Report of the Committee on Clearing Corporations

Securities and Exchange Board of India

July 2015

Letter of Transmittal

17 July, 2015

Shri U K Sinha
Chairman
Securities and Exchange Board of India
Mumbai

Dear Sir

Report of the Committee on Clearing Corporations

We have great pleasure in submitting the Report of the Committee on Clearing Corporations set up by SEBI.

We sincerely thank you for entrusting us with this task of contemporary relevance.

Yours faithfully,

(K V Kamath)
Chairman

(B Sambamurthy)
Member

(V Ravi Anshuman)
Member

(Nanda Dave)
Member

(Deepak Phatak)
Member

(S V Murali Dhar Rao)
Member-Secretary

Acknowledgements

This report of the Committee on Clearing Corporations has been made possible with the support and contributions of many individuals. The Committee would like to gratefully acknowledge their significant efforts and contributions.

The Committee sincerely thank for the valuable support provided by Chief General Manager Shri Pramod Kumar Bindlish. The Committee places on record its deep sense of appreciation for the exemplary dedication and enormous efforts put in by the core team from the Market Regulation Department comprising Shri Shashi Kumar Valsakumar, GM, Ms. Maninder Cheema, DGM, Ms. Yogita Jadhav, Shri Peter Mardi, Shri Meetesh Patel, Shri Atul Mittal and Shri Ramaneesh Goyal in providing comprehensive research and secretarial assistance, for conduct of meetings of the Committee, preparing materials for discussion and compiling draft materials.

Abbreviations

CC - Clearing Corporation

CCP-Central Counter Party

CSD- Central Securities Depository

CCIL- Clearing Corporation of India Ltd.

CPMI - Committee on Payment and Market Infrastructure

CM - Clearing Member

DSRC-Depository Systems Review Committee

EMIR - European Market Infrastructure Regulation

ESMA - European Securities and Markets Authority

EU- European Union

FMI - Financial Market Infrastructures

ICCL - Indian Clearing Corporation Ltd

IOSCO - International Organization of Securities Commissions

MSEI (formerly MCX-SX)-Metropolitan Stock Exchange of India

MCX-SXCCL - MCX-SX Clearing Corporation Ltd.

MII- Market Infrastructure Institution

NSCCL - National Securities Clearing Corporation Ltd

PFMI - Principle for Financial Market Infrastructure

RBI - Reserve Bank of India

SE - Stock Exchange

SEBI - Securities and Exchange Board of India

SECC - Stock Exchange and Clearing Corporation Regulations 2012

SCRA - Securities Contract (Regulation) Act 1956

SGF-Settlement Guarantee Fund

USA - United States of America

Executive Summary

The Securities and Exchange Board of India (hereinafter referred as 'SEBI') constituted a Committee, under the Chairmanship of Shri. K V Kamath, to examine the viability of introducing a single clearing corporation (CC) or interoperability between different CCs, as well as issues pertaining to investments, calculation of liquid assets in Net worth of recognised CC and Transfer of Profits by recognised SEs to the fund of recognized CC's.

The Committee deliberated extensively on the various terms of reference and while framing its recommendations has taken into account the present Indian securities market eco-system, the views expressed by different stakeholders and the global experience with regard to Clearing Corporations.

On the issue of viability of introducing a single clearing corporation or interoperability between different CCs, the Committee has recommended that at this juncture, moving to a single CC may not be appropriate for the securities market. Preserving the current market structure and maintaining separate clearing corporations for each exchange would be prudent at this stage. However, SEBI may keep the interoperability option open and consider the proposal for implementation when ground conditions are met, which, inter alia, include clear intent of the participants coming together and having a suitable framework in place to the satisfaction of SEBI.

On the issue of investment by a recognized CC and the manner of utilization of profits of CCs, the Committee has recommended that the investment policy of a CC should be built on the premise of highest degree of safety and least market risk. The Committee recommends that CC may be permitted to invest in Fixed Deposits (FDs) / Central Government Securities (G Secs). Other instruments like Non-Convertible Debentures (NCDs), Commercial Papers (CPs), money market mutual funds etc. may not be permitted

as investment vehicle as they carry credit/liquidity risks. The investment policy may be reviewed at least on an annual basis by the CC.

On the issue of reviewing the existing regulation of transfer of profits every year by the recognized Stock Exchanges to the fund of recognized CC, the Committee has recommended that since the requirement of core Settlement Guarantee Fund (SGF) has already been met, the 25% profit transfer requirement might not be required. Also, the Risk Management Review Committee (RMRC) of SEBI may review the stress test model, used to determine the Minimum Required Corpus (MRC) of core SGF, for making such departure.

With regard to the contribution already set aside by the Stock Exchanges towards the 25% profit transfer requirement, the Committee has recommended that the same may be utilized by exchange to cover the member contribution to the core SGF since this would result in lower transaction costs and would be in the overall interest of the market. SEBI may specify the details in this regard including in respect of contributions already made by CCs on behalf of members. Further, the requirement of member contribution may be reviewed after 5 years, or earlier, if warranted. The Committee recommended that SEBI may specify the details in this regard and may appropriately make necessary amendments to the SECC Regulations 2012.

On the issue of transfer of Depositories' profits to their Investor Protection Fund (IPF), the Committee recommended that depositories may transfer 5%, or such percentage as may be prescribed by SEBI from time to time, of their profits from depository operations every year to the IPF since the date of amendment of SEBI (Depositories and Participants) (Amendment) Regulations, 2012 requiring transfer of profits. SEBI may consider necessary amendment to SEBI (Depositories and Participants) Regulations, 1996 *to* enable the same.

The percentage of profits to be transferred every year by depositories to the IPF may be reviewed by SEBI on a periodic basis.

On the issue of defining 'the liquid assets' of CCs for the purpose of calculation of Net worth of a clearing corporation, the Committee recommended that the liquid assets should comprise Fixed Deposits (FDs)/Central Government Securities (G Secs). Further, other instruments like NCDs, CPs, money market mutual funds etc. carry credit/liquidity risks and hence, may not be considered towards calculation of liquid assets in net worth of CC.

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CHAPTER 1

Background

The Securities and Exchange Board of India (hereinafter referred as 'SEBI') constituted a Committee under the Chairmanship of Shri. K. V. Kamath, to examine the viability of introducing a single clearing corporation or interoperability between different CCs, as well as pertaining to Investments, calculation of liquid assets in Net worth and Transfer of Profits of recognised CCs. The other members of the Committee were:

a. *Shri. G Padmanabhan- Executive Director -RBI
b. **Ms. Nanda Dave-Chief General Manager-RBI
c. Prof. V. Ravi Anshuman, Professor, Finance and Control, IIM Bangalore
d. Prof. Deepak B. Phatak- Professor, IIT Mumbai
e. Prof. B. Sambamurthy-Ex Director, Institute for Development and Research in Banking Technology(IBRDT)
f. Shri S. V. Murali Dhar Rao, Executive Director, SEBI (Member Secretary).

* Shri G Padmanabhan Executive Director-RBI stepped down as Member of Committee upon attaining Superannuation.

**Ms. Nanda Dave CGM-RBI was nominated as Member of Committee in place of Shri G Padmanabhan-Executive Director-RBI.

Under the terms of reference, the Committee needed to review and make recommendations on the following issues:

a. The viability of introducing a single Clearing Corporation (CC) or interoperability between different CCs.
b. Investment by a recognized CC and the manner of utilization of profits of CCs.

c. To examine and review the existing regulation of transfer of profits every year by the recognized Stock Exchanges to the fund of recognized CC.
d. To define 'the liquid assets' of CCs for the purpose of calculation of Net worth of a clearing corporation.

Any other matter that Committee considers relevant or incidental thereto. Accordingly, the issue of Transfer of Depositories' profits to their Investor Protection Fund (IPF) was referred to the Committee.

CHAPTER 2

Methodology

The Committee was apprised of the evolution of the Clearing Corporations in Indian securities market and the steps taken by SEBI in order to develop the Indian securities market eco-system, especially by delineating the Clearing Corporations from the Stock Exchanges and defining the role and responsibilities of the Clearing Corporation.

The Committee examined the international practices with regard Interoperability of Clearing Corporations. Further, to facilitate the deliberations of the Committee an approach paper was prepared by SEBI on - the 'European Experience on Interoperability', the present structure of Indian Markets and risk management framework and the risks arising out of interoperability/ Single Clearing Corporation.

The Committee also took note of the international standards - Principles of Financial Market Infrastructures (PFMI), published by the Committee on Payment and Market Infrastructure (CPMI) and International Organization of Securities Commissions (IOSCO) on the regulation, supervision and monitoring of the payment and settlement systems, record keeping agencies etc. which play an important role in supporting and strengthening the global financial system so that it can withstand shocks.

Subsequently, this committee also held discussions with representative of the three Clearing Corporations - Indian Clearing Corporation Ltd, MCX-SX Clearing Corporation Ltd. and National Securities Clearing Corporation Ltd. Further, the committee also met representatives from ICICI Securities, National Securities Depository Ltd, DSP Merill Lynch, Forum Trading Solution and Clearing Corporation of India Ltd.

This report brings out the recommendations of the Committee. The committee, while framing its recommendations has taken into account the present Indian securities market eco-system, the views expressed by different stakeholders and the global experience with regard to Clearing Corporations.

CHAPTER 3

Introduction

Evolution of the Securities Market

Advancement in technology has had a significant impact on the global securities market. Rapid adoption of such technology has enabled investors, spread across different geographies to trade in several classes of assets in a matter of milliseconds. The journey from an open-outcry trading system to an online screen based trading mechanism available today has been challenging but such systems have benefited all the stakeholders in the securities market by reducing costs and increasing efficiency.

This momentous increase in trading and the resultant importance of market infrastructure has caused the regulators around the world to relook at the Risk Management and Clearing and Settlement Mechanism in place. The Indian Securities Market also witnessed a transformation, wherein, the importance of institutions engaged in providing clearing and settlement services was recognised.

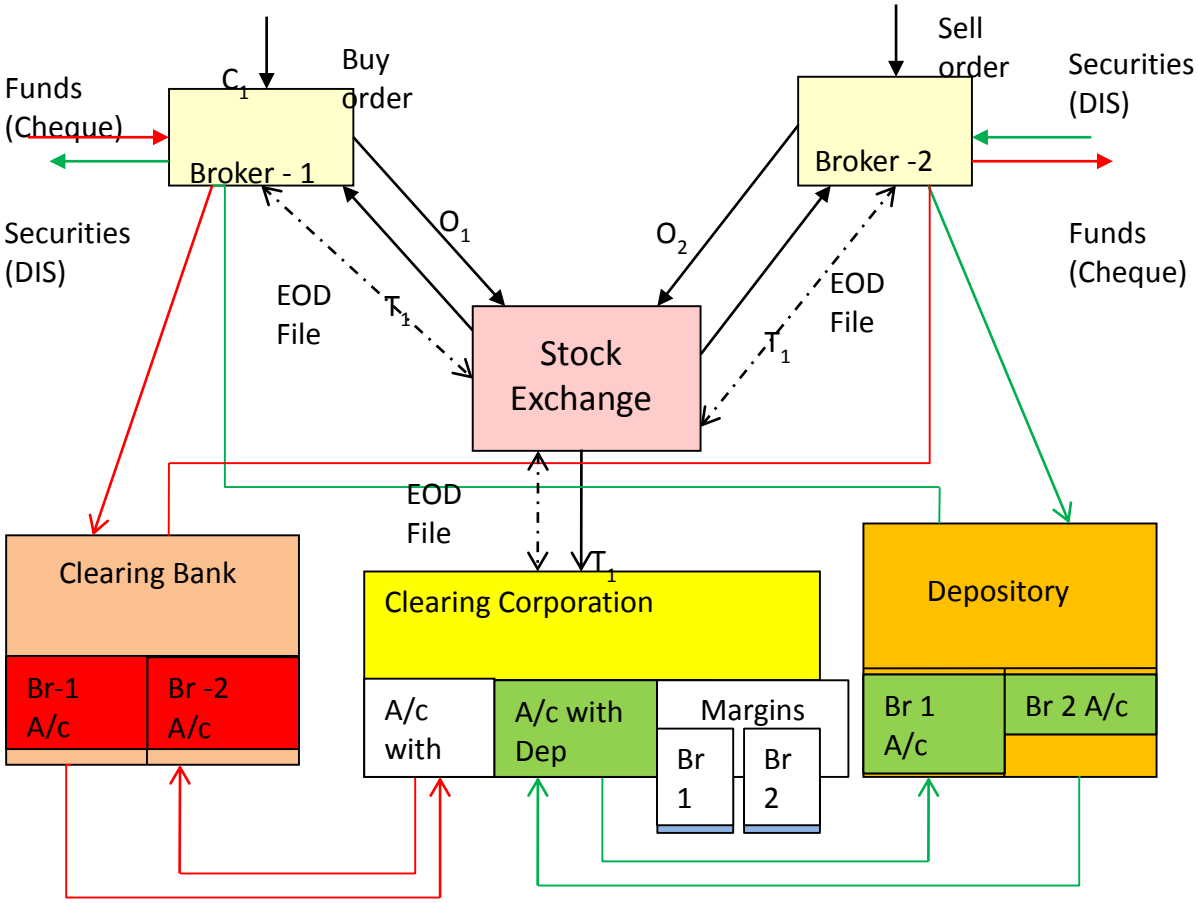
Towards this end SEBI constituted a Committee on "*Review of Ownership and Governance of Market Infrastructure Institutions*" under the Chairmanship of Dr. Bimal Jalan, (Former Governor, Reserve Bank of India), to examine the issues arising from the ownership and governance of Market Infrastructure Institutions (MIIs).

Based on the recommendations of this committee SEBI framed the Securities Contracts (Regulation) (Stock Exchanges and Clearing Corporations) Regulations, 2012 published on June 20, 2012 (hereinafter referred to as 'SECC Regulations'). The SECC Regulations provided the broad framework for regulation, supervision and monitoring of the Stock Exchanges and Clearing Corporations.

In light of the SECC Regulations, SEBI recognized three Clearing Corporations - Indian Clearing Corporation Ltd. (hereinafter referred to as 'ICCL'), National Securities Clearing Corporation Ltd (hereinafter referred to as 'NSCCL') and MCX-SX Clearing Corporation ltd. (hereinafter referred to as 'MCX-SXCCL') to clear and settle for their respective Exchanges.

Further, the CPMI and IOSCO also prescribed international standards (PFMIs) for systemically important financial market Infrastructures including Clearing Corporations, so as to strengthen such institutions which can support the global financial markets. 28 Jurisdictions have committed to adopt the PFMIs in their regulatory and supervisory functions over the systemically important financial market infrastructures.

The process flow of the current clearing and settlement in the Indian Securities Market is highlighted below –



Note -

C_1 – Client

O_1 – Order

T_1 - Trade

EOD – End of Day

Br – Broker

a) As soon as an order (O_1) is placed by the broker, and the same converts into a trade (T_1) a measure of risk is introduced into the system. The trades are then transferred to the Clearing Corporation (CC) for clearing and settlement requirements. The CC acting as a central counter party assumes the risk of settlement of the trade.

b) The risk that the CC faces is from the clearing member defaulting on the pay-in obligations at the time of settlement.

c) In order to capture this risk, a mechanism of collateral based margining has been put in place. This mechanism seeks to block a certain percentage of the collateral, calculated as a measure of volatility, based on the value of the trade.

d) Further, the members are required to bring additional margins in order to cover the change in price of the scrip from the day of trade till the day of final settlement.

e) In case of default by the clearing member, the CC steps in and makes good the settlement and conducts the necessary processes to recover the monies from the defaulting member.

CHAPTER 4

Viability of introducing a single Clearing Corporation (CC) or interoperability between different CCs

4.1. Background

Clearing Corporations have been a fundamental constituent of the securities market for decades. Evolution of regulations has allowed for the entry and exit of market infrastructure intermediaries, thus changing the capital market landscape. There is an increased level of competition at the level of various market infrastructure intermediaries, such as exchanges, clearing corporations and depositories.

The genesis of a single clearing corporation or interoperability between existing clearing corporations stems from the current suboptimal utilization of capital, wherein, margins, need to be deployed at the individual clearing corporations by market participants even if transactions are offsetting in nature till the time pay-ins are made. Further, the lack of flexibility for the market participants in choosing the venue for the clearing and settlement services results in higher cost to the market participant.

Propagators of Interoperability of CCs highlight that interoperability gives the trading members the option to clear trades with the clearing corporation of their choice. In the Indian context for e.g.: An investor could trade on, say BSE Ltd, and get the trade cleared through the Clearing Corporation of the National Stock Exchange, or vice versa which would result in efficient use of capital for trading members who take positions on multiple stock exchanges. Some of these positions may be offsetting in nature and would hence result in a much lower outgo on margins and collateral. Additionally, when

clearing corporations aren't linked to just one exchange but offer clearing services to other venues as well, competition among trading venues is enhanced.

Propagators of single Clearing Corporation highlight that while participants could always compete on the front end of the securities business, there are considerable cost efficiencies and risk reduction advantages to commoditising back office functions of a centralized infrastructure model that could achieve economies of scale by centralized trade netting, reducing cost and risk.

Interoperability is mainly a European initiative due to the fragmented market structure in Europe with more than 11 CCs operating in the European markets. To date, interoperability has predominantly been a European phenomenon, reflecting an effort in the European Union (EU) to foster a more integrated financial market. Market participants and regulators have encouraged interoperability as a way of lowering the costs to participants in accessing the markets served by CCs across EU countries, which otherwise often required the use of multiple nationally oriented intermediaries.

Presently, interoperability is applicable only for cash markets. Both in Europe as well as in the USA, trading happens through multiple trading facilities (called Multilateral Trading Facilities in Europe and Alternate Trading Systems in the USA) which are essentially brokerage firms which provide trade execution facility and operate as deemed exchanges with independent clearing arrangements. Globally, the facility of interoperability is not available for derivatives as derivatives are created by an Exchange with specific trading, risk management and clearing features and hence such products are traded and cleared only on the respective Exchange.

The European experience helps to illustrate the forces that led to the implementation of the existing links, and some of the impediments to their establishment. As per

reports, pursuant to interoperability arrangements the increased rivalry triggered has proven to be beneficial with up front clearing fees falling by up to 80% during the past two years (2010-12), according to industry reports. In addition, Euro CC, LCH Clearnet, Six Securities Services; and EMCF have reported a 30-40% reduction in settlement and operational costs since the debut of interoperability by Bats Chi.[1]

4.2. Interoperability in Other International Jurisdictions

4.2.1 USA

The equities market structure in the US today consists of competing stock exchanges and trading platforms that are required to make market information publicly available on terms that are fair and reasonable, but a single CC and a single CSD serving under common ownership serve the national equities market. While the Cash equity market has a single CC and CSD, the CC of the futures markets continues to be with the exchanges.

4.2.2 Asia

Most of the countries in the Asian region have a single equities exchange, CC and CSD. Korea, Singapore, Hong Kong all have a single equity exchange, CC and CSD. Australia and Japan have alternate trading venues; however they clear and settle through the existing CC and CSD. Pakistan has exchange clearing but a single CSD. China Securities Depository and Clearing Corporation is the central counterparty and guarantees securities and cash settlement for the transactions on both Shanghai and Shenzhen stock exchanges.

[1] www.iss-mag.com--Interoperability, Predictions For 2013

Thus, it is observed that interoperability pre dominantly remains a European phenomenon owing to their fragmented structure, while single CC/exchange CC is the preferred mode in other jurisdictions.

4.3. Interoperability: How it works? /Interoperability models[2]

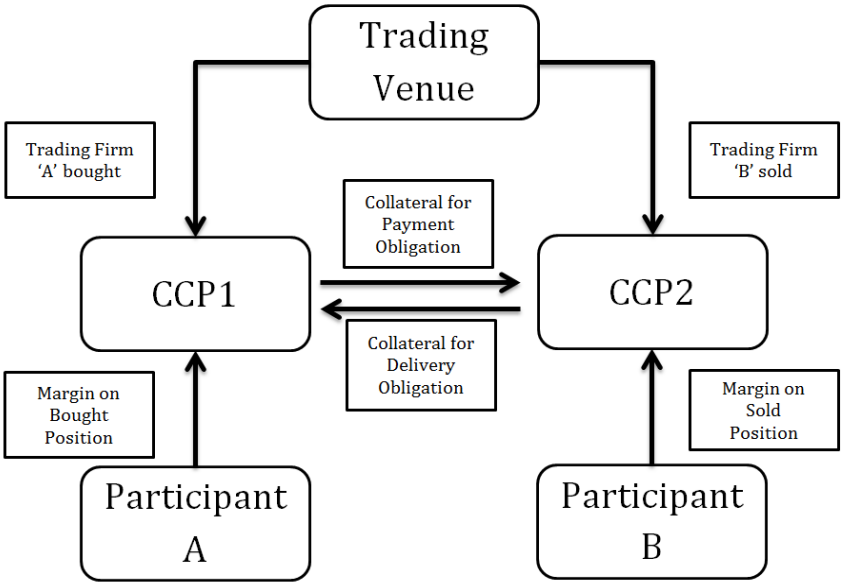
Interoperability facilitates novated trades between market participants that maintain clearing arrangements with different CCPs. To achieve this, a link is established between the two CCPs: the original trade contract is novated at three levels, rather than two as compared to when a trade takes place between participants of the same CCP.

The three contracts are between:

- the buyer and its CCP;
- the two CCPs; and
- the seller and its CCP.

Accordingly, each CCP provides a guarantee to the other that its side of the trade will be fulfilled; and each CCP provides a guarantee to its participant in relation to the performance of the other CCP.

[2] http://www.rba.gov.au/publications/bulletin/2012/jun/pdf/bu-0612-7.pdf



- Trading venue sends trades to the CCP selected by the Trading Firm
- Each CCP manages its exposure to the other's inability to fulfill obligations by collateralization
- If CCP1 is bankrupt, CCP2 will use collateral from CCP1 to cover any losses and expenses involved in closing out CCP1's obligations to CCP2 and vice versa.

Interoperability arrangements are commonly classified according to the symmetry of the risk-management requirements and of the CCPs' access to trade feeds. For instance, a CCP link may be set up either as a 'participant' link, or as a 'peer-to-peer' link.

- A *participant* link involves one CCP becoming a participant of the other, without a reciprocal arrangement. The participant CCP therefore provides collateral to the other CCP, but not vice versa. To protect itself from a default by the linked CCP, a participant CCP would have to make arrangements for additional default resources from elsewhere. A participant link is more likely to be established

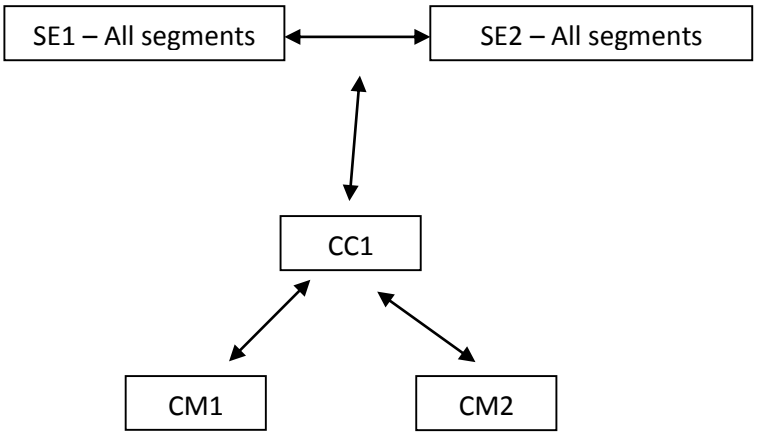
where the participant CCP has stronger incentives to establish a link than the CCP to which it is linking.

- A peer-to-peer link involves each CCP becoming a participant of the other, with collateral flowing in both directions (i.e. each linked CCP providing collateral to the other). The CCPs would likely have different participant obligations placed on them than regular participants; this would typically exempt the linked CCP from loss-sharing arrangements with other participants (e.g. contributions to a mutualized default fund), to reduce the direct exposures between each CCP and the other CCP's participants.

In view of the foregoing the Committee examined various models for Interoperability/ Single CC and gave its observations:

Model I

This model envisages that clearing corporations will provide clearing and settlement services to more than one exchange for all their segments.



SE1 & SE2 - Stock Exchanges

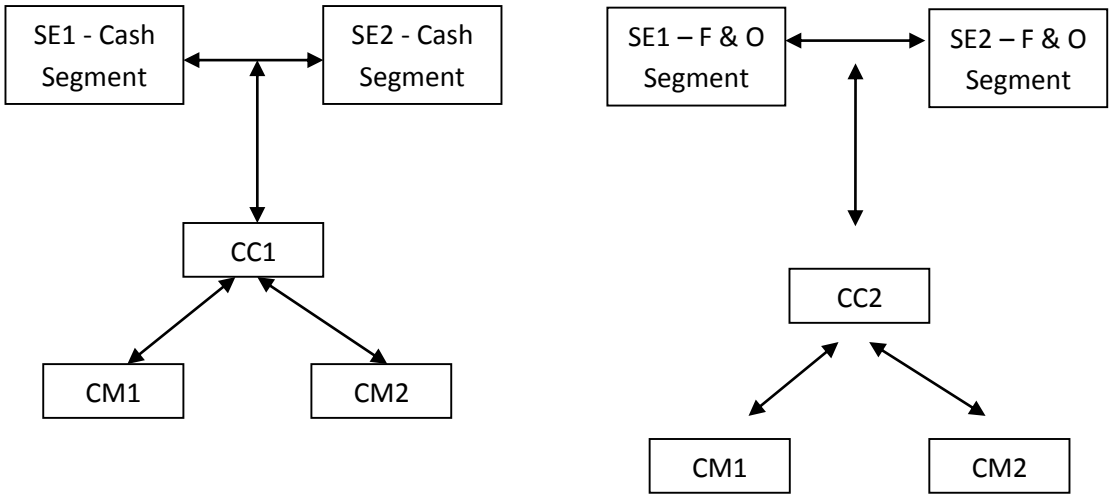
CC1 - Clearing Corporation

CM1 & CM2 - Clearing members

The Committee observed that the proposed model is basically a single clearing corporation serving all the exchanges. This model is best suited for optimal utilization of margin and collaterals and will bring about economies of scale. However, the downside of such a configuration is that it will result in a monopolistic structure. Further, the clearing corporation will become a too-big-to-fail market infrastructure institution. Moreover, in equity markets, given the large number of market participants, the challenges to maintain fairness of pricing, reasonable cost of transaction and a non-monopolistic disposition will be difficult to achieve. The potential downside of this model could be addressed by giving the single clearing corporation a public good orientation with sufficient checks and balances.

Model II (Part A)

This model envisages that the stock exchanges will seek clearing and settlement services of a particular clearing corporation for specific segments,



SE1 & SE2 - Stock Exchanges

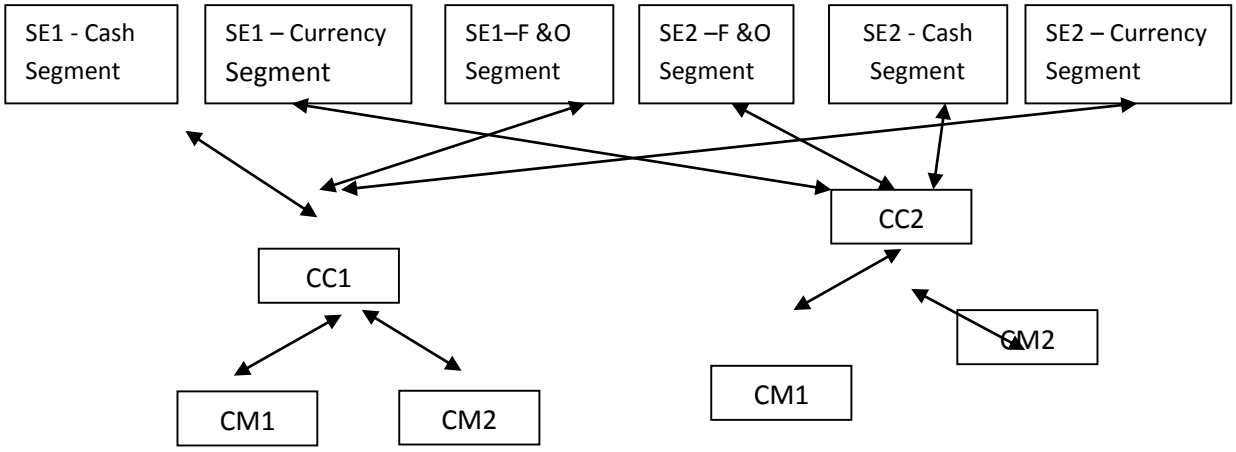
CC1 & CC2 - Clearing Corporations

CM1 & CM2 - Clearing members

The Committee observed that the proposed model envisages that stock exchanges will utilize the clearing and settlement services of a particular clearing corporation for specific segments. In other words one clearing corporation will clear only cash segment and all the exchanges will clear their cash segments through that specific clearing corporation. The most noteworthy outcome of this model will be vertical specialization of clearing corporations based on product classes.

Model II (Part B)

A derivation of the above model may be envisaged wherein the stock exchanges will perform the clearing and settlement of any of their segments through any clearing corporation. However, the option of clearing the same segment through multiple clearing corporations will not be available. Thus effectively, the exchanges have the choice to clear a specific asset class through a particular clearing corporation.



SE1 & SE2 - Stock Exchanges

CC1& CC2 - Clearing Corporations

CM1 & CM2 - Clearing members

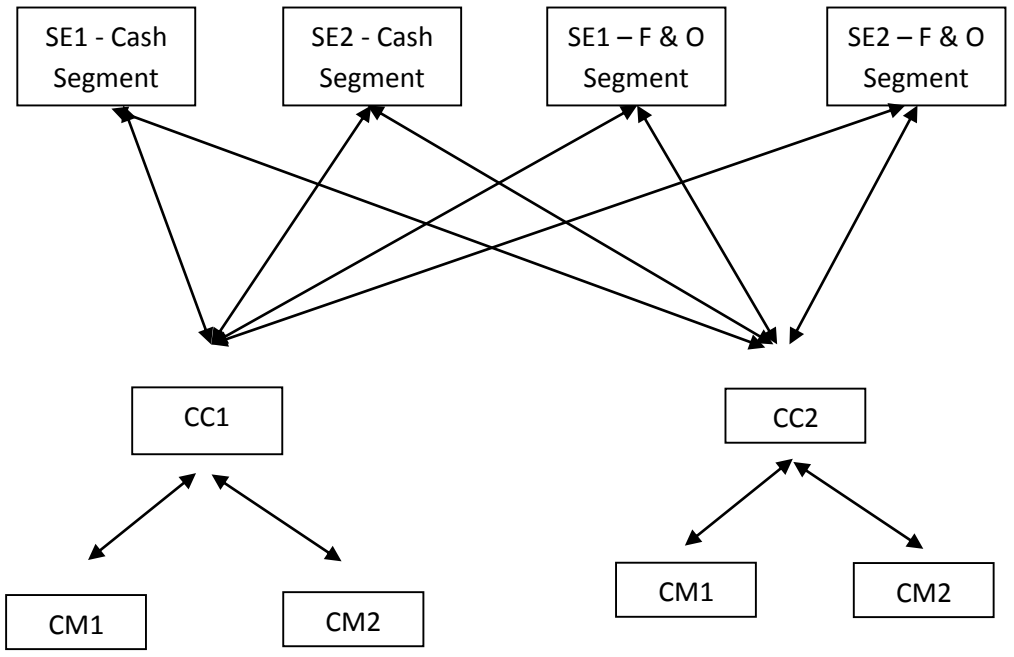
The Committee observed that as per the proposed model, the exchanges have the choice to clear a specific asset class through a particular clearing corporation. However, the

exchanges will not be able to clear and settle through multiple clearing corporations for a particular asset class. Thus, though this model provides an option to an exchange to choose a clearing corporation, it does not give any flexibility to clearing members to choose the clearing corporation. Thus, the clearing member will have no option but to clear through the clearing corporation decided by the exchange. Hence it will not meet the desired objective.

Moreover, in the present scenario, the clearing corporations are owned by the respective exchanges and there appears to be no incentive that would induce the exchanges to opt for other clearing corporations.

Model III

This model envisages that a stock exchange may tie up with multiple clearing corporations for clearing and settlement of the trades of a particular segment.



SE1 & SE2 - Stock Exchanges

CC1 &CC2 - Clearing Corporation

CM1 & CM2 - Clearing members

The Committee observed that the proposed model is a pure interoperable model. But implementation of the model would require a substantial amount of work, especially to address the risks arising out of interoperability.

4.4. Deliberations by the Committee on single CC and the possible risks arising out of interoperability and inter CC default management

The Committee, while weighing the options, namely, the present structure of clearing corporation, interoperability or centralized Clearing Corporation observed that while a single clearing corporation could help bring down margin requirements of market participants considerably, it needs to be considered whether this will come at the cost of putting the entire market at risk, amongst other things.

The Committee, upon examining the existing market structure in India, the prevalent risk management systems and interaction with the various market participants deliberated on the possible risks arising in the event of such complete interoperability. It observed that while interoperability is supposed to increase competition, capital efficiency and reduce cost, it also raises concerns about the risk management systems that should be in place to ensure compatibility between the different clearing houses and to contain the additional risks.

The Committee noted the risks arising out of links established between CCs (both individual and network of links)[3] as per CPSS-IOSCO recommendations for CCPs.

[3] CPSS-IOSCO recommendations for CCPs -November 2004

Risks arising out of links established between CCs

Risk	Risk Event Scenario	Effect on	
		Probability	**Impact**
Individual Link	Counter party Credit Risk- Failure of a Counter Party	↓	↑
	Liquidity risk - need for additional resources	↑	↑
	Operational risk-all aspects: additional operational risk for a Sub CCP due to its dependency on the other CCP	↑	↑
	Legal Risks: Between CCPs	↑	↑
	Settlement Risks	↑	↑
Network of Links	Network effect – inter-linkages between CCs allow risk to spread.	↑	↑
	Single point of failure	↓	----

How the CCs manage their exposure to each other's default is at the heart of an interoperability agreement.

4.5. Different options to manage the replacement costs risks between the CCs[4]

The Committee also studied the different options to manage the replacement costs risks between the CCs:

[4] Paper on "Investigation of risks arising from the emergence of multi -cleared trading platforms"-Joint Regulatory Authorities of LCH. Clearnet

a. CCs require a margin from each other and contribute to each other's default fund

In this option, each CC will cover the risk of default of the other CC both in normal and in extreme market circumstances i.e. where initial margin is insufficient to cover losses. However in this option, a CC would be directly impacted by the default of the other in situations where the default fund, including the linked CCs contribution to the default fund, is used.

The Contributing CCs may then have to replenish its contributions by calling for further contributions from its own members on the assumption that it would be permitted to assign member default contributions to another CC.

This arrangement would require each CC to hold potentially large amounts of collateral with its linked CC which may be inefficient. It is a conservative option and not used today.

b. CCs require margin from each other and instead of a contribution to each other's default funds, require from each other the provision of additional resources to cover losses in case of extreme market circumstances.

In this case also each CC will hold margin to cover the risk of default of the other CC both in normal and extreme market circumstances. However, the additional resources posted by each CC will not be treated as a default fund contribution by the CC holding the collateral and so cannot be used to meet losses incurred as a result of a default of a clearing member.

The difficulty may however be in calibrating adequately these additional resources. If they are too small, these resources could prove insufficient to cover the default risk of the linked CC in stress conditions. If they are too large, the cost of each CC holding potentially large amounts of collateral with the others in the network will be much higher.

c. CCs require margin from each other, but no contribution to each other's default fund and no additional resources to cover losses in case of extreme market circumstances.

In this case the replacement cost risk is covered in the normal market conditions but not in extreme market conditions. The issue of cost of each CC holding potentially large amounts of collateral with the others remains although to a lesser extent than in options 'a' and 'b'.

d. Not charge any margin to each other

The CCs do not margin each other, assuming that the CCs have a low probability of default in order to carry out their role. The safe management of a default will rely upon the CCs involved having robust legal arrangements to enable transfer of resources between each other in case of default of one of the CCs to facilitate the surviving CC to fulfil its obligations.

e. Expected loss calculation

CCs calculate a possible loss based on stress testing results, taking into account the post default backing of the linked CC (e.g. Default fund, insurance) and then calculate a recovery rate, which is the percentage of overall mark to market losses that will be left once the CCs resources have been used up and which therefore has to be covered by collateral. Eurex and Clearing Corporations use this model. This approach requires a great deal of transparency about members' positions for the host CC to carry out the stress test.

The Committee also noted the various inter CC default management practices in case of link arrangements practised by few Global CCs and also the proposal submitted by ICCL.

4.6. Recommendations of the Committee

Currently, there are three Clearing Corporations in India, viz. NSCCL, ICCL and MCX-SX CCL. Having a single Clearing Corporation would result in huge concentration of risk in the capital markets and also there is a risk that the single CC may misuse the monopoly it would enjoy. Multiple CCs promote healthy competition.

A CC's primary objective is to mitigate counterparty risk and provide a risk management framework for its members across its suite of products. Multiple CCs with healthy competition across them would prevent the concentration of risk. A single CCP across all stock exchanges covering cash equities, futures and options, currency derivatives, and debt instruments would introduce significant concentrated risk into the capital markets system implying a "too big to fail" scenario. Having a single CC may also lead to an increased systemic risk due to high dependency on one CC.

Interoperable CCs provide the necessary risk mitigation rather than one single clearing corporation with concentrated risk, while giving the members the option to clear trades with the clearing corporation of their choice resulting in efficient use of capital.

However, given the Indian scenario, where each of the MIIs is at different stages of maturity in terms of their volumes, risk management methodology and size of the default fund, maintaining separate clearing corporations may continue to foster innovation and competition across the clearing landscape. Further, the advent of the commodity markets and supervision thereof by SEBI would also pose a question on the structure of Clearing Corporations/Clearing Houses in the commodities markets which was also deliberated upon by the Working Group set up by the Government of India.

Therefore, the Committee recommends that at this juncture, moving to a single CC may not be appropriate for the securities market. Preserving the current market structure and maintaining separate clearing corporations for each exchange would be prudent at this stage. However, SEBI may keep the interoperability option open and consider the proposal

for implementation when ground conditions are met, which inter alia include clear intent of the participants coming together and having a suitable framework in place to the satisfaction of SEBI. If necessary, SEBI may also undertake some more research, conduct simulation exercise under various scenarios and explore new models before taking a final decision on introducing interoperability between different CCs.

CHAPTER 5

Investment Policy of Clearing Corporations

5.1 Background

A Clearing Corporation will generally invest its own financial resources as well as the margin and default contributions of its members. The investment of such resources usually entails some risk of loss or illiquidity or both. The investment policy of CCs should therefore be regulated with a view to the inherent liquidity exposures to which they are subject.

It is observed that CCs are not generally subject to external limitations on their investment strategies; however, in some cases the CC may publish an investment policy or include provisions governing its investment strategy in relation to member margin and default contributions in its rules. However, the CC retains a great deal of discretion as to its investment policy. The investment policy of a CC should assign the highest priority to the principles of capital preservation and liquidity maximization. The investment policy should also ensure that no conflicts of interest arise with the commercial interests of the CC.

In the Indian context, it may be pertinent to mention that pursuant to the Bimal Jalan Committee Report on Review of Ownership and Governance of Market Infrastructure Institutions, the Clearing Corporations are critically important entities having separate ownership, net worth, governance norms etc. which have been notified through the SECC Regulations 2012. As such, the Clearing Corporations are a public utility with an endeavour to earn only reasonable profits. The CPMI-IOSCO FMI Principles (which are to be followed by the CCs) have also made similar observations especially with respect to investment risks "When making its investment choices, the FMI should not allow pursuit of profit to compromise its financial soundness and liquidity risk management"

The Committee noted that presently, the SECC Regulations do not prescribe any norms for the investments to be made by the CCs, except in case of investments of SGF which have been broadly defined. The CCs in Indian securities markets have their investment policy which is approved by their Board. In the absence of specific regulatory requirements, the CCs retain a great deal of discretion as to the investment policy. It therefore becomes imperative to review the investment policies of the CCs in the Indian securities market.

The CPMI IOSCO Principle on investment risk under the PFMIs state the following:

CPMI-IOSCO Principle 16: Custody and investment risks

An FMI should safeguard its own and its participants' assets and minimize the risk of loss on and delay in access to these assets. An FMI's investments should be in instruments with minimal credit, market, and liquidity risks.

An FMI's strategy for investing its own and its participants' assets should be consistent with its overall risk-management strategy and fully disclosed to its participants.

When making its investment choices, the FMI should not allow pursuit of profit to compromise its financial soundness and liquidity risk management. Investments should be secured by, or be claims on, high-quality obligors to mitigate the credit risk to which the FMI is exposed. Also, because the value of an FMI's investments may need to be realised quickly, investments should allow for quick liquidation with little, if any, adverse price effect.

Investment risk is the risk of loss faced by an FMI when it invests its own or its participants' resources, such as collateral. These risks can be relevant not only to the costs of holding and investing resources but also to the safety and reliability of an FMI's risk-management systems. The failure of an FMI to properly safeguard its assets could result in credit, liquidity, and reputational problems for the FMI itself.

5.2 The Committee also studied the Investment Policies of some of the global CCPs in other jurisdictions as given below:

5.2.1 ESMA (European Securities Market Authority)[5]

ESMA has prescribed standards for investment policy in view of the Regulation (EU) No 648/2012 of the European Parliament and of the Council of 4 July 2012 on OTC Derivatives, CCPs and Trade Repositories (EMIR) which required ESMA to develop draft regulatory standards (RTS) and implementing technical standards (ITS) in relation to several provisions of EMIR. These technical standards were published in the Official Journal on 23 February 2013 and entered into force on 15 March 2013.

As per the Technical Standards on investment policy under the EMIR framework CHAPTER XI, (Article 47 of Regulation (EU) No 648/2012 on Investment Policy)

ESMA remains of the expectation that CCPs should not seek to use their treasury function as a profit centre but instead invest only to protect their financial resources.

ESMA has defined highly liquid financial instruments with minimal market and credit risk, highly secure arrangement for the deposit of cash and other assets and concentration limits on individual obligors.

A CCP's investments must be capable of being liquidated rapidly with minimal adverse price effect. Where a CCP deposits assets with a third party, it must ensure that the assets belonging to the Clearing Members are identifiable separately from the assets belonging to the CCP and from assets belonging to that third party by means of

[5] Official Journal of the European Union- Vol 56, 23rd February 2013; http://www.esma.europa.eu/system/files/2012-600_0.pdf

differently titled accounts on the books of the third party or any other equivalent measures that achieve the same level of protection. A CCP must have prompt access to the financial instruments when required.

A CCP may not invest its capital or the sums arising from the requirements laid down on margin, default fund, dedicated own resources, liquidity risk management in its own securities or those of its parent undertaking or its subsidiaries.

Concentration limits

A CCP shall establish and implement policies and procedures to ensure that the financial instruments in which its financial resources are invested remain sufficiently diversified.

A CCP shall determine concentration limits and monitor the concentration of its financial resources at the level of:

(a) individual financial instruments;

(b) types of financial instruments;

(c) individual issuers;

(d) types of issuers;

(e) counterparties with which arrangements are established.

When considering types of issuers a CCP shall take into account the following:

(a) geographic distribution;

(b) interdependencies and multiple relationships that an entity may have with a CCP;

(c) the level of credit risk;

(d) exposures the CCP have to the issuer through products cleared by the CCP.

The policies and the procedures shall determine the risk mitigation measures to be applied when the concentration limits are exceeded.

When determining the concentration limit for a CCP's exposure to an individual issuer or custodian, a CCP shall aggregate and treat as a single risk, the exposure to all financial instruments issued by, or explicitly guaranteed by, the issuer and all financial resources deposited with the custodian.

A CCP shall monitor on a regular basis the adequacy of its concentration limit policies and procedures. In addition, a CCP shall review its concentration limit policy and procedure at least annually and whenever a material change occurs that affects the risk exposure of the CCP.

If the CCP breaches a concentration limit set out in its policies and procedures, it shall inform the competent authority immediately. The CCP shall rectify the breach as soon as possible.

5.2.2 Euro CCP

Regulation Euro CCP Investment Policy ("REIP") records the policies and procedures which Euro CCP has put in place to safeguard (1) the cash provided by the Clearing Participants to Euro CCP held in the Non-segregated Cash Collateral Account(s) and/or Segregated Client Cash Collateral Account(s) (2) the cash held in the Clearing Fund and (3) the cash held as part of Euro CCP's own capital.

i. Euro CCP may invest into the following transaction types:

   a) hold cash intraday and overnight in current cash accounts with Central Banks in the countries belonging to the European Economic Area and Switzerland;

b) acquire through an outright buy government securities issued by the prescribed countries and in prescribed currencies. These securities may have a (remaining) tenor of up to 12 months;

c) hold cash intraday and overnight in current cash accounts with prescribed Credit Institutions, provided that collateral, in the form of securities issued by the prescribed countries is received by EuroCCP.

d) place deposits with prescribed Credit Institutions with a tenor of no more than 12 months, provided that collateral, in the form of securities issued by the prescribed countries, is received by EuroCCP.

e) enter into reverse repurchase agreements with a tenor of no more than 12 months with Credit Institutions for the purchase and sale of government securities issued by the prescribed countries.

ii. Euro CCP may hold the securities resulting from approved transactions with prescribed custodians only.

iii. EuroCCP shall not enter into approved transactions or maintain cash or custody account without legal agreements governing these transactions and accounts.

iv. The REIP is reviewed on a quarterly basis by the Board of EuroCCP and on an annual basis by the Risk Committee.

v. EuroCCP must instruct an external auditor to provide a report on the compliance with the REIP at least once every calendar Year

vi. Collateral holdings are required to be diversified at all times across permitted securities and diversified across approved issuing countries, in order to prevent inappropriate

concentrations of investments. As such EuroCCP is required to comply with the following concentration limits:

a) **Concentration limits Maximum value of total collateral value per respective security**

The maximum value of collateral held in one unique security may not be worth more than 20% of the total collateral value.

b) **Maximum value of total collateral value per issuing country**

The maximum value of all securities held as collateral issued by one country excluding France and Germany may not be worth more than 25 % of the total collateral value.

c) **Maximum value of total collateral value per issuing country being France or Germany**

The maximum value of all securities held as collateral issued by France or Germany may not be worth more than 50 % of the total collateral value.

vii. The REIP as amended from time to time will be published on the Euro CCP website.

5.2.3 EUREX CLEARING[6]

Eurex Clearing maintains a strict treasury policy that determines the re-investment of cash collateral provided by the Members.

A restrictive treasury policy applies for cash deposits, namely:

[6] http://www.eurexclearing.com

- Secured placement to the extent possible (reverse repo is the preferred instrument)
- Minimum counterparty rating of A-
- Minimum security rating of AA-
- Issuer must be a government, agency or supranational
- Placement tenor restricted; majority to be invested with a tenor of one business day

Eurex Clearing passes on interest earned from cash investments to its Clearing Members on a monthly basis.

5.2.4 NASDAQ OMX Stockholm AB[7]

i. NASDAQ OMX Clearing AB´s Investment Policy sets guidelines for the investments of cash received from members of the clearinghouse as collateral and/or contributions to Default fund or Loss Sharing Pool. In addition, the Investment Policy governs investments made by NASDAQ OMX Clearing AB (NOMX) including investments of regulatory capital used by the clearinghouse to support its operating funds or capital funds or any own funds contributed by NOMX to the Default fund.

ii. The Investment Policy stipulates how NOMX is allowed to invest above mentioned cash contributions and regulatory funds. The Investment Policy establishes a framework for investments and is compliant with the new regulations set forth by CPMI-IOSCO and EMIR.

iii. The overall objective of the investment policy is to preserve and protect the value of the members´ cash margin and contributions to Default Fund or Loss Sharing Pool as well as secure the value of NOMX´s own contributions to the regulatory capital. For that reason the investment policy is conservative and when investing the cash NOMX shall minimize

7 http://www.nasdaqomx.com

the credit, market, concentration and liquidity risk in order to ensure that any funds can be realized with minimum impact on invested value and within a very short time frame.

iv. Debt instruments bought as investments must be issued or explicitly guaranteed by:

- Government
- Central bank
- Multilateral Development bank
- EFSF (European Financial Stability Facility) or ESM (European Stability Mechanism)

v. NASDAQ OMX Clearing AB´s own assets shall be invested in eligible investments in SEK. (Swedish krona.)

vi. In order to reduce the credit risk, the cash received shall be invested within the constraints of the Investment Policy. The requirements are as follows:

- Minimum rating requirements by investment type
- Maximum CDS spread for issuer and counterparty
- Maximum term by investment type
- Maximum total exposure to a single issuer
- Maximum total counterparty risk

vii. The duration of the portfolio has a stipulated maximum in order to limit the interest rate exposure.

5.2.5 ASX Clearing Corporation Investment Policy[8]

ASX Clearing Corporation (ASXCC), a wholly-owned subsidiary within the ASX Group, manages the investment of clearing participant cash margins and default funds for both ASX central counterparties (CCPs), ASX Clear and ASX Clear (Futures). The ASX CCPs assume the credit, market and liquidity risk of investing these funds. The investment activities of ASXCC are governed by the ASXCC Investment Policy and associated investment mandate, which is approved at least annually by the ASXCC and CCP Boards. The investment activities of ASXCC form part of the Reserve Bank of Australia's (RBA's) annual assessment of ASX's clearing facilities.

The principal objective of the investment mandate is to ensure that the investment portfolio is made up of highly liquid financial instruments with a high credit quality and low levels of market risk. The primary driver of ASXCC's investment policy is the need to ensure timely and certain access to funds at all times, including in the event of a clearing participant default.

Investments are restricted to highly liquid, short term investments with counterparties of high credit standing. The credit quality of investment counterparties takes into account both short and long term publically available credit ratings - eligible counterparties are required to have a minimum external short-term credit rating equal to or above 'A-1' with Standard & Poor's. Counterparty limits are then assigned to each counterparty.

Approved investment products currently comprise -

- Australian Commonwealth Government Securities
- Australian State Government Securities

[8] http://www.asx.com.au

- Bank Bills, Negotiable Certificates of Deposits (NCDs) and Senior Debt Securities
- Bank fixed term deposits and overnight cash accounts
- Reverse Repurchases

All securities are required to be on the RBA's eligible securities list for re-purchase purposes. Exposures within the investment portfolio are managed using several different limits. These include limits on portfolio average maturity, maximum investment tenor, concentration limits, maximum exposure to a single investment counterparty and market risk limits. The policy also specifies a minimum level of cash and cash equivalent holdings.

Adherence to investment limits is monitored on a daily basis by the ASX CCPs' risk management division.

5.2.6 Indian CCs

The Committee also studied the Investment Policies of three Clearing Corporations (CCs) Indian Clearing Corporation Ltd, MCX-SX Clearing Corporation Ltd. and National Securities Clearing Corporation Ltd. The Committee noted that the investments made by the three CCs are broadly in Commercial Paper, Certificates of Deposit, Long term debt securities of Institutions and Corporates, Public Sector Bonds, Treasury Bills, Government Securities, Securities guaranteed by the Government, Intercorporate Deposits, Units of Mutual Funds (Cash Management Schemes, Liquid Schemes, Money Market Schemes, Debt Schemes, Gilt Schemes or any other similar debt schemes) and Fixed Deposit with Banks with limits thereon.

The Committee also noted that SEBI has recently issued circular on core Settlement Guarantee fund to be created by the CCs which inter alia requires maintaining a Minimum Required Corpus at all times based on the stress tests. Since cash and Bank FDs would be

accepted as the contribution to the core SGF, the same necessitates prudent management of the SGF.

As regards the investment policy of the Core SGF corpus the Circular stipulates that:
The CCs shall follow prudential norms of Investment policy for Core SGF corpus and establish and implement policies and procedures to ensure that Core SGF corpus is invested in highly liquid financial instruments with minimal market and credit risk and is capable of being liquidated rapidly with minimal adverse price effect.

The instruments in which investments may broadly be made are Fixed Deposit with Banks (only those banks which have a net worth of more than INR 500 Crores and are rated A1 (or A1+) or equivalent, , Treasury Bills, Government Securities and money market/liquid mutual funds subject to suitable transaction/investment limits and monitoring of the same. The CCs shall further ensure that the financial instruments in which the Core SGF corpus is invested remain sufficiently diversified at all times.

SEBI may prescribe the investment norms in this regard from time to time.

5.3 Recommendations of the Committee

In the default waterfall, as the CCP resources forming part of the core SGF precede the non-Defaulting Members' contribution, a question arises whether CCPs can invest the resources not forming part of core SGF in less conservative instruments/unrelated activities. However, keeping in mind the critical role performed by the CC, the Committee felt that CCs should focus on their main activity with regard to implementation of prudent Risk Management Measures and Clearing and Settlement Systems, instead of profit generating activities.

The Committee therefore recommends that the investment policy of a CC should be built on the premise of highest degree of safety and least market risk. The Committee recommends that CC may be permitted to invest in Fixed Deposits (FDs) / Central Government Securities (G Secs). *Other instruments like NCDs, CPs, money market mutual funds etc. may not be permitted as investment vehicle as they carry credit/liquidity risks.*

The investment policy should be reviewed at least on an annual basis by the CC.

CHAPTER 6

Transfer of 25% profits of Stock Exchanges to the Settlement Guarantee Fund of Clearing Corporation

6.1 Background

SEBI vide gazette notification dated June 20, 2012 notified the SEBI (Stock Exchanges and Clearing Corporations) Regulations (hereinafter referred to as 'SECC Regulations') 2012. Regulation 33 of the said regulations prescribed the requirement to transfer, every year, 25% of the profit of the stock exchange to the SGF maintained by the clearing corporation.

Transfer of profits

33. *Every recognized stock exchange shall credit* ***twenty five per cent*** *of its profits every year to the Fund as specified in regulation 39, of the recognized clearing corporation(s) which clears and settles trades executed on that stock exchange.*

Additionally, SEBI vide press release no. 66/2012 dated June 21, 2012 on "Ownership and Governance norms for Market Infrastructure Institutions", inter-alia, stated that it (SEBI) is in the process of setting up an Expert Committee, which shall also look into the norms for adequacy of the core corpus of the SGF/TGF and its sourcing, including transfer of profits by stock exchanges to the SGF/TGF in the long run.

In this context, the Committee was given to understand that the Committee on "*Review of Ownership and Governance of Market Infrastructure Institutions*"[9] chaired by Dr. Bimal Jalan, deliberated on the issue of Market Infrastructure Institutions (MII) being a public

[9] http://www.sebi.gov.in/commreport/ownershipreport.pdf

utility which should endeavour to earn only reasonable profits at par with average earnings of the corporate sector in India.

Therefore the Jalan committee recommended that a cap may be fixed on the maximum return that can be earned by MII on its net worth and can be distributed / allocated to the shareholders of MII out of the total returns earned by MII.

Any return/profits above such maximum attributable amount was to be transferred to Investor Protection Fund(IPF) or Settlement Guarantee Fund (SGF) as the case may be and the same was not to form part of shareholders' funds/ net worth for the purposes of determining returns and book value of the shares.

It was opined that this would strengthen the MII to withstand shocks, make them robust and may lead to reduction of the charges levied by MIIs on the users. The cap may be fixed by SEBI after taking into consideration 'risk free return' based on the yield on a 10 year GOI bond and a 'risk premium' to account for the risks faced by MIIs including equity risk premium and liquidity risk due to non-listing of MIIs. It should also take into account differential tax rate applicable to unlisted entities as the Committee has recommended that the MIIs should not be permitted to list.

The recommendations of Dr. Bimal Jalan committee on 'capping of profits of MIIs' were placed before the SEBI board with the view that, "*though it is necessary to ensure that the profit motive of the MIIs does not come in conflict with their regulatory role, putting a cap on distributable profits of MIIs may adversely affect efficiency, motivation and innovation. Therefore, from a regulatory and a risk management point of view, the stock exchanges may be mandated to transfer 25% of their profits to the Settlement Guarantee Fund of the clearing corporation where the trades of the exchange are cleared and settled. Such a transfer will also bolster the risk management capacity of the clearing corporations. The clearing corporation may be permitted such investment and utilization of profit as may be governed by the corresponding policy prescribed by SEBI.*"

It was also given to understand that while implementing the Regulation 33, there were several issues raised by the Stock Exchanges/ Clearing Corporations broadly highlighted below

A. Whether the transfer of profit (Regulation 33) to the SGF of clearing corporation should be refundable or non-refundable in nature
B. Whether the transfer of profits should be continual transfer or need based transfer
C. Whether the requirement of transfer of 25% of profit is very high.

Regarding the Issue of Refundable vs. Non Refundable, the committee noted that Regulation 33 of SECC Regulations 2012 does not specify the nature of the 'exchange contribution (Profits)' that is required to be transferred to SGF of the CC.

To draw an analogy, presently member deposits (exposure based and non-exposure based) available with the clearing corporation, are counted towards the SGF and available for utilization in case of the member defaults. However, these deposits are refundable in nature, and the member can claim the deposits upon surrender of membership.

Presently, there are three recognized clearing corporations i.e. ICCL, NSCCL and MCX-SXCCL which provide clearing and settlement services to their respective exchanges BSE, NSE and MSEI (formerly MCX-SX). The point under consideration would be whether the transfer of profits by the exchange towards the SGF of clearing corporation should be irrevocable, in case exchange decides to avail clearing and settlement services of a different clearing corporation.

The Committee is of the view that it would be rational to make the exchange contribution to be "refundable" based on certain conditions and subject to regulator's approval, considering that if an exchange decides to close down business, the unutilized portion of the exchange contribution may be refunded or if the exchange considers availing of clearing and settlement services of another CC, the unutilized portion of the exchange contribution

may be permitted to be transferred back to the exchange or to the new CCP which will provide clearing and settlement.

Regarding the issue of continual transfer vs. need based transfer of profits, the Committee felt that a view in this matter could be reached, if it was possible to establish that the SGF for which the transfer of profits is mandated, is adequate. A strong balance sheet net worth combined with an adequately funded SGF of a clearing corporation gives the regulator comfort with regard to the sustainability of the clearing corporation. Though it might be difficult to assess the adequacy of the SGF, a strong balance sheet net worth of a clearing corporation alleviates some concerns with regard to its adequacy.

The Principles of Financial Market Infrastructures (PFMI) require that for credit risk, CCPs should maintain financial resources sufficient to cover a wide range of potential stress scenarios that should include, but not be limited to, the default of the one/two participants and their affiliates that would potentially cause the largest aggregate credit exposure to the CCP in extreme but plausible market conditions.

The Committee noted that, SEBI, vide circular no. CIR/MRD/DRMNP/25/2014 dated August 27, 2014 issued the Core SGF, Default Waterfall and Stress Test guidelines[10] in order to bring greater clarity and uniformity as well as align the same with international best practices while enhancing the robustness of the present risk management system in the clearing corporations.

The circular requires Clearing Corporations (CCs) to carry out stress tests (in accordance with the stress testing norms prescribed in PFMI) and maintain Core SGF for each segment sufficient enough to meet the loss estimated by the various stress tests carried out for the segment, thus ensuring that CCs maintain financial resources for credit risk in compliance with PFMI. Further, the circular prescribes manner in which the contributions to the Core SGF will be made by various contributors - CC, Stock Exchange and members. Para 8 of the

10 http://www.sebi.gov.in/cms/sebi_data/attachdocs/1409136206919.pdf

said guidelines on **Contributions to Core SGF** specify that at least 25% of the minimum required corpus of Core SGF (as determined by stress tests) shall be contributed by Stock Exchange. The same is reproduced below -

8.b) Stock Exchange contribution: Stock Exchange contribution to Core SGF shall be at least 25% of the MRC (can be adjusted against transfer of profit by Stock Exchange as per Regulation 33 of SECC Regulations, which may be reviewed in view of these guidelines).

The circular also provides for adjustment of the contribution required from stock exchange in terms of the circular against any transfer of profit carried out by Stock Exchange under Regulation 33 of SECC Regulations.

Additionally, Para 14 of the said guidelines also prescribe a requirement for further contribution to / Recoupment of core SGF.

14) Requisite contributions to Core SGF by various contributors (as per clauses 7 and 8) for any month shall be made by the contributors before start of the month.

In the event of usage of Core SGF during a calendar month, contributors shall, as per usage of their individual contribution, immediately replenish the Core SGF to MRC.

In case there is failure on part of some contributor(s) to replenish its (their) contribution, same shall be immediately met, on a temporary basis during the month, in the following order:
(i) By CC
(ii) By SE

The Committee noted that as per the results of stress tests, the corpus of Core SGFs for various segments of the three Clearing Corporations for July 2015 is as under:

Table 1

Clearing Corporation	Segment	Core SGF Corpus (INR Crore) for July, 2015
National Securities Clearing Corporation Limited (NSCCL)	Equity Cash	149
	Equity Derivatives	547
	Currency Derivatives	78
	Debt	4
	Total	778
Indian Clearing Corporation Limited (ICCL)	Equity Cash	105.47
	Equity Derivatives	14.59
	Currency Derivatives	37.13
	Debt	1.13
	Total	158.32
MCX-SX Clearing Corporation Limited (MCX-SX CCL)	Equity Cash	0.25
	Equity Derivatives	0.25
	Currency Derivatives	34.42
	Debt	0.25
	Total	35.17

Regarding the Issue of the 25% of profit being very high it was given to understand that suggestions were received from market participants to modify Regulation 33 so as to reduce the requirement of 25% to either 2% or 5% of the net profits.

In this context, it is worth mentioning that Forward Markets Commission (FMC) vide circular FMC/2/2013/C/105 No. 2/2/2008-MKT-II dated August 23, 2013[11] and Circular **FMC/2/2014/C/28 F. No. 2/2/2008-MKT-II Dated 14thMarch, 2014** [12] prescribed guidelines for creation of SGF. The circulars inter-alia prescribed the following–

*1.(a)"The initial contribution to SGF by the Exchange will be equivalent to **5% of the sum total of the Gross Revenues** of the Exchange for the preceding financial years starting from Financial Year 2007-08 or from the date when the Exchange was set-up, till Financial Year 2012-13, subject to a minimum of Rs. 10 crores."*

The maximum contribution by an exchange in the Settlement Guarantee Fund in a year shall be up to 5% of the gross revenue (net of Income Tax to be paid by the exchange). In cases where exchanges have sufficient funds available in the Settlement Guarantee Fund to meet the contingent risk, then there is no need for exchanges to make any further contribution.

The FMC directive on "transfer of revenues" removes any ambiguity of whether the funds to be transferred should be calculated on profits before tax or after tax. Additionally, it also removes any ambiguity on adjustments of previous period losses, for calculation of profits.

The issue of reducing the 25 percentage falls back on the idea of whether the clearing corporation has accumulated adequate financial resources to withstand shocks. With regard to the issue of reducing the 25 percentage, the committee considers assessing the adequacy of the clearing corporation's two main financial defenses - Net worth and SGF.

[11] http://www.fmc.gov.in/show_file.aspx?linkid=SGF-580045388.pdf

[12] http://www.fmc.gov.in/show_file.aspx?linkid=61_23_08_2013-885109021.pdf

The Net worth of the three clearing corporations, as at the end of March, 2014 is given below -

Table 2

Sr. No.	**Clearing Corporations**	**Net worth (in INR crore)**
1	NSCCL	994
2	ICCL	427
3	MCX-SXCCL	29

The Committee is of the view that the Net worth of clearing corporations, which is above the minimum prescribed in the SECC Regulations, may be a starting point to draw regulatory comfort when ascertaining the adequacy of the financial strength of a clearing corporation. Further, the new SGF guidelines, which are modeled on the CPMI IOSCO's Principle of Financial Market Infrastructures (PFMIs), may also provide a second measure of regulatory comfort.

The Committee noted that given that both the requirements viz 25% transfer of profits by Exchanges to SGF of CC and the requirements under new SGF guidelines which also required the exchange to mandatorily contribute 25% of the required funds were towards strengthening the SGF. Therefore in order to reduce the cost burden and to remove duplicate actions in law, the above two contributions by the exchange were allowed to be set off against each other.

Considering the above, it is observed that, since two instances in law require an action from the exchanges towards the same end, it would bring clarity and remove ambiguity for the contribution by exchange towards SGF, if one of them is removed.

6.2 Recommendations of the Committee

The Committee notes that since the requirement of core SGF has already been met, the 25% profit transfer requirement might not be required. While the departure from the Regulatory requirement is desirable, the Risk Management Review Committee (RMRC) of SEBI may review the stress test model, used to determine the Minimum Required Corpus (MRC) of core SGF, for making such departure.

Regarding the refundability of the transfer of profits, the Committee recommends that the said transfer shall be refundable in nature. In the event of the exchange deciding to close down its business or deciding to avail clearing and settlement services of another CC, the unutilized portion of the exchange contribution to core SGF may be transferred back to the exchange.

With regard to the contribution already set aside by the Stock Exchanges towards the 25% profit transfer requirement, the Committee recommends that the same may be utilized by exchange to cover the member contribution to the core SGF since this would result in lower transaction costs and would be in the overall interest of the market. SEBI may specify the details in this regard including in respect of contributions already made by CCs on behalf of members.

The Committee also noted that as per SEBI's mandate, it is obligatory on part of the Stock Exchange/Clearing Corporation to make good the shortfall in the core SGF at any point of time. SEBI may thereafter take a view on the remaining unutilized amount already set aside by the Stock Exchange after fulfilling its contribution and member's contribution to core SGF.

The Committee recommends that, the requirement of member contribution may be reviewed after 5 years, or earlier if warranted.

SEBI may appropriately make necessary amendments to the SECC Regulations 2012.

6.3 Transfer of Depositories' profits to their Investor Protection Fund (IPF)

6.3.1 Background

As the Committee was reviewing the requirement of 25% profit transfer by Stock Exchange to CC, the Committee was requested to also review the requirement of Transfer of 25% Depositories' profits to their Investor Protection Fund (IPF)

The Committee note that in terms of 53 of the SEBI (DEPOSITORIES AND PARTICIPANTS) (AMENDMENT) REGULATIONS, 2012 on Investor Protection Fund:

(1) Every depository shall establish and maintain an Investor Protection Fund for the protection of interest of beneficial owners:

Provided that this Fund shall not be used by the depository for the purpose of indemnifying the beneficial owner under section 16 of the Depositories Act, 1996.

(2) Every depository shall credit twenty five per cent of its profits every year to the Investor Protection Fund.

(3) The contribution to and utilization of the Investor Protection Fund shall be in accordance with the norms specified by the Board."

The Depository Systems Review Committee (DSRC- constituted by SEBI) while reviewing the depository operations, observed that the contribution of 25% of annual profits by depositories to IPF appears to have been stipulated on the lines of the provisions of the Securities Contracts (Regulation) (Stock Exchanges and Clearing Corporations) Regulations, 2012 wherein exchanges are required to contribute 25% of their annual profit to the fund created by clearing corporations for the purpose of guaranteeing settlement of trades. The object of settlement guarantee fund, however, is materially different from that of the Investor Protection Fund under the depositories' regulations.

The DSRC noted that an IPF created under the Depositories and Participants (Amendment) Regulations, 2012 is primarily for investors' awareness, education and training. The risks to the depositories on account of fraud, etc., are covered by insurance which is taken by the depositories. In case of failure/ closure of DPs, the investors are protected as the Beneficiary Owners' data is available with the depositories and the investors are allowed to shift their accounts to other DPs. In view of this, the committee noted that the fund does not envisage providing compensation for any loss to the investors.

The DSRC felt the need to synergise the funds created with the stock exchanges and the depositories for the purpose of investors' awareness, education and training. It observed that since the IPF with the depositories does not provide for any sort of protection like the guarantee settlement fund, there is no need for an IPF with substantial contribution from the depositories alone. It was also of the view that the profit from depository operations need only be considered for the purpose of contribution to the IPF. Other income i.e. income received from investments & other non-operative activities may be excluded from computation of profits because mostly income under this head is received out of

investments made from accumulated reserves & surplus of past years, which was not distributed to stake holders.

Based on the above deliberations, the DSRC recommended inter alia the following:

- review the quantum of funds required to be transferred to IPF by depositories and arrive upon a sizable limit for corpus of IPF

The recommendations of the DSRC were broadly approved by the SEBI Board. With regard to the quantum of funds to be transferred by the Depositories to their IPF, it was desired that this Committee may provide its recommendation.

The Committee deliberated on this issue and noted that for investor protection, the depositories take insurance to manage the risk of indemnifying Beneficial Owners for any loss suffered due to negligence of depository or its participant. As such, the corpus of IPF can be used mainly for activities such as investor education like workshops, awareness programs etc. which does not warrant a large corpus.

6.3.2 Recommendations of the Committee

The committee recommends that depositories may transfer 5%, or such percentage as may be prescribed by SEBI from time to time, of their profits from depository operations every year to the IPF since the date of amendment of SEBI (Depositories and Participants) (Amendment) Regulations, 2012 requiring transfer of profits. Further, SEBI may consider necessary amendment to SEBI (Depositories and Participants) Regulations, 1996 to enable the same. The percentage of profits to be transferred every year by depositories to the IPF may be reviewed by SEBI on a periodic basis.

CHAPTER 7

Liquid Assets for calculation of Net worth of Clearing Corporation

7.1 Background

Considering the sensitive and risk-bearing role of the clearing corporations, a clearing corporation, must hold a sufficient amount of liquid net assets preferably funded by equity so that it can continue operations and services as a going concern even if it incurs general business losses, or for the purposes of an orderly wind-down of its critical operations and services, where necessary, or for the purpose of absorbing credit risk etc. Thus, liquid assets held must be funded by equity (such as equity capital, disclosed reserves, or retained earnings) rather than debt.

Accordingly, Regulation 14(3) of SCR (SECC) Regulations, 2012 (hereinafter SECC Regulations), specifies the minimum net worth requirement for Clearing Corporations as:

Every recognized clearing corporation shall achieve a minimum net worth of three hundred crore rupees within a period of three years from the date of recognition granted under these regulations.'

A CC acts as the central counterparty, novating both legs of a trade, acting as a seller for the buy-side of a transaction and acting as a buyer for the sell-side of a transaction. Extending this idea of novation, a CC is expected to continue to guarantee fulfillment of a trade even if a party on either side of transaction defaults or in a graver scenario, if a

clearing member (hereinafter CM) defaults and its obligations on a whole host of trades are not honored by it.

A robust minimum net worth criterion serves the twin purposes of i) ensuring that only serious financially sound entities come forward for setting up this kind of an important financial market infrastructure and ii) serving as an assurance to the participating CMs that the CC is capable of covering defaults by CMs, if any.

Currently, SECC Regulations have set the minimum net worth requirement of CCs at Rs. 300 crore. A CC which handles huge volumes of trade poses greater systemic risk and may thus be required to shore up a bigger amount as net worth.

The Committee noted that Regulation (EU) No 648/2012 of the European Parliament and of the Council of 4 July 2012 on OTC derivatives, central counterparties ("CCPs") and trade repositories ("the Regulation") required the European Banking Authority(EBA) to draft regulatory technical standards (RTS) on the capital requirements for CCPs under EMIR Framework. EBA, in close cooperation with the European System of Central Banks (ESCB) and the European Securities and Markets Authority (ESMA) adopted the draft technical standards on capital requirements for Central Counterparties (CCPs) under the EMIR Regulation on December 19, 2012.

Article 2 of the EBA Final RTS on Capital Requirements for Central Counterparties[13] is noteworthy in this context - 'A *CCP should hold capital, including retained earnings and reserves, which shall be at all times more than or equal to the sum of: (a) the CCP's capital requirements for orderly winding down or restructuring its activities (arrived at by multiplying the monthly gross operational expenses by the time span for winding down or restructuring its activities), (b) the CCP's capital requirements for overall operational and*

[13] EBA Consultation Paper on Draft Regulatory Technical Standards on Capital Requirements for CCPs (EBA/CP/2012/08)

legal risks, (c) the CCP's capital requirements necessary for covering credit, counterparty and market risks 'not covered' by specific financial resources, (d) the CCP's capital requirements for business risk (subject to a floor equal to 25% of its annual gross operational expenses).

As the central counterparty who guarantees every trade, it is the CC's primary responsibility to cover default. In fact putting CC capital at risk at the first stage of the waterfall (after the defaulter's resources) provides the CC with a strong incentive to control risk, monitor its members, and choose margin levels prudently. A case may thus be made that the CC's net worth (or a set fraction of it) should be utilized before seeking contributions from non-defaulting CMs.

This has been accounted for in the recent SEBI Circular CIR/MRD/DRMNP/25/2014 dated August 27, 2014 which has prescribed norms for Core Settlement Guarantee Fund (Core SGF), Default Waterfall and Stress Testing. As per the Circular, CC resources (equal to 5% of the segment Minimum Required Corpus) form the third stage of waterfall (after the defaulter's resources and Insurance, if any).

Views expressed in an EBA (European Banking Authority) discussion paper on the Draft Regulatory Technical Standards on the capital requirements for CCP may be noted-'"*A CCP's equity capital should also reflect a strong cash, cash equivalent or securities position to allow it to meet its current and projected operating expenses under a range of scenarios."*

The Committee also noted that Principle 15 of the PFMIs defines general business risk as the potential impairment of a CCP's financial position as a business concern resulting in losses charged against capital.

This view has also been echoed earlier in the Report of the Committee, constituted by SEBI, on 'Review of Ownership and Governance of Market Infrastructure Institutions' chaired by

Dr Bimal Jalan. The committee had, inter alia, the following to recommend about the net worth requirements of Clearing Corporations:

"*Keeping in view the clearing and settlement function, a need is felt to prescribe a higher net worth requirement for clearing corporations, as compared to stock exchanges and depositories..... Further, in order that such a net worth is available, in a worst case scenario, it is suggested that* ***it may be maintained in the form of liquid assets at all times****. Liquid assets would be those assets that are permitted to be deposited by a stockbroker in a stock exchange (clearing corporation) towards margin obligations. Until such time the clearing corporation achieves the prescribed net worth, it shall not be permitted to pay any dividend to its shareholders.*

As mentioned above, the liquidity of the net worth so prescribed and maintained is equally important as the amount of the net worth. In case of default, when the net worth of the CC might be required to be accessed to fulfill the remaining obligations of the defaulting member, an illiquid net worth may prove to be disruptive.

The committee observed that the function of a Clearing Corporation is to provide a safety shield and the purpose of the Net worth is to provide a solid bedrock for eventualities. Learnings from the 2008-09 crisis indicate that instruments which were considered safe turned out to be unsafe. Therefore the instruments to be considered towards calculation of liquid assets should be able to withstand the highest measures of liquidity and safety.

For the purpose of liquid assets, only Central Government Securities and Fixed Deposits may be considered as other instruments like NCDs, CPs etc. carry credit/liquidity risks.

Further, while considering Central Government Securities for calculating liquid assets is prudent, state government securities/bonds should not be considered towards the liquid assets calculations.

7.2 Recommendations of the Committee

The Committee recommends that the liquid assets should comprise Fixed Deposits (FDs)/Central Government Securities (G Secs).

Further, other instruments like NCDs, CPs, money market mutual funds, etc. carry credit/liquidity risks and hence, may not be considered towards calculation of liquid assets in net worth of CC.

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