- FLEXIBILITY & CONTROL
 through existing member interfaces
- NO NEW INTERFACE development for members

	Collateral	 Better utilisation of collateral by members through intersegmental transfers Online addition of cash Online release and transfer of collateral Facility to track status online
	Risk	 Online monitoring of margin utilisation and open interest through NSCCL-MASS and C2N Applications Facility available to CM for timely enablement of TMs Feed of risk data (positions, margins, limits and utilization) Members can connect feed with proprietary systems
	Clearing & Settlement	 Automation of CP code issuance Online early pay-in of funds/securities at granular level Immediate benefit of early pay-in

• Facility to make full pay-in of obligations

Dedicated Helpline



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NCL: Competencies & Services



- Wide-ranging choice of collateral to members
- Choice of multiple Banks & Custodians
- Prudent & diligent criteria for empanelling Banks & Custodians
- Prudential norms for acceptance/valuation of collateral
- Direct pledge facility through depositories
 - Upfront margining & online capital adequacy checks
 - Online position limit monitoring
 - Risk Management control to Clearing Members
 - Auto approval of CP trades
 - Voluntary Closeout facility / Pre-trade risk controls
 - Cross margining (including ETFs)
- Clearing facility through Multiple Banks
- Settlement through SFMS; Immediate reflection of pay-in/payout; no freezing of accounts
- Committed lines of credit with clearing banks to complete settlement
- Auto Delivery Out Facility /Direct Client Pay-out/Preferred Depository Pay-out
- Early Pay-in of Securities / Funds for margin exemption





Key due diligence information

PFMI Disclosures: Qualitative and Quantitative	https://www.nscclindia.com/NSCCL/disclosures/nsccl_dis_pfmi.htm
NSE Clearing Financials and Annual Reports	https://www.nscclindia.com/NSCCL/disclosures/nsccl_dis_financials.htm
Core SGF and Default Waterfall: Quantum of resources	https://www.nscclindia.com/NSCCL/disclosures/nsccl_dis_core_sgf.htm
NSE Clearing Rules, Regulations and Byelaws	https://www.nscclindia.com/NSCCL/res/nsccl_res_rules_reg.htm
NSE Clearing Consolidated Circulars	https://www.nscclindia.com/NSCCL/res/nsccl_res_cons_circulars.htm
FAQs on interoperability	On home page of https://www.nscclindia.com/





Thank You