

## Chapter 7 Risk Containment Measures

### Learning Objectives:

After reading this chapter, you should be able:

1. To recall the knowledge related to capital adequacy requirements under various segments.
2. To classify among the various types of margins.
3. To acquire practical aspects related to margin system.
4. To apply the knowledge of exposure limits in the real life situation and trade accordingly.

### Your guide engine to learning:

- 7.1** Introduction
- 7.2** Capital Adequacy Requirement
- 7.3** Base Minimum Capital (BMC) and Additional Base Capital (ABC)
- 7.4** Trading and Exposure Limits
  - 7.4.1 Determination of Gross Exposure
  - 7.4.2 Early Pay-in of Funds/Securities
  - 7.4.3 On line Exposure Monitoring
  - 7.4.4 Violation of Exposure Limits
- 7.5** Grouping of Securities
- 7.6** Margin Requirements
  - 7.6.1 Value at Risk Margin
  - 7.6.2 Mark to Market Margin
  - 7.6.3 Extreme Loss Margin
  - 7.6.4 Margin Payment and Payout
  - 7.6.5 Margin Shortfall
- 7.7** Settlement Guarantee
- 7.8** Penalty Points and Penal Interest
- 7.9** Indemnity Insurance
- 7.10** Inspection and Investigation
- 7.11** Investor Protection Fund (IPF)
- 7.12** No-delivery Period

### 7.1 Introduction

As we have already discussed in the previous chapter that all the trades are settled by next two working days after the trading day. The obligations are downloaded by the members on time so that they make available the required funds and securities when required. On T+2 day, the funds and securities are paid in by 11:00 am by the members/CM to the NSCCL and the resources are paid out to the CM by the NSCCL at or after 1.30 pm.

The CC has also given the option of direct pay-out to investors, where in the CC credits the clients demat account with the securities that he is to receive. The details

are furnished by the member of the respective client. In case the client has not paid fully to the member w.r.t the securities bought, the member can with hold the details of his account so that the member receives the securities in his pool account.

In case of short deliveries, NSCCL buys securities on behalf of the defaulter from the auction market on T+3 day. The auction market starts at 12 noon. From 12 noon to 12.30 pm, the initiator (i.e. NSCCL) puts the buy orders and the solicitors put the sell orders. Once the orders get matched, the CC buys the shares in order to settle the trade. In case the shares have still not been bought out, the CC compulsorily closes out the transaction by paying to the buyer for the shares not bought out.

To avoid such situations of default, the CC has put some statutory requirements with reference to capital adequacy and exposure limits. Since the CC doesn't want to run into the risk of buying from the auction market or going for compulsory close outs, it has fixed certain norms. The capital adequacy requirements in case of NSE are much higher than the rest of the stock exchanges in India.

## 7.2 Capital Adequacy Requirement

To become a member of the stock exchange on NSE, one needs to have certain amount of funds as minimum net worth. They also have to give some amount as interest free deposit to the CC. The table below gives the details of capital adequacy requirements for membership under NSE.

Segment		Requirements (in Rs.Lakh)		
		Net Worth	Total IFSD (Cash)	CSD (Collateral)
<b>WDM Segment</b>	WDM	200	150	--
<b>CM and F&amp;O Segment</b>	CM & TM of F&O	100	125	25
	Additional requirements for Clearing Membership of F&O	300*	25	25
	Total for CM, TM & Clearing Membership of F&O	300*	150	50
<b>CM, WDM and F&amp;O Segment</b>	CM, WDM & TM of F&O	200	275	25
	Additional requirements for Clearing Membership of F&O	300**	25	25
	Total for CM, WDM and TM of F&O	300**	300	50
<b>PCM</b>	CM or F&O	300	25	25
	CM & F&O	300	34	50
Note: * Rs.100 lakh for self-clearing members in F&O segment ** Rs.200 lakh in case of CM, WDM and Trading & self-clearing membership of F&O segment				

*Note:* A PCM is required to bring in interest free security deposit of Rs.6 lakh and collateral security deposit of Rs.17.5 lakh (Rs. 9 lakh and Rs.25 lakh respectively for corporate members) per trading member in the CM segment.

Out of the total capital provided by the TM (Base Minimum Capital and Additional Base Capital), BMC can be utilized towards taking exposure/turnover only, whereas the amount provided as ABC can be utilized towards margin payment if not used up for taking Exposure/Turnover.

### **7.3 Base Minimum Capital (BMC) and Additional Base Capital (ABC)**

Members are required to provide liquid assets which adequately cover various margins & base minimum capital requirements. Liquid assets of the member include their Initial membership deposits including the security deposits. Members may provide additional collateral deposit towards liquid assets, over and above their minimum membership deposit requirements.

#### ***Base Minimum Capital***

A Member is required to meet with the Base Minimum Capital (BMC) requirements prescribed by NSCCL before activation. The member has also to ensure that BMC is maintained in accordance with the requirements of NSCCL at all points of time, after activation.

Every member is required to maintain BMC of Rs.50 lakh with NSCCL in the following manner:

- (1) Rs.25 lakh in the form of cash.
- (2) Rs.25 lakh in any one form or combination of the following forms: (a) cash (b) fixed deposit receipts with approved custodians (c) Bank Guarantee from approved banks (d) approved securities in demat form deposited with approved custodians.

#### ***Additional Base Capital***

Members may provide additional margin/collateral deposit (additional base capital) to NSCCL, over and above their minimum deposit requirements (base capital), towards margins and/or exposure/turnover limits. This may be provided to get additional exposure limits so as to increase the working limits of the member.

Members may submit such deposits in any one form or combination of the following forms:

- (1) Cash.
- (2) Fixed Deposit Receipts (FDRs) issued by approved banks and deposited with approved Custodians or NSCCL.
- (3) Bank Guarantee in favor of NSCCL from approved banks in the specified format. If a Bank guarantee is submitted from bank, whose net worth is above Rs.500 crores, then the same is considered as cash component and all other Bank guarantees will be considered as non-cash component as per past procedures.
- (4) Approved securities in demat form deposited with approved Custodians.
- (5) Government Securities, The procedure for acceptance and list of securities is as specified in circular. The haircut for the Government Securities shall be 10%.
- (6) Units of the schemes of liquid mutual funds or government securities mutual funds. The haircuts for units of liquid funds or government securities mutual funds shall be 10% of Net Asset Value (NAV). **Haircut** would mean that if the NAV of a particular security is Rs.100, then the amount of loan that a member

can get would be Rs.90 (i.e. 10% less than NAV). Units of all Mutual Funds schemes except Liquid Mutual Funds and Government Securities Mutual Funds (in demat) are eligible security for the purpose of non-cash component of additional capital and margin subject to a haircut equivalent to the VaR of the unit's NAV plus any exit load charged by the mutual fund.

#### 7.4 Trading and Exposure Limits

Members are subject to trading limits on the basis of capital contributed. These trading limits are different for different situations, like it is 33 1/3 times in case of intra day trading and 8.5 times if in case Rs.1 crore is contributed and 10 times over and above Rs.1 crore contribution for all open positions. This means that a trader can trade up to 33 1/3 times the amount contributed, during intra day. This is known as **gross intra day exposure**. Trade would mean all buy + sell transactions value. In case the trader wants to carry certain positions as delivery, then in that case, the exposure will be 8.5 times of the free base capital up to Rs.1 crore. If a member has contributed more than Rs.1 crore, then the exposure limit would be 10 times of the amount contributed over and above Rs.1 crore. This is known as **gross exposure on open positions**.

Suppose, Base Minimum Capital (BMC) contributed by a member is Rs.1 crore. Since, his intra day trading limit would be 33 1/3 times of the amount contributed, the trader can buy + sell up to Rs.33.33 crores worth of shares in the day. Since this limit is for intra day trading, the trader has to square up his position within the day. In case he wants to trade for more amounts, he needs to give more capital to the exchange.

The gross exposure on all the open positions is 8.5 times, in case Rs.1 crore is contributed as capital and 10 times exposure is given to a member on the amount contributed over and above Rs.1 crore. Open positions means that after multi lateral netting, the member would be either giving or taking delivery of shares.

The total gross exposure for a member on any given day would be the total of the gross exposure computed across all the securities in which a member has an open position.

Gross exposure limit would be:

<b>Total Base Capital</b>	<b>Gross Exposure Limit</b>
Up to Rs.1 crore	8.5 times the total base capital
> Rs.1 crore	8.5 times + 10 times the total base capital in excess of Rs.1 crore

Or any such lower limits as applicable to the members.

*Note:* The total base capital being the base minimum capital (cash deposit and security deposit) and additional deposits, not used towards margins, in the nature of securities, bank guarantee, FDR, or cash with NSCCL and NSE.

##### 7.4.1 Determination of Gross Exposure

Steps for calculation of total gross exposure on a particular day are given below:

- Step 1:** Gross exposure is an accumulation of net outstanding open positions of all market sub-segments. This accumulation is done only till the actual pay-in day of each of these sub-segments and includes positions in securities that are in no delivery.
- Step 2:** As and when the pay-in day of a particular trading cycle is reached, the net outstanding open positions of that cycle are excluded from the calculation of GE one day prior to the pay-in day of that segment.
- Step 3:** The GE on Monday, excludes the positions pertaining to the settlement for which trading was completed on the previous Tuesday.
- Step 4:** Margins calculated on Friday's trades which are payable on Monday also exclude the positions pertaining to the settlement for which trading was completed on the previous Tuesday.

For example, suppose a member contributed a capital of Rs.2 crores. His intra day exposure limit will be  $33 \frac{1}{3}$  times, which is approximately Rs.66 crores. He goes long on 3,00,000 Infosys @ Rs.1575 on Monday. On the same day, he also buys 66,370 Reliance @ Rs.2825. This creates an overall gross position of Rs.65,99,95,250 which is calculated as follows:

3,00,000 Infosys @ Rs.1575	= Rs.47,25,00,000
66,370 Reliance @ Rs.2825	= Rs.18,74,95,250
Total	= Rs.65,99,95,250

Now, w.r.t. gross exposure limit, the member has a limit of Rs.28.5 crores. The same has been calculated as follows:

On Rs.1 crore	= Rs.8.5 crores	(8.5 times of 1 crore)
On next 1 crore	= Rs.10 crore	(10 times of 1 crore)
Total exposure	= Rs.18.5 crore	

Above 1 crore - 10 times exposure

1 crore or less - 8.5 times exposure

Therefore, the member can carry forward his positions to the tune of Rs.18.5 crores only and will have to square up his positions to the tune of Rs.37,49,95,250. If he carries forwards his position to the tune of Rs.18.5 crores, then for Tuesday, he will

not be able to take any open position. If he wants more exposure, then he will have to deposit more money. He can also go in for early pay-in of funds/securities to get his exposure released.

#### 7.4.2 Early pay-in of Funds/Securities

One can make an early pay-in of securities and/or funds against obligations before the actual pay-in day. In that case, the member shall receive benefit equivalent to the value of advance pay-in is given towards exposure limits by reduction in the cumulative net outstanding position. This benefit will be available on the evening of the day on which pre-pay-in is made.

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##### Early pay in of funds/securities

To avail of early pay-in facility, **minimum requirements** as under have been specified:

- If securities are in demat mode, the minimum value of securities in a request has to be at least Rs.5 lakhs, subject to each security being valued at not less than Rs.1 lakh.
- If the securities being delivered are in physical form, the minimum value of securities in a request should be Rs.25 lakhs, subject to each security being not less than Rs.5 lakhs.
- If the securities to be delivered are a combination of demat and physical form, the total value of securities in each request should be at least Rs.5 lakhs. The value per security in this case too, is required to be not less than Rs.1 lakh per security in case of demat securities and Rs.5 lakhs per security in case of physical securities.

#### 7.4.3 On-line Exposure Monitoring

NSCCL has put in place an on-line monitoring and surveillance

system whereby exposure of the members is monitored on a real time basis. The consolidated margin report which is downloaded and made available at the extranet server (FTP) at the end of the day contains the figure of gross exposure utilized and maximum allowable gross exposure. Apart from this, alert messages on reaching **70%, 85%, 95%** and **100%** of gross exposure are flashed on trading terminals while trading activity is on.

#### 7.4.4 Violation of Exposure Limits

In case a member violates the exposure limits, he is subject to penalty as reduced trading limits. Members are not permitted to trade for that day in case they violate the trading limits as fixed by the NSCCL. They are allowed to trade only on the next day with reduced trading limits. It would be **20 times** instead of 33 1/3 times until the member deposits additional capital with the NSCCL to resume the exposure limit. This deposit needs to be made within 15 days from the date of violation. In case the trader is unable to do so, then his trading limits would remain as 20 times till the next one month from the last date of depositing the additional base capital. In case he still fails to deposit the required amount, the trading limits would be reduced to **15 times** then 10 times and then from **10 times** to **5 times** the base capital. Members are not permitted to trade if any subsequent violation occurs till the required additional capital is brought in.

## 7.5 Grouping of Securities

Securities are grouped into various categories on the basis of liquidity and volatility. The grouping is done to fix margins for the same. The margin requirements are different for different groups. A security which is highly volatile would call for a high percentage of margins. A security which is illiquid again calls for a high percentage of margins as there are more chances of defaults. The grouping is done on the basis of trading done on NSE in that scrip and impact cost, which measures liquidity.

The prescribed categorization of stocks for imposition of margins has the structure as given below:

**Group I:** Includes those stocks which have been traded for at least 80% of the working days for the previous 18 months and the impact cost is less than 1%.

**Group II:** Includes those securities which have been traded for at least 80% of the working days for the previous 18 months and the impact cost is more than 1%.

**Group III:** Includes the rest of the securities except in the Trade-for-Trade segment.

For the purpose of categorization, impact cost is calculated on the 15<sup>th</sup> of every month on a rolling basis on the order book snapshots for the past six months. On the basis of the impact cost so calculated, the scrips can move from one group to another. The same would be incorporated from the 1<sup>st</sup> of next month.

## 7.6 Margin Requirements

As per SEBI directive, in T+2 rolling settlement, all stock exchanges have imposed stringent margin requirements as a part of their risk containment measures. There are various types of margins payable to the exchange. They are calculated at client level. The daily margin in rolling settlement comprises of Value at Risk (VaR) based margin, Mark to Market (MTM) margin and extreme loss margin. These margins are taken by the exchange to avoid defaults on the part of the clients and are payable by the trading members on T+1 basis. These margins are calculated scrip wise on the basis of market volatility and liquidity of the scrip. Let discuss these various types of margins further.

### 7.6.1 Value at Risk Margin

VaR Margin is a margin intended to cover the largest loss that can be encountered on 99% of the days (99% Value at Risk). For liquid securities, the margin covers one-day losses while for illiquid securities, it covers three-day losses so as to allow the clearing corporation to liquidate the position over three days. This leads to a scaling factor of square root of three for illiquid securities.

For liquid securities, the VaR margins are based only on the volatility of the security while for other securities, the volatility of the market index is also used in the computation.

**Computation of VaR for the three groups of securities**

VaR is a single number, which encapsulates whole information about the risk in a portfolio. It measures potential loss from an unlikely adverse event in a normal market environment. It involves using historical data on market prices and rates, the current portfolio positions, and models (e.g., option models, bond models) for pricing those positions. These inputs are then combined in different ways, depending on the method, to derive an estimate of a particular percentile of the loss distribution, typically the 99<sup>th</sup> percentile loss.

- **Security sigma** means the volatility of the security computed as at the end of the previous trading day. The volatility is computed as mentioned above.
- **Security VaR** means the highest of 7.5% or 3.5 security sigma.
- **Index sigma** means the daily volatility of the market index (S&P CNX Nifty or BSE Sensex) computed as at the end of the previous trading day. Index VaR means the highest of 5% or 3 index sigma. The higher of the Sensex VaR or Nifty VaR would be used for this purpose.

The VaR Margins are specified as follows for different groups of securities:

<b>Liquidity Categorization</b>	<b>One-Day VaR</b>	<b>Scaling factor for illiquidity</b>	<b>VaR Margin</b>
Liquid Securities (Group I)	Security VaR	1.00	Security VaR
Less Liquid Securities (Group II)	Higher of Security VaR and three times Index VaR	1.73 ( $\sqrt{3}$ )	Higher of 1.73 times Security VaR and 5.20 times Index VaR
Illiquid Securities (Group III)	Five times Index VaR	1.73 ( $\sqrt{3}$ )	8.66 times Index VaR

*Note:* In case of securities in Trade for Trade segment (TFT segment) the VaR rate applicable is 100%.

Security specific Margin: NSCCL may stipulate security specific margins for the securities from time to time.

The VaR margin rate computed as mentioned above will be charged on the net outstanding position (buy value-sell value) of the respective clients on the respective securities across all open settlements. There would be no netting off of positions across different settlements. The net position at a client level for a member is arrived at and thereafter, it is grossed across all the clients including proprietary position to arrive at the gross open position.

For example, in case of a member, if client A has a buy position of 1000 in a security and client B has a sell position of 1500 in the same security, the net position of the member in the security would be taken as 2500. The buy position of client A and sell



position of client B in the same security would not be netted. It would be summed up to arrive at the member's open position for the purpose of margin calculation.

The VaR margin shall be collected on an upfront basis by adjusting against the total liquid assets of the member at the time of trade. The VaR margin so collected shall be released on completion of pay-in of the settlement.

*Example – Determination of open position:* The exposure to be reckoned for the purpose of applying VaR-based margin rates is determined in the manner illustrated in the Table below. It is arrived at by adding up the absolute values of the net cumulative positions for all securities in which a member has an open position, assuming the member has only two clients and no proprietary position. It is also assumed that the scrips A and B attract VaR rate of 25% and 30% respectively.

**Client A**

Day	Net Value (buy value – sale value)		Cumulative Net Value		VAR		Total VAR
	Script A	Script B	Script A	Script B	Script A (25%)	Script B (30%)	Script (A+B)
Day 1	2000	10000	2000	10000	500	3000	3500
Day 2	4000	32000	6000	42000	1500	12600	14100
Day 3	40000	-5000	44000	27000	11000	8100	19100
Day 4	23000	1000	63000	-4000	15750	-1200	14550

**Client B**

Day	Net Value ( buy value- sale value )		Cumulative Net Value		VAR		Total VAR
	Script A	Script B	Script A	Script B	Script A (25%)	Script B (30%)	Script (A+B)
Day 1	30000	46000	30000	46000	7500	13800	21300
Day 2	-3500	-2100	26500	43900	6625	13170	19795
Day 3	4500	89000	1000	86900	250	26070	26320
Day 4	-1500	-600	3000	88400	750	26520	27270

**Member**

Day	Net Value ( buy value – sale value )		Cumulative Net Value		VAR		Total VAR
	Script A	Script B	Script A	Script B	Script A (25 %)	Script B (30 %)	Script (A+B)
Day 1	32000	56000	32000	56000	8000	16800	24800
Day 2	7500	34100	39500	90100	9875	27030	36905
Day 3	44500	94000	52000	128100	13000	38430	51430
Day 4	24500	1600	69000	95600	17250	28680	45930

Note: The total VaR is the sum of absolute cumulative net values multiplied with the VaR rate for all scrips. The cumulative net value is the cumulative net value of the scrip for the last two days (T and T-1), as margins are collected on T+1

basis. For example, the exposure at the end of day 4 is cumulative open position of the scrips for days 3 and 4.

**Snapshot of various group companies VaR**

**Group I security** POWERGRID – EQ (As on 22-OCT-2007 12:23:29 Hours IST)

Security Name	Face Value	ISIN Code	52 week high price	52 week low price
<a href="#">Power Grid Corporation of India Limited</a>	10.00	INE752E01010	149.45	83.15

Security VAR	Index VAR	VAR Margin	Extreme Loss Rate	Adhoc Margin	Applicable Margin Rate
14.42	-	14.42	5.00	-	19.42

**Group II security** MANGCHEFER – EQ (As on 22-OCT-2007 12:18:59 Hours IST)

Security Name	Face Value	ISIN Code	52 week high price	52 week low price
<a href="#">Mangalore Chemicals &amp; Fertilizers Limited</a>	10.00	INE558B01017	32.45	30.10

Security VAR	Index VAR	VAR Margin	Extreme Loss Rate	Adhoc Margin	Applicable Margin Rate
0.41	19.81	34.32	5.00	-	39.32

**Group III security** MANALU – EQ (As on 22-OCT-2007 12:21:59 Hours IST)

Security Name	Face Value	ISIN Code	52 week high price	52 week low price
<a href="#">Man Aluminium Limited</a>	10.00	INE215I01019	46.15	32.05

Security VAR	Index VAR	VAR Margin	Extreme Loss Rate	Adhoc Margin	Applicable Margin Rate
-	33.02	57.19	5.00	-	62.19

**Group Trade For Trade** OILCOUNTUB – BE (As on 21-NOV-2007 12:11:33 Hours IST)

Security Name	Face Value	ISIN Code	52 week high price	52 week low price
<a href="#">Oil Country Tubular Ltd</a>	10.00	INE591A01010	99.15	20.10

Security VAR	Index VAR	VAR Margin	Extreme	Adhoc Margin	Applicable

		Loss Rate		Margin Rate	
-	-	100.00	-	-	100.00

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**VaR margin for Institutional Trades**

VaR margin is charged at differential rate on the Net outstanding sale position of the client. However, such margins are added up across all clients of the member or custodian and the same are collected from the Trading Member or Custodian as the case may be. NSE disseminates VaR margin rates to the members & public at large through its web-site. VaR margin rate for each security is provided on a daily basis, at the end of each trading day. These rates are applicable on the positions at the end of next trading day. A separate file is also provided on a daily basis for the VaR margin rates applicable for the institutional trades on the net outstanding sale positions at the end of next trading day. A file on the multiplier is provided on a monthly basis, detailing the multiplier to be applied on each security in the following month.

**Mark to Market Margin**

Mark to market loss shall be

calculated by marking each transaction in security to the closing price of the security at the end of trading. In case the security has not been traded on a particular day, the latest available closing price at the NSE shall be considered as the closing price. In case the net outstanding position in any security is nil, the difference between the buy and sell values shall be considered as notional loss for the purpose of calculating the mark to market margin payable.

$$\text{MTM Profit/Loss} = [(Total\ Buy\ Qty * Close\ price) - Total\ Buy\ Value] - [Total\ Sale\ Value - (Total\ Sale\ Qty * Close\ price)]$$

**Collection of Mark-to-Market margin/settlement**

The mark to market margin (MTM) shall be collected from the member before the start of the trading of the next day. The MTM margin shall also be collected/adjusted from/against the cash/cash equivalent component of the liquid net worth deposited with the Exchange.

**Example 1:** A trading member has two clients with the following MTM positions. What will be the MTM for the trading member?

Client	Security X		Security Y		Security Z	
	T-1 Day	T Day	T-1 Day	T Day	T-1 Day	T Day
A	8000	3000	-5000	-12,000	0	0
B	10,000	5000	0	0	-15,000	-8000

Netting of positions – Client wise:

Client A (T-1 Day) 8000 – 5000 = (+) 3000

*Note:* Since the client has earned a notional profit of Rs.3000, it will not be considered while calculating the gross open position of the member.

Client A	(T Day)	3000 – 12000	= (-) 9000
Client B	(T-1 Day)	10000 – 15000	= (-) 5000
Client B	(T Day)	5000 – 8000	= (-) 3000

The MTM margin for the trading member will be (-) 17000

The MTM margin shall be collected on the gross open position of the member. The gross open position for this purpose would mean the gross of all net positions across all the clients of a member including its proprietary position. For this purpose, the positions of a client would be netted across its various securities and the positions of all the clients of a broker would be grossed.

There would be no netting off of the positions and setoff against MTM profits across two settlements i.e. T day and T-1 day. However, for computation of MTM profits/losses for the day, netting or setoff against MTM profits would be permitted.

**Example 2:** A trading member has two clients with the following positions. What will be the gross open position for the member in X, Y and Z?

Client	Security	Buy Value	Sell Value	Net Position
A	X	10,000	11,000	(-) 1000
	Y	30,000	25,000	(+) 5000
	Z	8,000	9,500	(-) 1500
B	X	5,000	4000	(+) 1000
	Y	20,000	17,000	(+) 3000

The gross open position for the member in X, Y and Z will be 2000, 8000 and 1500 respectively.

In case of Trade for Trade Segment (TFT segment) each trade shall be marked to market based on the closing price of that security.

The MTM margin so collected shall be released on completion of pay-in of the settlement.

### 7.6.3 Extreme Loss Margin

The Extreme Loss Margin for any security shall be higher of:

1. 5%, or
2. 1.5 times the standard deviation of daily logarithmic returns of the security price in the last six months. This computation shall be done at the end of each month by taking the price data on a rolling basis for the past six months and the resulting value shall be applicable for the next month.

In view of market volatility, SEBI may direct stock exchanges to change the margins from time-to-time in order to ensure market safety and safeguard the interest of investors.

The Extreme Loss Margin shall be collected/adjusted against the total liquid assets of the member on a real time basis. The Extreme Loss Margin shall be collected on the gross open position of the member. The gross open position for this purpose would mean the gross of all net positions across all the clients of a member including its proprietary position. There would be no netting off of positions across different settlements. The Extreme Loss Margin collected shall be released on completion of pay-in of the settlement.

Following are the **examples** of various companies having different extreme loss margins:

BAJAJELEC – EQ (As on 02-NOV-2007 16:00:09 Hours IST)

Security Name	Face Value	ISIN Code	52 week high price	52 week low price
<a href="#">Bajaj Electricals Limited</a>	10.00	INE193E01017	359.80	331.25

Security VAR	Index VAR	VAR Margin	Extreme Loss Rate	Adhoc Margin	Applicable Margin Rate
1.68	20.19	34.97	5.00	-	39.97

POWERGRID – EQ (As on 12-NOV-2007 12:39:34 Hours IST)

Security Name	Face Value	ISIN Code	52 week high price	52 week low price
<a href="#">Power Grid Corporation of India Limited</a>	10.00	INE752E01010	163.90	83.15

Security VAR	Index VAR	VAR Margin	Extreme Loss Rate	Adhoc Margin	Applicable Margin Rate
11.35	-	11.35	6.29	-	17.64

#### 7.6.4 Margin Payment and Payout

In simple terms, margin refers to the collateral that a member has to deposit with the exchange to be able to trade on any given day. It is a risk management system backed with the objective of protecting the exchange against any potential adversity that may arise in the future. There are various types of margins that are applied on the clients. These margins are calculated on the client level. The margins are paid in by the members on T+1 day. This is done by calculating it for each client, scrip wise.

##### **Payment of margin**

The daily margin for rolling settlements is payable on T+1 day. The margin is collected together for all settlements for all clients. Members are responsible to compute margin payable and to make suitable margin payments on the due date. Members are required to deposit the margin money due in cash, bank guarantee or FDRs, rounded off to the next higher multiple of Rs.10,000.

### **Payout of margin**

The margins deposited in cash on a given day may, if NSCCL chooses not to exercise its lien, be returned to the member on the subsequent day after adjustment for margin, additional base capital and any other funds dues. NSCCL may, at its discretion may retain part or whole of the amount releasable cash margin, with respect to any member as a risk containment measure.

### **Upfront margins collection**

Members are required to ensure collection of upfront margin from their clients at rates mentioned below and deposit the same in a separate clients account, in respect of trades in Normal market which would result in a margin of Rs.50,000/- or more, after applying the margin percentages as given below:

<i>Groups (Securities Covered)</i>	<i>Upfront Margin Rate</i>
Group I	15%
Group II	30%
Group III	45%

### **7.6.5 Margin Shortfall**

In case of any shortfall in margin:

- The members shall not be permitted to trade with immediate effect.
- Penalty for margin violation

Penalty applicable for margin violation shall be levied on a monthly basis based on slabs as mentioned below:

<b>Instances of Disablement</b>	<b>Penalty to be levied</b>
1 <sup>st</sup> instance	0.07% per day
2 <sup>nd</sup> to 5 <sup>th</sup> instance of disablement	0.07% per day + Rs.5000/- per instance from 2 <sup>nd</sup> to 5 <sup>th</sup> instance
6 <sup>th</sup> to 10 <sup>th</sup> instance of disablement	0.07% per day + Rs.20000 ( for 2 <sup>nd</sup> to 5 <sup>th</sup> instance) + Rs.10000/- per instance from 6 <sup>th</sup> to 10 <sup>th</sup> instance
11 <sup>th</sup> instance onwards	0.07% per day + Rs.70,000/- (for 2 <sup>nd</sup> to 10 <sup>th</sup> instance) + Rs.10000/- per instance from 11 <sup>th</sup> instance onwards. Additionally, the member will be referred to the Disciplinary Action Committee for suitable action

Instances as mentioned above shall refer to all disablements during market hours in a calendar month. The penal charge of 0.07% per day shall be applicable on all disablements due to margin violation anytime during the day.

### **7.7 Settlement Guarantee**

The National Stock Exchange has set up a clearing corporation, the National Securities Clearing Corporation Limited, which acts as a counter party to every trade executed on the Capital Market Segment of the exchange. The establishment of clearing houses has helped streamline the clearing system. SEBI also gave "in-principle" approval to The Stock Exchange, Mumbai, for their trade/settlement guarantee fund. A settlement guarantee fund ensures the timely completion of settlement irrespective of any broker defaulting to the exchange. SEBI has been promoting the establishment of trade/settlement guarantee funds at the stock exchanges. The existence of a trade/settlement guarantee fund or clearing corporation which provides a trade/settlement guarantee generates confidence among investors dealing on the exchange and enhances the overall safety of the market.

Therefore, the investors have faith in the system that even if the individual members do not pay on time, the clearing and settlement would get completed as per the schedule. In case a member fails to pay-in his obligations on time, the non defaulting party is still paid on time through the reserve that the exchange is holding. A large Settlement Guarantee Fund, which stood at Rs.4,055.18 crore at the end of March 2006, provides a cushion for any residual risk and operates like a self-insurance mechanism wherein members themselves contribute to the fund.

### **Enrich your learning**

The size of the Settlement Guarantee Fund (SGF) with stock exchanges has shrunk following the introduction of rolling settlement. The corpus of SGF has fallen sharply between March 2001 and March 2002 on both NSE and BSE. On the NSE, the SGF has fallen by 38 per cent from Rs.2,919 crore (March 2001) to Rs.1,781 crore (March 2002). On the BSE, the corpus of SGF (BSE terms it as Trade Guarantee Fund) has fallen by 46 per cent to Rs.977.12 crore (Rs.1,813.58 crore).

### **7.8 Penalty Points and Penal Interest**

NSCCL has instituted a penalty points system. Non performance in settlement by way of non-payment of amounts, short delivery or bad delivery attracts penalty points and a penal interest charge. The penalty interest and points are levied for a month. The penalty points that are accumulated, and the penalty that would be imposed for different types of violations, are made transparent to the members. The strict implementation of this system acts as a strong deterrent for settlement lapses. In addition, it also helps in identifying potential problem cases entailing risks.

Penalties are charged to members for:

- Failure to fulfill their funds obligations.
- Failure to fulfill their securities deliverable obligations.
- Gross Exposure & Turnover Violations.
- Margin Shortages.
- Security Deposit Shortages.

- Other violations in respect of client code modifications, non-confirmation of custodial trades, company objections reported against the members' etc.

<i>Type of Default</i>	<i>Penalty Charges</i>
Shortages in Funds pay in, margins pay in and security deposit shortages	0.07% per day
Shortages in security deposit	0.09% per day
Shortages in Securities Pay-in	0.05% per day
Company Objections Bad & Fake and Company Objections Rectification / Replication of bad and fake delivery in all markets	0.09% per day from the day of non compliance
Wrong claims of dividend, bonus etc.	Rs.100 per claim
Same set of shares reported twice under objection	10% of value with a minimum of Rs.5000/- per claim
Incorrect undertaking on Form 6-I	10% of value with a minimum of Rs.5000/- per claim
Late withdrawal of company objections	Rs.2 per share with a minimum of Rs.200/-
Non Settlement of trade under TT segment	0.50% of trade value
Cancellation of trade under TT segment	Rs.1000/- per trade per side
Failure to settle within the stipulated time under TT segment	Maximum of Rs.10000/- or Rs.500/- per trade per day, subject to maximum of 2.50 times the value of trade for each side
Failure to report within the stipulated time under TT segment	Maximum of Rs.5000/- or Rs.500/- per trade per day, subject to maximum of 2.50 times the value of trade for each side

Penalty points are calculated for each settlement and cumulated for all the settlements over each calendar month. Penalty points are imposed over and above penal interest and other charges. At the beginning of the first settlement period of each month the cumulated points will be reset to zero.

<i>Type of Default</i>	<i>Penalty points per settlement</i>
Funds Shortage amount Rs.5 lakhs or more	Nil
Funds Shortage amount less than Rs.5 lakhs	Nil
Securities Shortage for Rs.10 lakhs or more in Normal Market	Nil
Securities Shortage for less than Rs.10 lakhs in Normal Market	Nil
Securities Shortage in Auction Market	Nil
Gross Exposure or Turnover Violation for Rs.5 lakhs or more	4
Gross Exposure or Turnover Violation for less than Rs.5 lakhs	2
Margin Shortages for Rs.5 lakhs or more	Nil
Margin Shortages for less than Rs.5 lakhs	Nil
Security Deposit Shortages for Rs.5 lakhs or more	Nil
Security Deposit Shortages for less than Rs.5 lakhs	Nil
Non Confirmation of Custodial Trades	4
Company Objections Bad & Fake delivery in all markets	Nil



Company Objections Rectification / Replication of bad and fake delivery in all markets	Nil
Client code modifications of more than 5 instances	4

The following penalties are imposed for penalty points earned during each calendar month:

<i>Penalty Points</i>	<i>Penalty</i>
0 to 20	No action
21 to 30	Reprimand letter
31 to 50	A fine of Rs.2000/- per point over 30 points
51 to 100	A fine of Rs.5000/- per point over 50 points plus Rs.40,000/-
Over 100	Allowable exposure to be reduced by 75% for 10 settlements in Normal Regular Market

In addition to the above, a penal interest at the rate of 9 basis points for each day of default will be levied on the members who fail to pay the penalty imposed on them.

### **7.9 Indemnity Insurance**

The Exchange has arranged a comprehensive insurance scheme to cover risks of trading members. The Exchange has also taken an insurance cover of Rs.50 crore to protect against risks from settlement defaults and transit risk arising from securities movement among its clearing centers.

### **7.10 Inspection and Investigation**

There is a regulatory requirement that a minimum of 20% of the active trading members should be inspected every year to verify their level of compliance with various rules, byelaws and regulations of the Exchange. Usually, inspection of more members than the regulatory requirement is undertaken every year. The inspection randomly verifies if the investor interests are being compromised in the conduct of business by the members. On the basis of various alerts further analysis is carried out. If it suggests any possible irregularity such as deviations from the past trends/patterns, concentration of trading at NSE at the member level, then a more detailed investigation is undertaken. If the detailed investigation establishes any irregular activity, then a disciplinary action is initiated against the member. If the investigation suggests suspicions of possible irregular activity across the stock exchanges and/or possible involvement of clients, the same is informed to SEBI.

### **7.11 Investor Protection Fund (IPF)**

Despite the various efforts taken by the regulators and exchange, some problems do arise. A cushion in the form of Investor Protection Funds (IPFs) is set up by the stock exchanges. Investor Protection Fund (IPF) has been set up as a trust under Bombay Public Trust Act, 1950 under the name and style of National Stock Exchange Investor Protection Fund Trust and is administered by the Trustees. The IPF is maintained by NSE and the purpose of the IPF is to take care of investor claims, which may arise out of non-settlement of obligations by the trading members. The IPF is also used to settle claims of such investors whose trading member has been declared a defaulter.

Further, the stock exchanges have been allowed to utilize interest income earned on IPF for investor education, awareness and research.

**Quantum of Compensation:** The maximum amount of claim payable from the IPF to the investor (where the trading member through whom the investor has dealt is declared a defaulter) is Rs.10 lakh.

**Procedure for filing claims:** A notice is published in widely circulated daily newspapers notifying the trading member who has been declared defaulter. Claims against the trading member specified in the notice are required to be made, on or before three months from the date of such published notice. The claimant is required to submit full details and all relevant facts of the case duly supported by copies of the relevant documents.

The trustees in disallowing (whether wholly or partly) a claim for compensation shall serve notice of such disallowance on the claimant. The trustees may at any time and from time to time require any person to produce and deliver any securities, documents or statements of evidence necessary to support any claim made or necessary for the purpose of establishing his claims. In default of delivery of such documents, the trustees may disallow (wholly or partly) any claim made by him.

The trustees, if satisfied that the default on which the claim is founded was actually committed, may allow the claim and act accordingly. The trustees have an absolute discretion as regards the mode and method of assessing the nature of the claim including their genuineness and at their discretion may accept, reject or partially grant or allow claims and make payment thereof subject to the limits herein mentioned.

### Enrich your learning

Centre wise Break-up of resolved complaints against Company – Sep'07

Region	Carried forward balance (1)	Complaints Received (2)	Complaints Resolved / Closed (3)	Balance at month end (1+2-3)
Mumbai	29	20	23	26
Delhi	164	29	79	114
Kolkata	13	2	0	15
Chennai	11	0	4	7
Total	<b>217</b>	<b>51</b>	<b>106</b>	<b>162</b>

### Investor Education and Protection Fund (IEPF)

The Companies Act, 1956 allows

provides for an Investor Education and Protection Fund (IEPF) to protect the interests of small shareholders. The fund is utilized for conducting direct education programmes, organizing seminars, promoting research activities and providing legal assistance to genuine investor litigants through investor grievances forums. A committee comprising both government and non-government members manages the fund. The IEPF is constituted from grants received from the government and from the unclaimed dividends, share application money, matured deposits and unclaimed debentures of the corporate.

IEPF provides financial assistance to any organization/entity/person with a viable project proposal on investors' education and protection. The eligible entities are those registered under the Societies Registration Act or formed as Trusts or Incorporated Companies. They should be in existence for a minimum period of 2 years employing a minimum of 20 members and be governed by properly established rules, regulations and or bylaws prior to its date of application for registration. In addition, they should not be a profit making entity. The limit for each entity for assistance would be subject to 5% of budget of IEPF during that financial year and not exceeding 50% of the amount to be spent on the proposed program/activity.

### 7.12 No-delivery Period

A share goes into no-delivery period when the company concerned closes its register of shareholders for payment of dividend, bonus shares and such other benefits. During this period no delivery of shares is made and this period lasts for five days. Such an activity may result in the share price going up or down. For example if there are more buyers than sellers the share price may move up. On the other hand, if sellers are more than buyers, the share price may come down.

When the no-delivery period is over, sellers will be obliged to deliver the shares to the buyers, trading will return to the normal mode & the price trend prevailed during the no-delivery period will be reversed. Take Infosys, for instance. This share rose by Rs.300 during the no-delivery period only to fall thereafter.

To avoid such price fluctuations and to facilitate transfer of shares by the company, SEBI has considered it fit to do away with the no-delivery period only for the stocks in the electronic (demat) form; for transfers in these stocks do not take much time.

No Delivery			
Security	Start Date	End Date	Purpose
GUJARAT MIN. DEV. CORPN	8-Nov-2007	15-Nov-2007	FV SPLIT RS.10/- TO RS.2/

#### Enrich your learning

No- Delivery on NSE	
Guj.Mineral D	08/11 - 15/11
ICSA	23/10 - 29/10
ITD Cementation	30/10 - 05/11
Ruchi Soya Ind.	29/10 - 02/11
Tata Steel	29/10 - 02/11
West Coast Pap.	26/10 - 01/11
Source: Economic Times - 27 October 2007	

#### Summary/Recapitulation

To avoid situation of default, the NSCCL has puts some statutory requirements with reference to capital requirements and exposure limits. A member has to have some basic net worth depending

upon the segment in which he would be working. He can start his business by depositing some basic capital known as Minimum Base Capital (MBC).

Additional Base Capital (ABC) can be given in various forms apart from case.

- Trading and exposure limits for a particular member would depend on the capital contributed by him.
- Securities are group into various categories, at NSE, on the basis of liquidity and volatility. This is done for impositions of margins.
- Various types of margins are payable to the exchange to avoid defaults. These margins are calculated at client level. Daily margins comprise of VaR and Extreme Loss Margin.
- Mark to Market Margin (MTM) is collected on the basis of closing price of the stock. This again done to avoid defaults.
- Up front margins are also collected on the basis of securities falling in different groups less liquid stock calls for a higher margins and vice-versa. Non payment of margin amount (whole or partial) calls for penal charges.
- In case a trading member violates the exposure limits at any point of time his trading limits are reduced. In order to restore the exposure limits he needs to bring in some amount of additional capital.
- A member can also opt for early pay in of funds and / or securities for releasing the exposure limits for the day.
- The exchange maintains an Investors' Protection Fund to protect the interests of the clients of the trading members of the exchange.

### Let's revise - New Terms

- |                                 |                               |
|---------------------------------|-------------------------------|
| • Risk Containment Measures.    | • VaR                         |
| • Capital Adequacy Requirement. | • MTM.                        |
| • Additional Base Capital.      | • Margin Payment              |
| • Base Minimum Capital.         | • Margin Payout               |
| • Margins.                      | • Upfront Margins             |
| • Initial Margin                | • Trading & Exposure Limits   |
| • Settlement guarantee          | • Extreme Loss Margins        |
| • No -delivery Period           | • On-line Exposure Monitoring |
| • Investor Protection           | • Off-line Monitoring         |

### Multiple Choice Questions — Time your efforts

- Q.1** MTM & VAR margins are calculated on \_\_\_\_\_ basis.
- a) Daily.
  - b) Monthly.
  - c) Weekly.
  - d) Quarterly.
- Q.2** Minimum net worth requirement for a member of NSE to trade in Cash Market & Future & Option segment is \_\_\_\_\_
- a) 100 Lakhs.
  - b) 125 Lakhs.
  - c) 50 Lakhs.
  - d) 75 Lakhs.

- Q.3** NSCCL has put in place an on-line exposure surveillance alerts, which has been built in, so that both the member & NSCCL are alerted as per pre set levels \_\_\_\_\_
- a) Reaching 70%, 85%, 95%, 100%
  - b) Reaching 60%, 75%, 80%, 90%
  - c) Reaching 50%, 55%, 65%, 75%
  - d) Reaching 45%, 55%, 65%, 75%
- Q.4** Gross turnover (buy+sell) intraday of the member should not exceed \_\_\_\_\_ times the base capital.
- a) 33 & 1/3.
  - b) 45.
  - c) 55.
  - d) 75.
- Q.5** For each violation of gross exposure limit & intra-day turnover limit, a penalty of Rs. \_\_\_\_\_ is levied, which is paid by the trading member next day.
- a) 1500.
  - b) 1000.
  - c) 5000.
  - d) 2000.
- Q.6** Gross exposure for a member, across all securities in rolling settlements, is computed as absolute\_\_\_\_\_.
- a) Buy value.
  - b) Sell Value.
  - c) Auction value.
  - d) Buy value- sell value.
- Q.7** Deals executed on behalf of the following entities are considered as institutional deals\_\_\_\_\_
- a) Financial Institutions.
  - b) SEBI registered FIIs & Mutual Funds.
  - c) Banks.
  - d) All of the above.
- Q.8** After the executions of trade, the ----- becomes the counter-party to the transaction ensures that funds & securities obligations are met.
- a) SEBI
  - b) Clearing Corporation
  - c) NSE
  - d) BSE
- Q.9** The maximum amount of claim payable from the Investor Protection Fund to the investor is Rs.\_\_\_\_\_.
- a) 20 lakhs.
  - b) 10 lakhs.
  - c) 50 lakhs.
  - d) 25 lakhs.

**Answers:**

- |        |         |        |        |        |
|--------|---------|--------|--------|--------|
| Q1 (a) | Q 2 (a) | Q3 (a) | Q4 (a) | Q5 (c) |
| Q6 (d) | Q7 (d)  | Q8 (b) | Q9 (b) |        |

**Very Short Questions**

- Q1 What is a no delivery period?
- Q2 Why would a member go for early pay in off funds / security?
- Q3 How is exposure monitored on off line basis?

**Short Questions**

- Q1 How many types of daily margins are there & at what level are they computed?
- Q2 What will be the repercussions in case of non payment of margins?
- Q3 Write a short note on settlement guarantee.
- Q4 What is the need to have in an investor protection fund?

**Long Answers**

- Q1 In what forms can additional based capital be submitted by the members?
- Q2 Explain the concept of Mark to Market Margin with the help of practical example.
- Q3 Explain the concept of exposure and how is it calculated for gross open positions?
- Q4 How are stocks categories at NSE for imposition of margins?