International Journal of Enhanced Research in Management & Computer Applications
ISSN: 2319-7471, Vol. 10 Issue 10, October, 2021, Impact Factor: 7.751

Introduction to Risk Management in Trading

Aakash Sharma

ABSTRACT

The point of this article is to overcome any barrier in value trading risk management writings and especially according to the viewpoint of arising and illiquid markets, like with regards to the Bay Participation Committee (GCC) monetary business sectors. In this article, we exhibit a commonsense methodology for the estimation and control of market risk openness for monetary trading portfolios that contain a few illiquid value protections during the loosening up (close-out) period. This approach depends on the famous idea of Significant worth In danger (VaR) alongside the improvement of a streamlining risk calculation using framework polynomial math procedure. Our exhaustive resource market risk demonstrating calculation can all the while handle VaR investigation under typical and serious economic situations, other than it considers the impacts of illiquidity and short-deals of exchanged value protections. To show the appropriate utilization of VaR and stress testing strategies, certifiable organized displaying methods of trading risk management are introduced for the GCC monetary business sectors. To this end, complete reproduction contextual investigations are achieved with the target of developing a sensible structure for trading risk estimation and control notwithstanding the incitement of a gamble streamlining calculation process for the calculation of greatest approved VaR risk-planning limits

Key words: trading risks, Management Strategies, trading.

INTRIODUCTION

Risk management is one of the most important aspects of trading, where a trader needs to have a good knowledge of risk identification, evaluation and management. This article covers the following aspects of risk management.

RISK MANAGEMENT

Risk management in trading is fundamental for turning away the gamble of bearing the misfortunes emerging from securities exchange. Risk management implies distinguishing proof, assessment and alleviation of risks which typically emerge when the market moves the other way from the assumptions.

Thus, setting your assumptions based on an intensive examination of the market and subsequent to guessing every one of the risks is truly significant.

Patterns are the main variable here. A pattern suggests the overall heading or force of the market, resource cost or other such measures.

Furthermore, a pattern gets shaped by the financial backers' gamble craving which suggests the gamble expected in the event of specific occasions like races (political occasions), loan cost choices (monetary occasions) and new progressions in innovation (business occasions).

Subsequently, in the wake of expecting such risks, you can put resources into the securities exchange gauging your expected risks with your expected additions.

Learn about the changing ideas of hazard management in the ongoing business sector exhaustively by our master Rajib Ranjan Borah in this Next, we will figure out the recognizable proof as well as assessment of trading risk.

IDENTIFICATION OF RISKS

While recognizing the trading risks one has to know the various factors at play on the lookout.

These factors can be financial factors, for example, choices of loan fee by the national bank or an exchange war.

While settling on our trading choices, we should guarantee that we are thinking about those financial variables which can influence our resources.

Here, we are referencing the force of these elements to make conceivable value variances of these resources and in the event that they really influence the costs a great deal, we should know the recurrence of these variables.

Figuring out these significant focuses will assist us with recognizing these variables as a likely danger to the portfolio. Along these lines, we can be ready to handle the dangerous situations in the market with the assistance of practices, for example, supporting, putting resources into choices, expansion of resources into generally safe and high gamble and so on.

Recommended Read: Articles on Portfolio and Chance Management

Allow us now to make a beeline for the assessment of trading risks.

EVALUATION OF TRADING RISKS

The trading risk assessment suggests figuring out the presentation of a portfolio on the lookout.

There are two methods for assessing the gamble on the lookout. One is with Alpha and another is with Beta.

Alpha is the proportion of a venture's exhibition contrasted with a specific benchmark. The abundance return of the portfolio over the benchmark record is the portfolio's alpha. In the event that alpha is positive the venture has beated its benchmark. Also, on the off chance that it is negative, the portfolio has failed to meet expectations. An alpha of 0 would demonstrate that the portfolio is following the benchmark impeccably.

For instance, an alpha of 1 method the asset has beated the profits of the benchmark record by 1% and an alpha of - 1 method the asset failed to meet expectations by 1%. Alpha Age - Controlling Intraday Chance Profile

Beta is a proportion of the unpredictability of a security or a portfolio in contrast with the market all in all. As a rule, a beta more than 1 shows that the portfolio or security is more unpredictable than the market, while a beta of under 1 demonstrates that the speculation is moderately less unstable. Low beta stocks are additionally called cautious stock since financial backers like to hold them when the market is especially unstable. High-beta stocks will more often than not be inclined toward when the market is rising consistently and financial backers are glad to face more prominent challenges to augment benefits.

For instance, on the off chance that a stock's beta is 1.5, hypothetically it is half more unstable than the market. On the other hand, in the event that a stock's beta is 0.60, hypothetically it is 40% less unpredictable than the market.

Then, we will figure out the gamble management approaches which assist with great cash management. Dynamic Cash Management.

POPULAR RISK MANAGEMENT STRATEGIES AND ELEMENTS

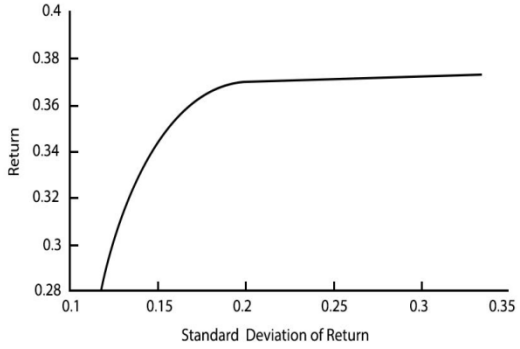
The most popular risk management strategies and elements to make your trades successful while evading risks are as follows:

- Portfolio optimisation
- Hedging
- 1% rule and 2% investing rule
- Monitoring the trade while utilising advanced technology
- Avoiding unclear trade setups
- Stop loss

PORTFOLIO OPTIMIZATION

Portfolio streamlining is the most common way of developing portfolios to augment expected return while limiting the gamble. It includes examining portfolios with various extents of speculations by working out the gamble and the return for every one of the portfolios and choosing the blend of ventures which accomplishes the ideal gamble versus return compromise.

Current portfolio hypothesis, a speculation which was advanced by Harry Markowitz in 1952, accepts that a financial backer needs to expand a portfolio's normal return for a given measure of chance, with risk estimated by the standard deviation of the portfolio's pace of return. The gamble and return of a portfolio can be plotted on a chart as:



The ideal gamble portfolio not set in stone to be some place in the bend on the grounds that as you go higher up, you face proportionately more challenge for a lower return, and as you go lower in the bend the portfolio returns are exceptionally low, so putting resources into such a portfolio would be futile as you can accomplish comparable returns by putting resources into without risk resources.

HEDGING

Supporting is a venture procedure intended to counterbalance a likely misfortune. As such, supporting is financial planning to lessen the gamble. Supporting against market cost risk means to shield yourself from the unfriendly developments in costs by achieving a cost lock. This is finished by utilizing counterbalancing contracts against the normal position you hold while supporting against credit risk.

Supporting should be possible utilizing subordinates, as the connection among subsidiaries and their comparing hidden is obviously characterized in the majority of the cases. Other monetary instruments like insurance, future policies, trades, choices and many kinds of over-the-counter items are utilized to support.

Example

Allow us to expect organization ABC produces corn pieces as a morning meal item to its customers. Then, at that point, for organization ABC, changes in the cost of corn in the items market is a gamble. Since organization ABC is in a characteristic short position (since it is selling corn as corn drops), it should ensure the cost of the corn doesn't rise constantly during the course of obtainment of corn. The organization will go into counterbalancing long agreements in the corn future market say at $400/bushel. Tomorrow, assuming that the spot cost of corn is $425/bushel, organization ABC has effectively supported this cost changeability by going into long fates contract for its corn obtainment. Furthermore, if, the spot cost is under $400, say $375/bushel, still the organization ABC will purchase corn at $400/bushel since it has previously gone into a future agreement. Consequently organization ABC achieved a value lock of $400/bushel.

MEANING AND IMPORTANCE OF 1% RULE & 2% INVESTING RULE

1% and 2% rule in trading imply the maximum amount of the risk which is feasible on per trade should be either 1% or 2%.

This helps you to avoid the excessive loss that may happen otherwise. Hence, no more than 1% or 2% of capital should be risked on the single trade. This is usually possible with day trading.
For instance, a trader holding $10,000 of capital would not risk more than $100 on the single trade.

MONITORING THE TRADE WHILE UTILISING ADVANCED TECHNOLOGY

It is very important that you monitor your trades. Monitoring the trade can be done with:

- **Utilising algorithmic trading -** The trend of the stock keeps changing and to make the most out of your trades it is extremely important/crucial to keep a check on the change in the market. In today's advanced trading, automated trades have made it much easier to find out the most gainful position and invest automatically since the trades are algorithm-driven. This is known as algorithmic trading. Technologies such as neural networks, machine learning and deep learning models help with the automation of monitoring as well as for deciding the trade positions even within a fraction of seconds.

- **Backtesting the strategies -** Backtesting is the process of testing a trading strategy using historical data to determine the effectiveness of that strategy. Backtest results usually show the strategy's performance in terms of some popular performance statistics like Sharpe Ratio and Sortino ratio, which help to quantify the strategy's return on risk. If the results meet the necessary criteria, the strategy can be implemented with some reasonable degree of confidence. If the results are less favourable, the strategy can be modified, adjusted and optimized to achieve a desirable result.

AVOIDING UNCLEAR TRADE SETUPS

An unclear trade setup takes place when one of your indicators agree to a certain trading position but others do not. For instance, if you are using the moving indicators like EMA, MA, etc. and one of them shows a clear trade setup but does not agree with the trade setups of other indicators, it creates confusion.

In such a scenario, it is best to wait for the right trade and not make any decisions when you are not sure about it. A set of mixed trade setups should never be the base of your decision making.

STOP LOSS

Stop loss is a buy or sell order which gets triggered when the stock price reaches a specified price known as the stop price. Stop loss is extremely useful for the investor who doesn't want to monitor the security on a continuous basis. The other advantages of using stop loss are to offer protection from excessive loss and to enable better control of your account. One of the disadvantages of the stop loss is that it is mostly a market order and hence, it exaggerates the loss.
For instance, Suppose you buy the stock XYZ at $50 per share that you feared might drop in price, you could use a stop order to sell if the price dropped below $45 per share to protect yourself against a larger loss.

Also, you can SEE this to find out more about risk management practices from one of our experts Marco Nicolas Dibo.

RISK MANAGEMENT STRATEGIES

Portfolio Diversification: Investors can opt for more than one financial instrument to diversify their portfolios and further diversify investing in financial products of different companies belonging to distinct sectors. A diversified basket may provide a shield if any industry or company moves in an unfavorable direction.

Practice rupee cost-averaging: All you need to do in this approach is to buy shares regularly – some of these shares purchased by you will be cheaper than others. Over the long run, the buy costs will average out, and what will stand out is the growth of these small, compounding investments.

Stop Limit: If in case the market moves in an unfavorable direction than intended, you can cap your losses by placing the following orders with Angel One,

- Stop-Loss Orders
- Robo Orders

Following Market Trends: Many investors believe that following the trend is one of the most important stock market strategies to mitigate investment risk. The difficulty in this strategy is being able to identify the trend because the markets are dynamic and constantly changing

Take Profit: This is the price at which the investor is willing to sell his investment and book profits. This point is beneficial to reduce the risks when the possibility of further price increase is huge. Booking profits on stocks that are nearing their resistance levels after large gains ensures that investors sell these before consolidation occurs and prices begin to decrease.

MARGIN REQUIREMENTS

The margin requirements in various market segments are the following:

1. Value at Risk(VaR)

VaR estimates the risk of loss in investments. It calculates the percentage of an investment you might lose in a set period given the normal market conditions.

A VaR margin has three components:

- period (one day for liquid securities)
- confidence level (99%)
- loss (amount or percentage)

VaR margin intends to cover the highest loss that one can encounter on 99% of the days (99% Value at Risk).

For example, a security with a 20% VaR margin requirement implies a possibility of a 20% loss in the value of the stock in one day, given the confidence is 99%. If the trade value of a security is ₹1,00,000, 20% VaR would be ₹20,000.

The VaR margin is collected on an upfront basis at the beginning and varies from scrip to scrip.

2. Extreme Loss Margin

The Extreme Loss Margin aims at covering the losses that could occur outside the coverage of VaR margins.

The Extreme Loss Margin for any stock is higher than 1.5 times the standard deviation of daily logarithmic returns of the stock price in the last six months or 5% of the position's value.

If (VaR+ELM)=X%,

As per the regulatory guidelines, Angel One assumes a margin requirement at X% or 20%, whichever is higher.

For instance, if (VaR+ELM)=17%, Angel One assumes the margin requirement as 20%.

3. Mark to Market(MTM) margin

MTM is calculated at the end of the day on all open positions by comparing the transaction price with the stock's closing price for the day.

For instance, if you buy 100 shares of 'X' at ₹100 at 11 AM on a trading day 'T' and if the closing price of the shares on that day happens to be ₹75, then you will face a notional loss of ₹2500 on your buy position. This loss is termed as MTM loss and is payable on 'T+1' day before the opening of the trade.

4. Initial/SPAN margin

The initial margin for the F&O segment is calculated on a portfolio (a collection of futures and option positions) based approach. The margin calculation is carried out using software called – SPAN (Standard Portfolio Analysis of Risk).

SPAN generates about 16 different scenarios by assuming different values to the price and volatility. For each of these scenarios, the possible loss that the portfolio would suffer is calculated. The initial margin required to be paid by the investor would be equal to the highest loss the portfolio would suffer in any of the scenarios considered. The margin is monitored and collected at the time of placing the buy/sell order.

5. Exposure margin

In addition to the Initial/SPAN margin, the exposure margin is also collected in the F&O segment to protect the positions.

- Exposure margins regarding index futures and index option sell positions are 3% of the notional value.
- For futures on individual securities and sell positions in options on individual securities, the exposure margin is higher at 5% or 1.5 standard deviations of the logarithmic returns of the stock (in the underlying cash market) over the last six months period. It is applied to the notional value of a position.

CONCLUSION

With the trading practice, it is critical to ensure that your exchanges are secure with right gamble management at place. Having a decent information on the gamble management practices and strategies is a shelter for any dealer since it assists you with limiting misfortunes and boost gains. With the right distinguishing proof and assessment of your risks, you can effectively deal with something similar.

Risk management is likewise important to realize about risks related with day trading, intraday trading, and in present day digital currency trading. You can look at our seminar on Crypto Trading Strategies to comprehend Digital forms of money and the risks implied.

REFERENCES

[1]. Al Janabi, M.A.M. (2005), 'Trading Risk Management: Practical Applications to Emerging-Markets', in S. Motamen-Samadian (Ed.), Risk Management in Emerging Markets, pp. 91–136. UK: Palgrave/MacMillan.
[2]. 'Equity Trading Risk Management: The Case of Casablanca Stock Exchange', International Journal of Risk Assessment and Management, 7(4): 535–68.
[3]. 'Risk Analysis, Reporting and Control of Equity Exposure: Viable Applications to the Mexican Financial Market', Journal of Derivatives and Hedge Funds, 13(1): 33–58.
[4]. 'A Practical Approach to Market Risk Analysis and Control: Empirical Test of the Mexican Foreign Exchange and Stock Markets', International Journal of Risk Assessment and Management, 9(1&2): 70–103.
[5]. Angelidis, T. and S. Degiannakis (2005), 'Modeling Risk for Long and Short Trading Positions', The Journal of Risk Finance, 6(3): 226–38.
[6]. Berkowitz, J. and J. O'Brien (2001), 'How Accurate are Value-at-Risk Models at Commercial Banks?', Working Paper, US Federal Reserve Board's Finance and Economics.
[7]. Bredin, D. and S. Hyde (2004), 'FOREX Risk: Measurement and Evaluation Using Value-at-Risk', Journal of Business Finance and Accounting, 31(9&10): 1389–417.
[8]. Britten-Jones, M. and S.M. Schaefer (1999), 'Non-linear Value-at-risk', Europan Finance Review, 2(2): 161–87.
[9]. Cornish, E. and R. Fisher (1937), 'Moments and Cumulants in the Specification of Distributions', Revue de l'Institut International de Statistique, 5(4): 307–20.
[10]. Culp, C., R. Mensink and A. Neves (1998), 'Value at Risk for Asset Managers', Derivatives Quarterly, Winter Issue, 5(2): 21–33.
[11]. Dowd, K., D. Blake and A. Cairns (2004), 'Long-term Value at Risk', The Journal of Risk Finance, Winter/Spring Issue, 5(2): 52–57.
[12]. Embrechts, P., A. Hoeing and A. Juri (2003), 'Using Copulae to Bound the Value at Risk for Functions of Dependent Risks', Finance and Stochastics, 7(2): 145–67.
[13]. Engle, R. (2001), 'GARCH 101: The Use of ARCH and GARCH models in Applied Econometrics', Journal of Economic Perspectives, 15 (4): 157–68.
[14]. Garcia, R., E. Renault and G. Tsafack (2007), 'Proper Conditioning for Coherent VaR in Portfolio Management', Management Science, 53 (3): 483–94.