



Analysis Of Trading and Hedging Mechanism in Indian Capital Market: Trends and Future Prospects

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Introduction:

The project involves a detailed study of Indian Stock market. This Project will cover the certain areas of trading & hedging mechanism of Indian Stock market. In recent time the stock market is fluctuating very vastly. From last 9 month we have seen the sense from 20,000 to 12, 000. There are many reasons for this downfall but it has created a very big loss for investor. The regular or professional investor is able to minimize the risk through hedging & some future/contract option but the retail investor who has invested money only on the basis on 20,000 points of Sensex has lost his money because these investors are not a regular investor and they don't know how to minimize or hedge the risk.

The study covers a complete mechanism of trading procedure and hedging procedure on Indian Stock market. The project will also covers the primary data with the help of close ended questionnaire. With the help of primary data we will try to find out the co-relation between hedging strategies and way to hedge the risk. We will also study the hedging strategies adopted by the investor in real life and how much the investor is able to hedge the risk. Project will also cover the online trading mechanism of Indian Stock market.

Review of Existing Literature:

To probe and research any problem in a better way, it is necessary to review the existing literature of course; various studies relating to different aspects of Hedging practices of investors and corporate have been conducted in the past. Thus a brief review of some of the doctoral studies conducted in recent past year is given below.

1. Peterson and Thiagarajan (1996) undertook a study on Risk measurement and Hedging, with and without Derivatives: The literature makes an important point that measuring Risk Exposure is an essential component of Firm's Risk Management strategy. In this research they have compared the risk exposures of two firms that are at opposite ends of the derivatives use spectrum. The research question is that why publicly traded firms manage risk and how. They have taken the logic of Tofano (1996) and Haushalter (2000). They have examined two gold mining firms. They have analyzed the operating cash flows, sales revenue, operating cost structures, taxable income, and

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investment opportunities etc. they have analyzed the managerial incentives for risk management like

- i. Compensation policy.
- ii. Managerial Incentives to reduce equity volatility.
- iii. Managerial Incentives to reduce earnings volatility.

2. Hentschel and Kothari (2000) undertook a study on the effect of Derivatives:

The objective of the study was to measure the effect of derivatives on risk exposure of derivative users to that of non-users. They find economically small differences in equity return volatility between derivative users and non-users. They also find that currency hedging has little effect on the currency exposure of firm's equity, even though derivatives use ranges from 0.6% to 64.25 of the firm's assets.

3. Naik and Yadav (October 2003) undertook a study on Risk Management with Derivatives by dealers and market quality in govt. bond markets: The objective of the study is also how bond dealers manage core business risk with Interest Rate Futures and the extent to which market quality is affected by their selective risk taking.

First analyze the extent of selective market risk taking by Government bond dealers and the way they use interest Rate Futures contracts to manage their spot risk on a day to day basis. In this context, we also investigate the factors that govern the time series variation in hedging with futures. Second in view of the magnitude and profitability of selective market risk is related to the dealer's market share. Third we test the central implication of Ho & Stoll's (1983) Model, which applies at the overall portfolio level. Finally we investigate the relation between the selective market risk taking activity of dealers and market quality. The Findings show that dealer's activity control their total risk exposure of a dealer relative to the eternalness of other dealer position, the greater is the amount of exposure the dealer trades in the direction predicted.

4. Ravi (2004) Conducted a study on the Cross-Currency swaps Making life a little bit easier: The study found that corporate with or faring to exposure are many willing to take upon exposure expecting to profiles out of the transaction. They are willing to swap rupees loan with forex loan and best in forward cover or make the payment to on spot basis on the day of disbursements. They may also consider raising new loans in a foreign currency and swap rupee loan, if it turns out to be a cheaper option.

5. Tofano & Haushalter (1996) undertook a study on the Risk Exposure using Derivatives: They analyze using derivatives is not a binary decision, but a continuous one. A firm that hedges most of its risk. Using Survey data, Tofano calculates the change in the volume of the gold mining firm's derivatives portfolio with respect to gold prices.

Higher deltas (Greater sensitivity of firm's derivative portfolio to gold price changes) imply that the firm has hedged more of its risk. Haushalter uses the fraction of the current year's production has been hedged with derivatives as a dependent variable. They have restricted their samples to single industry.

6. Main (1996) undertook a study on the Derivatives as Risk Management Tool:

The objective of the study is to analyze the firm as a derivative user. He has taken the gold industry. The firms instead of borrowing dollars, a firm borrow gold that it then sells to fund its mining operations. At the end of the loan, the firm returns a fixed amount of gold (principal plus interest). Gold is economically equivalent to cash loan plus a series of short position in the forward gold market. So they find this kind of Swap Operation as a hedging instrument.

7. Guay (1999) undertook a study on the Derivatives as risk Management Tool: The objective of the study was to analyze the risk reduction. He has examined the firm's using derivatives. He finds a reduction in risk for these firms but the reduction is not large economically. The volatility of their equity returns drops by approximately two percentage point. Firms can manage their risk in many ways. Firms that do not use derivative might reduce their risk by alternative means.

Methodology (Sources and Methods)

Data Collection:

➤ **Primary Data**

Data collected through a survey. A questionnaire was made for the survey of both institutional as well as individual investors. The main focus was on the individual investors and for the survey of institutional investors the main focus was on the persons dealing in either primary market or secondary market.

Sample Size:

For individual investors = 100

For institutional investors = 10

➤ **Secondary Data**

Secondary data was taken from the published sources and electronic media.

Sampling Technique:

Data collected through primary source. The sample was taken randomly from the market. The questions were close ended. Likert scale was applied on questions.

Data Analysis and Interpretation:

Data will be analyzed using:

- Practical Strategies
- Charts using SPSS , and;
- Other statistical tools.

Objective:

- To analyze the On Line Trading & hedging on Indian stock market
- To analyze the changing dimensions and volatility of Capital Market

Scope:

- Study of Indian equity market.
- Study of hedging strategies adopted by investor to minimize his risk.
- The project is focused on the mechanism of trading on stock market.
- Study of derivative market in current scenario.

Trading Pattern of the Indian Stock Market

Trading in Indian stock exchanges is limited to listed securities of public limited companies. They are broadly divided into two categories, namely, specified securities (forward list) and non-specified securities (cash list). Equity shares of dividend paying, growth-oriented companies with a paid-up capital of at least Rs.50 million and a market capitalization of at least Rs.100 million and having more than 20,000 shareholders are, normally, put in the specified group and the balance in non-specified group.

India has the third largest investor base in the world. India has one of the world's lowest transaction costs based on screen based transactions, paperless trading and a T+2 settlements cycle.

India has the distinction of consistent returns from the equities. Indian equities are highest across emerging Asia for the fiscal year (April 2005-March 2006). The returns from Indian equity markets have been far ahead of other emerging markets such as Mexico (52%), Brazil (43%) or gulf co-operation council (GCC) economies such as Kuwait (26%). Indian equities have delivered the highest returns in the world.

Two types of transactions can be carried out on the Indian stock exchanges: (a) **spot delivery transactions** "for delivery and payment within the time or on the date stipulated when entering into the contract which shall not be more than 14 days following the date of the contract": and (b) **forward transactions** "delivery and payment can be extended by further period of 14 days each so that the overall period does not exceed 90 days from the date of the contract". The latter is permitted only in the case of specified shares. The brokers who carry over the out standings pay carry over charges (cantango or backwardation) which are usually determined by the rates of interest prevailing.

A member broker in an Indian stock exchange can act as an agent, buy and sell securities for his clients on a commission basis and also can act as a trader or dealer as a principal, buy and sell securities on his own account and risk, in contrast with the practice prevailing on New York and London Stock Exchanges, where a member can act as a jobber or a broker only.

The nature of trading on Indian Stock Exchanges are that of age old conventional style of face-to-face trading with bids and offers being made by open outcry. However, there is a great amount of effort to modernize the Indian stock exchanges in the very recent times.

Data Analysis from primary survey

Does the company have a Risk Management Committee or Designated Risk Manager?

- 70% of institutional investors says that the company have a risk management committee or Designated risk manager.
- 30% of institutional investor says that the company has not a risk management committee or designated risk manager.
- Since the risk management committee is the very important committee to take the decision about investment and many of the companies do not have risk management committee.

Do you use derivatives for risk management?

- 40% of the institutional investor says that they use derivatives for risk management.
- 60% of the institutional investor says that derivatives are not used for risk management.
- Derivatives are the major tools for hedging the risk. Many institutional investor use derivatives for the risk management.

Please rank the type of risk considered for derivatives usage according to importance?

- 50% of investors have given 1st rank to the foreign exchange risk.
- 40% of investors have given 2nd rank to the interest rate risk.
- 10% of investors have ranked the commodity price risk as the last one.
- According to the survey conducted and the results absorbed it is being observed that the foreign exchange risk is more important risk for derivative usage.

What are the goals of derivatives usage?

- 50% of investors have agreed with the view that the balance sheet accounting is the main goal for the derivative usage.
- 20% of investors consider accounting earnings as a goal for the derivative usage.
- And again, another 20% of investors consider firm value as the main aim for the derivative usage.
- 10% of the total investors believe cash flow to be the main aim for the derivative usage.
- According to the analysis balance sheet accounting is considered as the main goal for the derivative usage by the institutional investors.

What are the derivative instrument(s) used in forex exposure risk management?

- 90% of the investors chose forwards as the main instrument which is being used in forex exposure risk management.
- 10% of the investors chose other instruments of derivatives for the forex exposure risk management.

Do you alter timing of hedge according to your market view?

- 40% of the investors says that they use hedge accounting but 20% of the investors are not aware about their hedge accounting.
- 40% of investors use hedge accounting sometimes about not as a specific tool for hedging.

Do you alter the size of your hedge according to your market view?

- 60% of the investors are not aware about the market view and hedge size so they do not alter their size according to market view.
- 20% of investor alters their hedge according to market view.
- 20% of investors sometimes alter their hedge according to market view.

DATA ANALYSIS USING Z-TEST

One-Sample Statistics

Test Value = 0	z	df	Sig. (2-tailed)
Inflation	19.507	95	.000
Individual's Income	19.266	95	.000
Mkt conditions	24.580	95	.000
Eco-conditions	24.077	95	.000
Company-fundamental	20.487	95	.000
Company market condition	20.960	95	.000
Company annual results	26.836	95	.000
Govt regulations	23.060	95	.000
Impact of sharemarket	24.763	95	.000

All are statistically significant at 1% level

INDIVIDUAL INVESTORS

What is the type of market in which you deals in?

- 70% Retail investor uses secondary market for trading. Whereas 30% of retail investors uses Primary market for trading.

What is your purpose for Hedging?

- Awareness about hedging is very less in retail investors, 40% of investors use hedging for wealth multiplication.
- 38% of investors use hedging for short term gain. 10% investors say about Sustainable return and 12% of investors say about growth.

What hedging instrument do you prefer?

- 43% uses futures for hedging and 27% investors go for Swaps.
- Where only 30% investor uses futures contracts.

Suggestions And Recommendations

Indian Equity market is very old and there are many changes taking place from time to time. As the technology changes the whole process gets affected. For the trading & hedging mechanism the suggestions are:

- Bombay Stock Exchanges should provide training to all investors about the trading mechanisms because many investors don't know that how transactions are taking place.
- Investors should know how to do online transaction. They should not be dependent on the brokers or agents.
- Investors must know about the demat process and about the brokerage which is charged by the agents.
- Investors should know how to analyze the hedging process so that to mitigate the risk and must know about the benefits of the hedging and why the investor goes for hedging.
- BSE should come up with some guidelines and strategies regarding the hedging process and essentials of hedging process.
- Individuals should go for virtual trading so as to learn the trading mechanism.

References

- Edwards, C, "Managing Derivatives Risk," Chartered Secretary, October 1998, A217-989.
- Garg A. and Gupta. S. (2020), High Speed Railway (HSR): India and the World Comparison of existing systems. *International Journal of Innovative Technology and Research.* Volume No.8, Issue No.4, 9516-9530.
- Gupta K. and Gupta T. (2018). Durkheim's Theory of Anomie and the 2016 American Election, *Journal of Global Economy*, Research Centre for Social Sciences, Mumbai, India, vol. 14(1), 28-39.

- Gupta, S, (2018) Antidisestablishmentarianism in the American Election: The Rise of Donald Trump and Far Right Parties in Europe, Identity Politics in the light of Niccolo Machiavelli's Treatise "The Prince", Journal of Global Economy, Research Centre for Social Sciences, Mumbai, India, vol. 13(4), pages 25-267, May 2018
- Gupta, S, and Verma, R (2008) Comparative Analysis of Financial Performance of Private Sector Banks in India: Application of CAMEL Model, Journal of Global Economy, Research Centre for Social Sciences, Mumbai, India, vol. 4(2), pages 160-180, June.
- Gupta, S. and Gupta, T. (2012). Enhancing Marginal Field Development Economics: Leasing Operated Production Facility Approach, Journal of Global Economy, Research Centre for Social Sciences, Mumbai, India, vol. 8(1), pages 63-71, March.
- Gupta, S. , Pahwa, M. S. and Gupta A. (2013). Innovative Price Adjustments Technique for Thermal Coal: A Study of Operation Function under changing Techno Environment. *Global Journal of Management and Business Research*, Apr. 2013. ISSN 2249-4588.
- Gupta, S. (2009) "Pre and Post Merger Valuation- A Study of Tata Corus Merger Deal," Journal of Global Economy, Research Centre for Social Sciences, Mumbai, India, vol. 5(4), pages 299-319, December.
- Gupta, S. (2013) Accounting and Assessment of Capital Expenditure of New Feeder Airport in India: A Case Study of Idukki Airport, *IBA Journal of Management and Leadership*, Vol 5(1), July 2013, ISSN 2230 – 7524
- Gupta, S. (2017). Financial Intelligence. *Journal of Global Economy*, Research Centre for Social Sciences, Mumbai, India, Vol 13(3), Nov 2017
- Gupta, S. and Sharma R.K. (2012). Pricing and Taxation in Oil and Gas Sector: A study with special reference to ONGC. Journal of Global Economy. Research Centre for Social Sciences, Mumbai, India, vol. 8(3), 233-260.
- Gupta, S. and Verma, R. (2008, May), Changing Paradigm in Indian Banking. *Professional Banker* , 21-2.
- Gupta, S. (2016). Factor Analysis in holistic approach for Project Performance framework of Oil and Gas projects in India, *International Research Journal of Social Science and Management*, India, vol. 2(1)
- Gupta, S., & Sacchar, S. (2017). Cost Optimization of Warehousing Operations in FMCG: An Analytical Study of Supply Chain. *Journal of Global Economy*, 13(3), Nov 2017
- Gupta, S., & Srivastava, S. (2016). Pre Disinvestment & Post Disinvestment Financial Analysis of Oil and Gas Company in India, *Journal of Global Economy*, 12(3), 205-214.

- Gupta, S., Tyagi R., Sharma A. and Singh H, (2021). Human Wealthsurance: Analytical Study on Financial Planning of Community Investors during COVID-19. *International Journal of Management (IJM)*. 12(1), 2021, pp. 1453-1473.
- Gupta, Sumeet .(2013)Techno-Economic Evaluation of Exploration & Production, " Journal of Global Economy, Research Centre for Social Sciences,Mumbai, India, vol. 9(2), pages 153-171, June.
- Jayaraj, R ., & Gupta, S. (2011) "An Empirical Analysis of the Impact of Foreign Direct Investment on Economic Activity of India," Journal of Global Economy, Research Centre for Social Sciences,Mumbai, India, vol. 7(2), pages 100-120, June.
- Peterson, M.A. and Thiagarajan, S.R., "Risk measurement and Hedging ; with and without Derivatives," *Financial Management* winter 2005, 5-30.
- Stulz, M.Rene; should we fear derivatives; The GCFAI journal of derivatives Machets January 2005.