Market wisdom INVESTOR EMPOWERMENT SERIES
LESSON NO.14• FROM THE HOUSE OF ASIT C. MEHTA INVESTMENTS

Margins and Investors

Collection and payments of margins is what makes the market safe. Over the years our stock markets have risen on the safety index since it has managed to survive two crisis in May 2006 and May 2005. Huge FII funds are flowing into the country essentially due safety perceived in the settlement systems of the two exchanges. Proper collection of margins ensures that there is no over trading and in event of falling share prices enough funds cushion is available to the exchanges to cover the mark to market losses. However the kind of discipline that is displayed in payment of margins by the brokers is not always seen amongst ultimate investors. There is some awareness in payment of Derivative margins but in case of cash margins investors often refuse to honour the margin calls. Huge competition in the market place also unfortunately adds to this systemic risk since investors consider it as a matter of right not to pay the margin calls. Let us understand the entire margin structure of the stock exchange. This will serve two purposes one is it will help you understand why the stock exchanges are safe and secondly if you have not been paying margins because you do not understand them then it will be an enlightenment for you. The explanations are very statistical, but then margin computation is all about converting risk into statistical averages.

In the cash segment 3 types of margins are collected on daily basis:

Derivatives Segment:

There are 3 types of margin levied by the exchanges in case of derivative contracts.

- VAR (Value at Risk) Margin
- ELM (Extreme Loss Margin)
- M to M (Mark to Market) Margin

The value that is at risk is the likely fall or rise in share price that can occur during the day i.e. volatility. Volatility is the difference in highs and lows during a given period of time. Higher the range, bigger is the risk of fluctuation in the market. We are currently taking previous 6 month period as basis for computing the volatility. This is a moving period i.e. On 1st January the six months will be from 1st July to 31st December then 2nd January it will be from 2nd July to 1st January and so on. A percentage of difference in highs and lows is considered as a basis for margin rate percentage. This is called exponentially weighted moving average methodology.

The method of calculating VaR rate varies from scrip to scrip. The scrips are divided into 3 categories. Group I consists of scrip that are traded more than 80% of the trading days in the previous six months and the mean impact cost (successive changes in share price due to execution of buy and sell orders) of shares of the same is less than 1 %. Group II consists of scrip that are traded more than 80% of the trading days in the previous six months and the mean impact cost of the same is more than 1 %. The stocks not falling under both the above category is classified under group III.

Extreme Loss Margin: The ELM for any scrip shall be 5% of the scrip value or 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. Like VaR this is also applicable on individual client level.

Mark to Market Margin: This is calculated at the end of the day by on all open position by comparing the transaction price with the closing price of the scrip. The calculation is at client level – scrip level. For all squared off positions the difference between buy value and sell value will be regarded as M to M value. The M to M profit are ignored and all losses or grossed and levied as M to M margin.

Margin Release: All the margins so collected will be released after successful pay in/pay out. In case of sales if the delivery is submitted to exchange as early payin then margin will be released on processing of earlypay in by the exchanges.

Derivatives Segment:

There are 3 types of margin levied by the exchanges in case of derivative contracts.

- Initial Margin
- Exposure Margin
- Premium Margin

Initial Margin: This margin is calculated on a portfolio basis and not on individual scrip basis. The margin calculation is done using SPAN (Standard Portfolio Analysis of Risk) a product developed by Chicago Mercantile Exchange. The margin is levied at trade level on real-time basis. The rates are computed at 5 intervals

one at the beginning of the day 3 during market hours and one at the end of the day.

The objective of SPAN is to identify overall risk in a portfolio of futures and options contracts for each client. The system treats futures and options contracts uniformly, while at the same time recognizing the unique exposures associated with options portfolios like extremely deep out-of-the-money short positions, inter-month risk and inter-commodity risk.

Initial margin requirements are based on 99% value at risk over a one-day time horizon. However, in the case of futures contracts (on index or individual securities), where it may not be possible to collect mark to market settlement value, before the commencement of trading on the next day, the initial margin may be computed over a two-day time horizon, applying the appropriate statistical formula.

This will explain why the margins that you pay on first day of a derivatives contract keeps changing every day as we advance towards the maturity of the contract. Past volatility trends keeps changing the margin rates. In case of very high volatility the initial margin alongwith mark to market margin may be as high as 70:75% of the scrip value. Thus investors who trade in derivative markets have to be very careful while taking positions. The margins calls will escalate and if you are unable to pay, your positions will be forcefully liquidated. The margin will be levied at individual client level on all outstanding net position at scrip wise gross level.

Exposure Margin

This margin is based on a single percentage on the value of the scrip determined at the beginning of every month for the following month by the exchange. This is charged over and above the initial margin and is popularly referred as second line of defence.

Premium Margin

In case of option purchase the margin levied will be equivalent to the premium amount. This margin will be levied till the time premium settlement is complete.

India is the only country where the Trade Guarantee Fund is available to customers in event of default by a broker in derivatives segment. Hence margins paid in derivatives segment are completely safe. You can request for a margin confirmation from time to time from your broker. We can all contribute to the overall safety of the markets by diligently paying margins. Margins are a statistically complicated subject. If further details are required please write to the undersigned a simplistic version is presented here.

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