

## **A Study on Risk Management Methods and Practices of Traders in Indian Equity Derivative Markets in Inada.**

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### **Abstract**

The concept of brand equity derivatives has received significant attention from both scholars and marketing practitioners, there have been two general motivations for studying brand equity. One is strategy-based motivation to improve marketing productivity. Given higher costs, greater competition, and flattening demand in many markets, firms seek to increase the efficiency of their marketing expenses. Equity derivatives are so called because they have no value of their own. They derive their value from the value of some other asset. It helps investors to hedge the risk of loss in their portfolios.

**Keywords:** Equity, Derivatives. Growth. Risk management, financial management.

### **Introduction**

In the financial market, these are marked as very high degree of volatility. Although, there is chance to partially or fully transfer price risks by locking-in asset prices. Derivatives products are not influenced the fluctuations in the underlying asset prices. However, by locking in asset prices, derivative products minimize the impact of fluctuations in asset prices on the profitability and cash flow situation of risk-averse investors. These instruments can be used to be protection of risk which is to be raised unexpected uncertainties in financial market. Derivatives are used for both risk and as high risk in investments. Term derivative comes from how the price of these contracts is derived from the price of some underlying commodity, security or index or the magnitude of some event.

### **Statement of the Problem**

Day by day the complexity in risk management is increasing. Even though there are many tools and techniques are available to manage risk, still there is requirement for sophisticated instruments to manage risk. Derivative instruments are developed as more sophisticated and innovative tools to handle risk. But still today market participants are not so familiar with derivatives. Lack of understanding of the market and lack of close link to those doing the day-to-day trading have also hindered the growth of these markets. The absence of such awareness and inadequate appreciation of the character, derivatives may result in a number of investors burning their hands.

### **Objectives of the study**

## A Study on Risk Management Methods and Practices of Traders in Indian Equity Derivative Markets in Inada.

1.To understand the practices and methods followed by the traders in managing the risks faced while trading in the commodities.

2.To suggest appropriate risk management strategies to the traders in commodity derivatives.

### Hypothesis of the study

1.There is no significant difference in the opinion of the investors towards the characteristics of the derivative market.

2.There is no significant association between the demographic factors of the investors on the investment patterns.

### Research Design

The research design followed in the present study is descriptive in nature. A structured questionnaire is used as an instrument to collect data from commodity derivative traders. An analytical study is made for the secondary data collected from the Multi Commodity Exchange to quantify the risk.

### Tools used for Analysis

The data was compiled using Excel, and SPSS was used for tabulating the data collected through questionnaires. To analyze the data from different sources and to interpret the analysis, Factor analysis, Structural equation model, frequency distribution, descriptive statistics covering mean and weighted average. Besides, statistical tools such as Chi-Square Test for testing of independence of variables, Z test for testing of proportions, and "t" test for testing of correlation co-efficient are used.

### Review of Literature

**Peter Carr and Dilip Madan** disclosed that generally does not formally consider derivatives securities as a potential investment vehicles. Derivatives are considered at all, they are only viewed as tactical vehicles for efficiently re-allocating funds across broad asset classes, such as cash, fixed income, equity and alternative investments. They studied that under reasonable market conditions, derivatives comprise an important, interesting and separate asset class, imperfectly correlated with other broad asset classes. If derivatives are not held in our economy then the investor confines his holdings to the bond and the stock and the optimal derivatives position is zero.

**Swarup K. S.** empirically found that equity investors first enter capital market though investment in primary market. The main reason for slump in equity offering is lack of investor confidence in the primary market. It appeared from the analysis that the investors give importance to own analysis as compared to brokers' advice. They also consider market price as a better indicator than analyst recommendations.

**Rajeswari, T. R. and Moorthy, V. E. R.** said that expectations of the investors influenced by their perception and human generally relate perception to action. The study revealed that the most preferred vehicle is bank deposit with mutual funds and equity on fourth and sixth respectively. The survey also revealed that the investment decision is made by investors on their own.

**Chris Veld and Yulia V. Veld-Merkoulova** found that investors consider the original investment returns to

be the most important benchmark, followed by the risk-free rate of return and the market return. Study found that investors with longer time horizon would generally be better off investing in stocks compared to investors with shorter time horizon. They knew through the question on risk perceptions that investors.

### Limitation of the study

The Study area is limited to Karnataka region only. Some respondents are feel hesitated because of busy work schedules. The questionnaire targeted only commodity derivatives Market investors, i.e. individuals trading on personal account. Large retail clients who traded on company account might be screened out and their opinions would then not be captured.

### Scope of the Study

The study will be focused on the Shivamogga district which is considered to be a tier two city in the state of Karnataka. The study area is growing consistently and shows a significant growth its economic, infrastructural growth and also the increasing disposable income of the individuals which has made the study area highly potential for the investors to invest on different avenues and options they have got today and also derivatives market being one among them. For the current study the investors were identified with the help of agents and the brokers.

## DATA ANALYSIS AND INTERPRETATIONS

### Cross tabulation between the Monthly Income of the Family and the Investors Investment Patterns towards Risk Associated with Derivatives Regulators should ban use

		Risk associated with derivatives regulators should ban use		Total
		Disagree	Neutral	
Monthly Income of Family	Rs 31000 – 50000	40	19	59
	>Rs 50000	231	32	263
Total		271	51	322

Source: Primary Data-Field Survey

Table Clearly depicts respondent's response towards the monthly income of the family and the investors investment patterns towards Risk associated with derivatives regulators should ban use, where in majority of respondents that is 231 , who are having the Monthly Income of Family Above >Rs 50000 Disagree invest in Risk associated with derivatives regulators should ban use. 40 of them having Monthly Income of Family Rs 31000 – 50000 Disagree invest in Risk associated with derivatives regulators should ban use.

### Chi-Square test between the Monthly Income of the Family and the Investors Investment Patterns towards Risk Associated with Derivatives Regulators should ban use

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	14.513 <sup>a</sup>	1	0	0.001	

**A Study on Risk Management Methods and Practices of Traders in Indian Equity Derivative Markets in Inada.**

Likelihood Ratio	12.517	1	0		
Linear-by-Linear Association	14.468	1	0		
N of Valid Cases	322				
a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 9.34.					
b. Computed only for a 2x2 table					

Source: Primary Data-Field Survey

The Chi-square test Statistics was executed to see is there any significant relationship between the monthly income of the investors and their perception towards risk associated with derivatives regulators should ban use the Pearson chi-square results of 0.001 which is lesser than the table value of .05 indicated that there is a significant relationship between the monthly income of the investors and their perception towards risk associated with derivatives regulators should ban use.

**Cross tabulation between the Monthly Income of the Family and the Investors Investment Patterns towards Derivative Market is less Speculative than Equity Market.**

		Derivative market is less speculative than equity market		Total
		Neutral	Agree	
Monthly Income of Family	Rs 31000 – 50000	43	16	59
	>Rs 50000	216	47	263
Total		259	63	322

Source: Primary Data-Field Survey

Table Clearly depicts respondent’s response towards the monthly income of the family and the investors investment patterns towards Derivative market is less speculative than equity market, where in majority of respondents that is 216 , who are having the Monthly Income of Family Above >Rs 50000 Neutral invest in Derivative market is less speculative than equity market. 43 of them having Monthly Income of Family Rs 31000 – 50000 Neutral invest in Derivative market is less speculative than equity market. 47 of them having Monthly Income of Family >Rs 50000 expressed that Agree the invest on the Derivative market is less speculative than equity market.

**Chi-Square test between the Monthly Income of the Family and the Investors Investment Patterns towards Derivative Market is less Speculative than Equity Market**

	Value	Df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	2.619 <sup>a</sup>	1	0.106	0.145	
Likelihood Ratio	2.457	1	0.117		
Linear-by-Linear Association	2.611	1	0.106		
N of Valid Cases	322				
a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 11.54.					
b. Computed only for a 2x2 table					

Source: Primary Data-Field Survey

The Chi-square test Statistics was executed to see is there any significant relationship between the monthly income of the investors and their perception towards Derivative market is less speculative than equity market the Pearson chi-square results of 0.145 which is higher than the table value of .05 indicated that there is no significant relationship between the monthly income of the investors and their perception towards Equity Derivative market is less speculative than equity market.

**Cross tabulation between the Monthly Income of the Investors and the Investors Perception towards Brokerage Fee is Very Low.**

		Brokerage fee is very low		Total
		Neutral	Agree	
Monthly Income of Family	Rs 31000 – 50000	46	13	59
	>Rs 50000	222	41	263
Total		268	54	322

Source: Primary Data-Field Survey

Table Clearly depicts respondent’s response towards the monthly income of the family and the investors investment patterns towards Brokerage fee is very low, where in majority of respondents that is 222 , who are having the Monthly Income of Family Above >Rs 50000 Neutral invest in Brokerage fee is very low. 46 of them having Monthly Income of Family Rs 31000 – 50000 Neutral invest in Brokerage fee is very low. 46 of them having Monthly Income of Rs 31000 – 50000 expressed that Neutral the invest on the Brokerage fee is very low.

**Chi-Square test between the Monthly Income of the Investors and the Investors Perception towards Brokerage Fee is Very Low.**

	Value	Df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	1.434 <sup>a</sup>	1	0.231	0.248	
Likelihood Ratio	1.355	1	0.244		
Linear-by-Linear Association	1.429	1	0.232		
N of Valid Cases	322				
a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 9.89.					
b. Computed only for a 2x2 table					

Source: Primary Data-Field Survey

The Chi-square test Statistics was executed to see is there any significant relationship between the monthly income of the investors and their perception towards Brokerage fee is very low the Pearson chi-square results of 0.248 which is higher than the table value of .05 indicated that there is no significant relationship between the monthly income of the investors and their perception towards Brokerage fee is very low.

**Cross tabulation between the Monthly Income of the Investors and their Perception towards Volatility in Derivative Market is less than Equity Market**

		Volatility in derivative market is less than equity market		Total
		Strongly Disagree	Disagree	
Monthly Income of Family	Rs 31000 – 50000	44	15	59
	>Rs 50000	207	56	263
Total		251	71	322

Source: Primary Data-Field Survey

Table Clearly depicts respondent's response towards the monthly income of the family and the investors investment patterns towards Volatility in derivative market is less than equity market, where in majority of respondents that is 207 , who are having the Monthly Income of Family Above >Rs 50000 Strongly Disagree invest in Volatility in derivative market is less than equity market. 44 of them having Monthly Income of Family Rs 31000 – 50000 Strongly Disagree invest in Volatility in derivative market is less than equity market. 56 of them having Monthly Income of >Rs 50000 expressed that Disagree the invest on the Volatility in derivative market is less than equity market.

**Chi-Square test between the Monthly Income of the Investors and their Perception towards Volatility in Derivative Market is less than Equity Market.**

	Value	Df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.478 <sup>a</sup>	1	0.489	0.297	
Likelihood Ratio	0.466	1	0.495		
Linear-by-Linear Association	0.477	1	0.49		
N of Valid Cases	322				
a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 13.01.					
b. Computed only for a 2x2 table					

Source: Primary Data-Field Survey

The Chi-square test Statistics was executed to see is there any significant relationship between the monthly income of the investors and their perception towards Volatility in derivative market is less than equity market the Pearson chi-square results of 0.297 which is higher than the table value of .05 indicated that there is no significant relationship between the monthly income of the investors and their perception towards Volatility in derivative market is less than equity market.

**Chi-Square test between the total Annual Investment of the Investors and their Perception towards Instruments Derivatives are Purely Speculative Highly Leveraged.**

	Value	Df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.090 <sup>a</sup>	1	0.764	0.452	
Likelihood Ratio	0.09	1	0.765		
Linear-by-Linear Association	0.09	1	0.764		
N of Valid Cases	322				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 11.23.

b. Computed only for a 2x2 table

Source: Primary Data-Field Survey

Table Reveals The Chi-square test Statistics was executed to see is there any significant relationship between the total annual investment of the investors and their perception towards Instruments Derivatives are purely speculative highly leveraged the Pearson chi-square results of 0.452 which is higher than the table value of .05 indicated that there is no significant relationship between the total annual investment of the investors and their perception towards Instruments Derivatives are purely speculative highly leveraged.

**Cross tabulation test between the Total Annual Investment of the Investors and the Investors Perception towards Big Institutions Investors have a Purpose for using Derivatives**

		Big institutions investors have a purpose for using Derivatives					Total
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
What is your Total Annual Investment	Rs.50001 – 100000	0	0	3	22	7	32
	Above Rs.100000	4	58	30	155	43	290
Total		4	58	33	177	50	322

Source: Primary Data-Field Survey

Table Clearly depicts respondent's response towards the total annual investment of the investors and the investors perception towards Big institutions investors have a purpose for using Derivatives, where in majority of respondents that is 155 , who are having the annual investment of the investors Above Rs.100000 Agree invest in Big institutions investors have a purpose for using Derivatives. 58 of them having annual investment of the investors Above Rs.100000 Disagree invest in Big institutions investors have a purpose for using Derivatives. only 22 of respondents having annual investment of Rs.50001 – 100000 expressed that Agree the invest on the Big institutions investors have a purpose for using Derivatives.

**Hypothesis: There is no significant difference in the opinion of the investors towards the characteristics of the Equity derivative market.**

ANOVA						
		Sum of Squares	Df	Mean Square	F	Sig.
Products Derivatives are complex and high-tech financial	Between Groups	2.016	2	1.008	4.104	0.017
	Within Groups	78.372	319	0.246		
	Total	80.388	321			
Instruments Derivatives are purely speculative highly leveraged	Between Groups	4.494	2	2.247	10.41	0.000
	Within Groups	68.851	319	0.216		
	Total	73.345	321			
Big institutions investors have a purpose for using	Between Groups	0.504	2	0.252	0.257	0.773
	Within Groups	312.232	319	0.979		

A Study on Risk Management Methods and Practices of Traders in Indian Equity Derivative Markets  
in Inada.

Derivatives	Total	312.736	321			
Fashion Financial derivatives are simply the latest risk mgmt.	Between Groups	10.479	2	5.24	3.124	0.045
	Within Groups	534.949	319	1.677		
	Total	545.429	321			
Only risk seeking organizations investors should use Derivatives	Between Groups	6.565	2	3.283	5.38	0.005
	Within Groups	194.64	319	0.61		
	Total	201.205	321			
Risk associated with financial derivatives are new and unknown	Between Groups	12.324	2	6.162	3.379	0.035
	Within Groups	581.738	319	1.824		
	Total	594.062	321			
Derivatives trading is a nun safe and risky	Between Groups	0	2	0	.	0.231
	Within Groups	0	319	0		
	Total	0	321			
Derivatives trading increasing systematic risk	Between Groups	1.133	2	0.567	2.784	0.063
	Within Groups	64.929	319	0.204		
	Total	66.062	321			
Risk associated with derivatives regulators should ban use	Between Groups	0.082	2	0.041	0.303	0.738
	Within Groups	42.841	319	0.134		
	Total	42.922	321			
Derivative market is less speculative than equity market	Between Groups	3.645	2	1.823	12.364	0.000
	Within Groups	47.029	319	0.147		
	Total	50.674	321			
Brokerage fee is very low	Between Groups	1.016	2	0.508	3.688	0.026
	Within Groups	43.928	319	0.138		
	Total	44.944	321			
Volatility in derivative market is less than equity market	Between Groups	1.137	2	0.568	3.344	0.037
	Within Groups	54.208	319	0.17		
	Total	55.345	321			

The above table shows the ANOVA test which is been executed to analyze the difference in the opinion of the investors towards the characteristics of the Equity derivative market, where the result showed that considering



the various factors where most of the factors the p value was greater than the table value at 5% level of significance hence it was hence it can be interpreted as there was no difference of opinion of the investors towards the various characteristics of the equity derivative market.

### Findings

- ❖ The Chi-square test Statistics was executed to see is there any significant relationship between the monthly income of the investors and their perception towards risk associated with derivatives regulators should ban use the Pearson chi-square results of 0.001 which is lesser than the table value of .05 indicated that there is a significant relationship between the monthly income of the investors and their perception towards risk associated with derivatives regulators should ban use.
- ❖ The Chi-square test Statistics was executed to see is there any significant relationship between the monthly income of the investors and their perception towards Derivative market is less speculative than equity market the Pearson chi-square results of 0.145 which is higher than the table value of .05 indicated that there is no significant relationship between the monthly income of the investors and their perception towards Equity Derivative market is less speculative than equity market
- ❖ Table Reveals The Chi-square test Statistics was executed to see is there any significant relationship between the total annual investment of the investors and their perception towards Instruments Derivatives are purely speculative highly leveraged the Pearson chi-square results of 0.452 which is higher than the table value of .05 indicated that there is no significant relationship between the total annual investment of the investors and their perception towards Instruments Derivatives are purely speculative highly leveraged.
- ❖ The Chi-square test Statistics was executed to see is there any significant relationship between the monthly income of the investors and their perception towards Brokerage fee is very low the Pearson chi-square results of 0.248 which is higher than the table value of .05 indicated that there is no significant relationship between the monthly income of the investors and their perception towards Brokerage fee is very low.
- ❖ The Chi-square test Statistics was executed to see is there any significant relationship between the monthly income of the investors and their perception towards Volatility in derivative market is less than equity market the Pearson chi-square results of 0.297 which is higher than the table value of .05 indicated that there is no significant relationship between the monthly income of the investors and their perception towards Volatility in derivative market is less than equity market.
- ❖ Table Clearly depicts respondent's response towards the total annual investment of the investors and the investors perception towards Big institutions investors have a purpose for using Derivatives, where in majority of respondents that is 155 , who are having the annual investment of the investors Above Rs.100000 Agree invest in Big institutions investors have a purpose for using Derivatives. 58 of them having annual investment of the investors Above Rs.100000 Disagree invest in Big institutions investors have a purpose for using Derivatives. only 22 of respondents having annual investment of Rs.50001 – 100000 expressed that Agree the invest on the Big institutions investors have a purpose for using Derivatives.
- ❖ The above table shows the ANOVA test which is been executed to analyze the difference in the opinion of the investors towards the characteristics of the Equity derivative market, where the result showed that

## A Study on Risk Management Methods and Practices of Traders in Indian Equity Derivative Markets in Inada.

considering the various factors where most of the factors the p value was greater than the table value at 5% level of significance hence it was hence it can be interpreted as there was no difference of opinion of the investors towards the various characteristics of the equity derivative market.

### **Suggestions**

- ❖ It is recommended that a strong audit body with regular audits should be active throughout the year to detect any upcoming signs of manipulation etc. Although audits are conducted periodically by the regulatory bodies, its felt that a stronger initiative towards this direction is needed. The same should be not be a burden on the traders for compliance but should be facilitated as a normal routine activity with less paper work and more automation.
- ❖ It's recommended that rigorous and continuous training should be the norm for as an eligibility to remain as members in the market. The initiative should not be considered as a cost centre but should be considered as an investment for future returns
- ❖ An awareness drive amongst investors should be a continuous initiative so that investors park their money in the markets with full knowledge of risks involved in the business. This would help build an efficient and strong market with a symmetric and homogeneous group participating in the market.
- ❖ The market has received greater acceptability of the Mutual Funds and Insurance Products as effective risk management tools. A number of investors in the markets are transferring the responsibility of managing their investments to the professional investment managers, who cannot provide customized solutions to each of the investors. The markets have to make the intermediaries mandatory to possess the required knowledge. Though NSE and BSE have made it mandatory for the intermediaries to possess NCFM and BCFM certification, this has to be made more rigorous in imparting training to the intermediaries.
- ❖ It is recommended that strong, responsive investor protection mechanism be set up, although the present system and infrastructure is just proving to be adequate.
- ❖ Though the intermediary role in the market has seen a major transition and the intermediaries are emerging as single window solution providers for all sections of market providing diverse investment solutions, they are not in a position to do equitable justice to all groups of investors. Though they provide diverse solutions, they will have to provide specialized solutions to their customers by having qualified and experienced workforce who can concentrate on a single segment each and provide specialized solutions to the customers.

### **Conclusion**

Risk averse investors always trying to play safe by investing in conventional products like mutual funds, insurance, government bonds and securities whereas those are willing to take risk and want to earn more returns and in lieu of that they prefer to invest in derivative market. As derivative market offers more return, with the hedging of interest rate risk and exchange rate risk with maximum profits and minimum loss. It has been observed that people have got awareness with respect to derivatives trading amongst the retail investors in India. This is enabled due to relatively increase in number of trading agents in the market. These commission agents make their income from trading done by the investors. But many studies have revealed even though some of the

developing economies have realized the importance of derivative market but still there is a requirement for the in-depth studies in this field of derivatives market, otherwise because of the lack of knowledge the retail investors might have to face lot of complexities and problems.

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