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A Study on Perception of Retail Investors Towards Equity Derivatives Market

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Abstract:
Retail investors' perception refers to their understanding, attitude and beliefs about financial instruments like derivatives, which influence their investment decisions and risk-taking behavior. Perception of investors is influenced by various factors. The study of retail investors' perception with regard to equity derivatives is important to understand their market participation and investment choices. Derivatives are viewed as risky and complicated by many retail investors. It negatively effects their participation and engagement in derivatives. The analysis of retail investors' perception helps in finding the main factors which shape their decision-making. This understanding allows the financial institutions, regulators and policy makers to develop derivatives products which are suitable to them and investors favorable policies. Eventually, the improvement in the perception of retail investors regarding derivatives products can enhance their participation, strengthen the market depth and increase the overall efficiency of financial system. In the present paper, an attempt has been made to study the factors affecting the perception of retail investors towards risk and return in equity derivatives market.

Key Words: Risk perception, return expectations, risk tolerance, speculative behaviour etc.

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Introduction

Retail investors' participation in equity derivatives has shown a substantial growth in last two decades. It is driven by technological advancements, increase in financial literacy and easy access to Indian capital market. Derivative is a financial instrument whose value is derived from the value of security which is known as underlying assets. The underlying assets include stock, commodities, mortgages, index, bonds and currencies. Derivatives offer a trader to hedge his position against risks that offsets losses (Mishkin and Eakins, 2012).

Retail investors' perception refers to their understanding, attitude and beliefs about financial instruments like derivatives, which influence their investment decisions and risk-taking behavior. Derivatives market offers instruments which are helpful in managing the risk, increase market efficiency and discover prices. Exchange traded derivatives and over the counter derivatives are two parts of derivatives market. Exchange traded derivatives consist of standardized options and futures which are regulated by exchanges like National Stock Exchange in India, Bombay Stock Exchange, Chicago Mercantile Exchange and Intercontinental Exchange. These instruments provide certain benefits like transparency and liquidity. It also involves the

central clearing house which is helpful in reducing counterparty risk by margin requirement (Hull, 2018; Kolb and Overdahl, 2010). In contrast, over-the-counter derivatives consist of forwards, swaps and customized options. These are privately negotiated contracts that offers flexibility but carry higher credit and counterparty risks due to lack of centralized clearing (Jarrow and Turnbull, 2000).

In India, a significant role has been played by NSE and BSE for increasing the accessibility of derivative instruments to investors. Security and Exchange Board of India plays an important role in protecting the retail investors who are trading in derivatives by maintaining transparency in the transactions and educating the investors regarding complexity and speculative nature of derivatives. The understanding of perception of retail investors regarding equity derivatives is important for market regulators, policy makers and financial institution to develop impactful education programs and enhance the participation of retail investors (Panchal et al., 2022).

Review of Literature

Saravana (2010) analyzed the investors' preference towards equity derivatives. It was found that some investors preferred derivatives market for earning high returns but risk is also high in derivatives market. Investors are required to have proper knowledge of derivatives products before investing in them. investors were satisfied for equity derivatives due to many reasons such as low investment, liquidity and capital appreciation. **Thamotharan and Prabhakaran (2013)** analyzed investors' perception on derivatives market in Dharamapuri District and found that investment was significantly affected by age and education level of investors. Occupation has significant impact on investment pattern. Transparency of transactions, past performance of the company, image of the company, popularity of the company and services of stock brokers were most influencing factors for investors perception. **Tripathi (2014)** examined the perception of investors with regards to derivatives trading in India. The finding highlighted that investors prefer insurance and real estate investment in India which offer better returns with minimum risk associated with it. Most of the Indian investors invested their funds in options that provides benefits such as risk diversification and greater profits with minimum investment. **Veena and Murthy (2015)** studied investors' perception towards trading in equity derivatives market. The results of the study depicted that 60 percent of respondents were businessmen who invested major part of their income in equity derivatives instrument. Unfair practice of brokers in trading in equity derivatives market was the key problem that every investor faced. **Joshi and Batra (2017)** studied factors affecting investment decision in stock market and found that price earnings ratio and earning per share were preferred by investors than liquidity, image of the company and market share. Further, macro-economic environment, foreign institutional investors flow and economic condition at global level were considered by the investors while they make investment in stock market. **Venkatesha et al. (2018)** studied investors' perception in equity derivatives and found that investor's first preference in derivative instruments were index options than stock futures, stock options and index futures. A large portion of investors participated as speculator in equity derivatives market. Equity derivative was considered as risk hedging tool and the trading of equity derivative has been affected by spot market. Market and credit risk were identified as two major factors in capital market.

Objectives

- To study the factors influencing the perception of retail investors towards risk and returns in equity derivatives.

Research Methodology

In this study, data has been collected from National Capital Territory of Delhi. Delhi is universe of the study. Delhi is divided into 4 zones- East, West, North, South. From these

zones, 11 administrative districts were selected for data collection. Purposive sampling technique was used to collect the data. Data has been collected from 500 respondents. Demographics pertaining to age, gender, educational qualification, marital status, occupation, and income have been considered while collecting the data.

Finding

The perception of retail investors towards risk & returns in equity derivatives is influenced by many factors. Factors which influence the perception of retail investors towards risk and returns are as follows:

Table 1: KMO and Bartlett's Test

KMO and Bartlett's Test		
KMO Measure of Sampling Adequacy		.833
Bartlett's Test of Sphericity	Approx. Chi-Square	6138.064
	Df	190
	Sig.	.000
Number of Items	20	

KMO test is applied to check the adequacy of sample for factor analysis. It determines whether data is suitable for factor analysis or not. The KMO statistics varies from 0 to 1. The value of KMO which is closer to 1 indicates better suitability of data for Factor Analysis and value 0.5 is considered as minimum. The table 1 shows that the value of KMO is 0.833. It indicates that data is appropriate for Factor Analysis to further process. The Bartlett's test is found to be significant as the p-value is significant (0.000). Therefore, data can be analyzed using factor analysis as a technique.

Table 2: Eigen Value with Cumulative Percentage of Variance

Factors	Eigen Value	% of Variance	Cumulative % of Variance
1	3.549	17.744	17.744
2	3.318	16.592	34.336
3	2.967	14.834	49.170
4	2.867	14.333	63.503
5	2.691	13.456	76.959

Principal Component Method has been used to extract the factors. Varimax rotation method of Factor Analysis was used to rotate the Component matrix. Five factors have been extracted from 20 variables. Factor loading above 0.50 was selected from values given in the rows of each variable. Factors whose eigen value was greater than or equal to 1 are taken for further analysis. Table 2 depicts that five factors have been extracted having eigen values 3.549, 3.318, 2.967, 2.867 and 2.691 respectively. A total 76.959 percent variance is explained by these five factors.

Table 3: Unrotated Component Matrix

Unrotated Component Matrix					
Variables	**Components/Factors**				
	1	2	3	4	5
1	.428	.062	-.154	.580	.469
2	.390	.072	-.177	.618	.419
3	.416	.115	-.133	.590	.415
4	.393	.061	-.179	.561	.453
5	.571	-.411	-.162	-.489	.214
6	.568	-.409	-.122	-.507	.234
7	.567	-.377	-.114	-.502	.200
8	.593	-.431	-.127	-.449	.233

9	.098	-.456	.733	.189	-.065
10	.149	-.453	.694	.237	-.094
11	.106	-.399	.714	.214	-.054
12	.137	-.468	.673	.244	-.060
13	.557	.194	-.111	.109	-.644
14	.547	.167	-.069	.142	-.640
15	.541	.173	-.122	.127	-.639
16	.596	.152	-.080	.166	-.553
17	.226	.679	.422	-.270	.246
18	.233	.648	.461	-.232	.196
19	.259	.650	.442	-.267	.208
20	.268	.645	.430	-.255	.155
Extraction Method: Principal Component Analysis					

Table 4: Rotated Component Matrix

Rotated Component Matrix					
Variables	**Components/Factors**				
	1	2	3	4	5
1					.874
2					.862
3					.847
4					.841
5	.897				
6	.904				
7	.875				
8	.895				
9			.890		
10			.878		
11			.853		
12			.866		
13				.885	
14				.871	
15				.872	
16				.837	
17		.906			
18		.881			
19		.894			
20		.869			
Extraction Method: Principal Component Analysis					

Five factors have been extracted using Factor Analysis. These are low initial investment, short sell and carry over position, return expectations, awareness of strategies and risk appetite. These are explained in detail as under:

Factor 1: Low Initial Investment

Sr. No.	Variables (α=0.916)	Factor Loading
1	I believe that derivative needs low investment which influenced me to invest	.897
2	I believe that derivatives are leveraged instruments and thus only margin money is to be paid, hence, this helps in increased investments in derivatives market.	.904

3	I prefer derivatives because of their high return potential with limited investment	.875
4	I believe that derivatives are affordable for gaining exposure of premium assets	.895

All the variables loaded on factor-1 are having positive factor loading and has been named as 'Low Initial Investment'. Low initial investment plays a vital role in influencing the perception of retail investors towards risk and returns while trading in equity derivatives. Initially low investment is needed to make investment in derivatives. Derivative becomes more accessible for retail investors because of low initial investment. Derivatives enable retail investors to retain a larger position with limited margin money in the market.

Factor 2: Short sell and Carryover Position

Sr. No.	Variables (α=0.910)	Factor Loading
1	I believe that trade in derivative is for short sell of carryover position	.906
2	I believe that short selling provides equal opportunity of profit as long positions	.881
3	I believe that investors choose carryover strategies in order to avoid losses	.894
4	I believe that short selling is useful strategy in volatile market situations.	.869

There are four variables loaded on this factor with high positive loading. Short selling and carry over the position significantly influence the perception of retail investors while trading in equity derivatives market. Short selling is that situation in which retail investors sell the futures contracts having expectation that the price of the underlying asset will reduce in future. If the price declines as per the expectation of retail investors, they can earn profit with buy back of the futures contracts at a lower price while short selling is not available for options contracts like future. Carrying over a position involves transfer of futures contracts in equity derivatives. In order to maintain position in the market beyond the expiry of a current contract, retail investor can close the position of expiry and open a new position in a contract with a later expiration date. Options traders have right to carry over their positions by rolling options contracts.

Factor 3: Return Expectations

Sr. No.	Variables (α=0.895)	Factor Loading
1	I believe that derivative market is to make money within short time.	.890
2	I believe that trading in derivative market is done because of potential higher returns.	.878
3	I believe that better returns are offered by derivatives as compared to traditional investments	.853
4	I prefer derivatives to take benefits of short-term movements in price	.866

There are four variables loaded on this factor having high positive loading. The perception of retail investors towards equity derivatives is influenced by high returns expectations. Retail investors prefer equity derivatives because of potential of higher returns. Many features are offered by futures and options contracts that help in increasing the gains. Retail investors engage in equity derivative trading in order to exploit the arbitrage opportunities. Volatility also helps in creating opportunities for profit in financial markets. Options are used to take benefit from increased volatility.

Factor 4: Awareness of Strategies

Sr. No.	Variables (α=0.891)	Factor Loading
1	I believe that investors are generally aware of various strategies that can be adopted in derivatives trading.	.885
2	I believe that knowledge of derivatives is necessary to efficient trading in derivatives market.	.871
3	I believe that investors understand the impact of volatility on option pricing	.872
4	I believe that investors are aware with regard to tax Implications on profits from derivatives	.837

The fourth factor has been named as awareness about the strategies of equity derivatives. The awareness of strategies influences retail investors perceptions towards equity derivatives in several ways. Awareness of retail investors about derivative strategies increases their understanding of risk management. Investors feel more confident while dealing in equity derivatives if they know how certain derivatives strategies can help in minimizing the risks. Hence, it is helpful for retail investors to minimize their potential losses. This reduction in the fear of retail investors also encourages the participation of them in the derivatives market.

Factor 5: Risk Appetite

Sr. No.	Variables (α=0.879)	Factor Loading
1	I believe that it is risky to trade in derivatives market.	.874
2	I believe that derivatives are only for risk takers and not for conservative investors.	.862
3	I believe that liquidity risk is highly significant in derivative market trading.	.847
4	I believe that derivatives as an instrument are appropriate only for Institutional Investors.	.841

The fifth factor consists of four variables with high positive loading. This factor suggests that the perception of retail investors towards risk and returns in equity derivatives is influenced by risk capacity. Derivatives are generally used by risk-takers as compared to investors who are conservative in nature. Volatility and rapid price changes influenced the perception of retail investors in derivative market. Conservative investors keep away from stress and emotional turmoil associated with market volatility and prefers safe and stable investment. It is not the first choice of conservative investors to invest in derivatives. Derivatives are used by various market participants such as individual and institutional investors. Due to complexity and risk associated with derivatives, it is more suitable to institutional investors. It is easy to deal in derivatives transactions as compared to certain other stock market transactions for various reasons. The ease of transactions depends up on the specific derivative instrument and the retail investor's familiarity with the market. Derivatives enable the retail investors to earn profit in both conditions whether market is rising or falling.

Discussion

The results reveal that five factors have been extracted using Factor Analysis which influence the perception of retail investors towards risk and return in equity derivatives. These are low initial investment, short sell and carry over position, returns expectations, awareness of strategies and risk appetite. Low initial investment plays a vital role in influencing the perception of retail investors towards risk and returns while trading in equity derivatives. Initially low investment is needed to make investment in derivatives. Short selling and carry over the position significantly influence the perception of retail

investors while trading in equity derivatives market. Carrying over a position involves transfer of futures contracts in equity derivatives. In order to maintain position in the market beyond the expiry of a current contract, retail investor can close the position of expiry and open a new position in a contract with a later expiration date. The perception of retail investors towards equity derivatives is influenced by high returns expectations. Retail investors prefer equity derivatives because of potential of higher returns. The awareness of strategies influences retail investors perceptions towards equity derivatives in several ways. Awareness of retail investors about derivative strategies increases their understanding of risk management. Derivatives are generally used by risk-takers as compared to investors who are conservative in nature.

The obtained results are similar to some previous studies conducted on factors influencing the perception of retail investors towards risk and returns. Saravana (2010), Thamotharan and Prabhakaran (2013), Nagaraju (2014) and Tripathi (2014).

Conclusion

Retail investors' perception towards risk and returns in equity derivatives is influenced by many factors. These factors include low initial investment, short sell and carry over position, returns expectation, awareness of strategies and risk appetite. Derivative becomes more accessible for retail investors because of low initial investment. Derivatives enable retail investors to retain a larger position with limited margin money in the market. Some investors perceive equity derivatives a risky instrument. But they get high returns from equity derivatives as compared to traditional investment platforms. Many features are offered by futures and options contracts that help in increasing the gains. Volatility also helps in creating opportunities for profit in financial markets. Options are used to take benefit from increased volatility.

References

1. Aggarwal, S., & Singh, S. (2019). Retail investors' awareness towards equity investment with reference to Bhopal city. *International Journal of Management*, 10 (3), 8-14.
2. Alamelu, K., & Indhumathi, G. (2017). Investors' perception towards mutual funds in Madurai district, Tamilnadu. *International Journal of Engineering Development and Research*, 5 (3), 1171-1173.
3. Barberis, N., & Thaler, R. (2003). A survey of behavioral finance. *Elsevier,* 1, 1053–1128.
4. Hull, J. C. (2018). Options, futures, and other derivatives (10th ed.). *Pearson Education*.
5. Jarrow, R., & Turnbull, S. M. (2000). Derivative securities (2nd ed.). *South-Western College Publishing*.
6. Joshi, M. C., & Batra, Y. (2017). Factors affecting investment decision in stock market. *Business and Competitive Advantage: Creating and Sustaining Ideas to solve Contemporary Issues in Recent Era,* 144-159.
7. Kolb, R. W., & Overdahl, J. A. (2010). Financial derivatives: Pricing and risk management. *Wiley.*
8. Kumar, S., & Goyal, K. A. (2015). Retail investors' perception towards derivatives market in India. *Journal of Financial Markets and Products*, 8 (2), 22–34.
9. Mishkin, F. S., & Eakins, S. G. (2012). Financial markets and institutions (7th ed.). *Pearson Education*.
10. Panchal, N., Langhneja, P., & Makwana, J. (2022). Study on investors' perception towards trading in equity derivatives. *International Journal of Management, Public Policy and Research,* 1 (2), 75–81.
11. Qureshi, M. S., & Akber, S. (2018). Investor preference towards equity analysis. *International Journal & Magazine of Engineering, Technology, Management and Research*, 5 (1), 40-45.
12. Raghavan, S. T. P., & Tomar, A. S. (2017). Derivatives market in India: An empirical analysis on perception of retail investors towards derivatives market with reference to Visakhapatnam district. *Journal of Advances and Scholarly Researches in Allied Education*, 12 (2), 214-218.

13. Sivasankar, N., & Ananth, A. A. (2016). A study on investors perception towards derivative market in Coimbatore district. *International Journal of Business and Administration Research Review*, 3 (1), 139-142.

14. Thamotharan, A., & Prabakaran, G. (2013). Investors' perception on derivatives market, indications from derivatives market in India with special references to Dharmapuri district. *International Journal of Scientific Research*, 2 (12), 338-343.

15. Tripathi, G. (2014). An empirical investigation of investors perception towards derivative trading. *Global Journal of Finance and Management,* 6 (2), 99-104.

16. Veena, K. P., & Murthy, M. (2015), Investor perception towards trading in equity derivative market: A study at angel broking Pvt. Ltd. Mysore city. *Global Journal for Research Analysis,* 4 (2), 35-38.

17. Venkatesha, R., Hiriyappa, B., & Pradeepa (2018). Investors perception towards equity derivatives with special reference to Shiva Moga district. *Intercontinental Journal of Finance Research Review*, 6 (8), 10-23.