



A Study on Awareness and Risk Opinion of Derivatives Market Investors

¹Umang Mehta; ²Dr. Minal Uprety

¹(Acropolis Institute of Management Studies and Research, Indore, M.P, India)

²(Prestige Institute of Management Studies and Research, Indore, M.P, India)

ABSTRACT

Stock Market is experiencing tremendous growth particularly in past few years. The growth is not at all in terms of new highs of index's that were created in market but also in terms of volume and active stock market participation from traders and investors. This study is aimed to figure out the relationship between demographic variables with awareness of investors for derivatives market and risk opinion of investors for equity derivatives in stock market. The results revealed no significant relationship between the demographic variables with awareness and risk opinion of derivative investors. And investors were found to have basic awareness about derivatives market. The study highlights that regulators and brokers need to provide derivatives literacy not only basic understanding of market but advance literacy needed to be given to retail investors to let them understand trading with derivatives strategy for risk minimization.

KEYWORDS: derivatives, stock market, risk, retail investors, literacy.

1 INTRODUCTION

Indian financial sector has spent all the way through tremendous developments over the years. Financial derivatives start two decades back has been one of them. Financial derivatives along with financial innovation began its journey as risk management tool, but have been always on radar of economists over its usage. The core objective of derivatives for risk management is kept aside and complete market is dominated by speculator and experts were, raising concerns that it is not derivatives that derive its value from the underlying assets but it is the underlying share that derives its value from derivative. Market statistics also raised concern over that same, as the gap between daily derivatives trade and cash market turnovers widened a lot.

Investment in cash market, derivatives market or any other instruments traded on exchange(s) have different element of risk. Derivatives market is not considered a suitable opportunity for someone with limited investment, lesser experience and low level of tolerance of risk (hdfc securities).

Earlier research studies had found that retail investor's participation in the equity cash market has been remarkable, particularly in the last one decade, and this participation improved with double digit growth in the past two years of pandemic situation in the world. Increase in the retail participation has been witnessed by the number of corporate houses offering equity through primary markets (Girish & Rastogi, 2013). Ravichandran (2008) said future is the most important derivative instrument followed by option market. Derivatives brought many consequences among investors as some of them enjoyed the advantages of trading into them while many of them suffered from heavy losses and were on edge to exit the market. Varadharajan and Vikkraman (2011) in their study work said that an investor decision of investment into any financial avenue is done after consultation with their near and dear ones; also they may seek advice from the professions advisors or brokers. Cautious investors take into consideration company results and other announcement making a repo of company in their mind before picking any stock for investment. Tripathi (2014) study over perception over derivatives shows that investors in India mainly invest their savings into in real estates and insurance as they are the options offering great returns with minimum risk associated with it. Further statistical analysis revealed that demographic characters like education, profession and gender do not affect the behavior of derivatives trading whereas income was found to have significant effect on derivatives. According to theory of modern behavioral finance, arbitrage holds its self limits (Baker & Wurgler, 2007).

Islamoğlu et al., (2015) explore the factors which influenced investor's behavior by collecting data from bankers and found income, awareness and information influences individual's decision of investment. Ramiah et al., (2015) studied noise traders and analyzed the cost of their existence in the market and identified how noise trading can be related to certain market basics.

Kourtidis et. Al., (2011) divided the investors on the basis "overconfidence, risk tolerance, self-monitoring and social influences" and said these qualities influences the investment behavior of investors. The constructive value addition of derivatives is more than the negative penalty of derivatives, subject to certain exceptions (Sahoo & Sahoo, 2020). Concept of behavioral finance is growing into the market and this leads to changing attitude along with the awareness of individual investors about derivatives (Sarathkumar & Dhandhayuthapani, 2016).

Semnani and Benesloo (2015) is of the opinion that derivatives were serious financial tool with and need to be handled carefully as it has great reliability and acceptance in the financial world. Inefficient users cannot understand the importance of derivatives as great hedging tool. Vidhya and Magesh (2018) despite the fact that investors have lack of knowledge and skills in the stock market particularly derivatives, and also knowing the risk of derivatives investment investors want to put their money into derivatives market that signifies their acceptance for this financial avenue.

Sarkar and Sahu (2017) found moderate level of awareness of individual investors the study work carried over 500 respondents make this fact clear that lack of awareness prevails amongst investors for stock market trading. Vohra and Kaur (2016) evidenced that lack of awareness is responsible for lesser women participation in the Indian stock market. Lower level of awareness among investors leads to lesser economic participation that further results into reduced economic decision making power in the households, and if this is on the part of female investors leads to further carry forwarding of the same situation to next generation (Hung et al., 2012).

Individual's decision for any financial investment is dependent on various measures that encompass socio-economic individuality like gender, age, income level and educational qualification (Bali et al., 2009; Maxfield et al., 2010; Ozmen & Sumer, 2011) individual investor's personal traits, such as behavioral attribute, emotions, risk tolerance, etc (Mishra et al., 2010; Chitra & Sreedevi, 2011; Young et al., 2012). Certain market related factors like expectation for risk, return of investment, transaction costs of investment, and market factors better known as market risk influence individual in decision making (Chang, 2008; Ferguson et al., 2011). Certain studies have also considered for the purpose of analysis the influence of wealth and risk aversion over the stock market participation (Hong et al., 2004; Georgarakos & Pasini, 2011; Almenberg & Dreber, 2015).

Al-Tamimi and Kalli (2009) in their survey based study based on investors of UAE found risk-diversification, certain spiritual and superficial viewpoint and market image of business as the mainly influencing reason on investors decision of investment, while market buzz, relatives and friend's advice influence were have slight impact. Due to funding limitation young investors were incapable to invest in stock market (Constantinides et al., 2002). Unexpectedly around 70% of proper savers of financial system are not financially literate (Klapper et al., 2015).

Earlier studies draw attention towards the correlation between investors' financial awareness and their investment behavior. Safety of the investment was considered to be the most essential decisive factor for investors to do investments. The stage of investor's financial knowledge influences their decision to invest in mutual fund the author used investment intention as dependent variable to examine purpose of investment in financial products (Dey et al., 2015). Investors have general habit to avoid carrying out transactions if they are not able to understand it. Investor's posse's sound knowledge about basic investments options available to them link bank's fixed deposit and government savings schemes (Prasad & Subhas, 1991; Shollapur & Kuchanur, 2008).

Due to unwillingness to take more exposure towards risk lesser stock market participation were observed (Rooij et al., 2011). Investors with higher risk appetite were found to be more willing to invest in stocks (Wood & Zaichkowsky, 2004). Risk is at the central subject matter while making any financial investment decision. The risk-tolerance attitude of investor determines their investment style and decision (Hunter & Kemp, 2004; Fellner & Maciejovsky, 2007; Bali et al., 2009). Profit maximization is the primary concern of investors in the market that influences and attract investors into the market, and a trapped investor made a move towards risk management (Mehta & Uprety, 2021). Paul and Bajaj (2012) find that majority of present equity market investors enjoy a modest level of awareness regarding the equity market. The study work also found no significant association between gender and age demographic variable of investors in equity financial market and their awareness about the equity cash market. Hence no influence was found for investor's awareness from their gender and age.

Jain and Mandot (2012) studied the association between investors risk level and demographic variables and found negative relationship between marital status, gender, age, educational qualification and occupation of the investors with their ability to adopt risk where as income and investment knowledge of the investors were found positively correlated. The study also found no relationship between investors city if residence and their risk bearing ability.

As the earlier study work were confined to study awareness for investment avenues, mutual fund, and stock market in particular, but not much work had concentrated on derivatives awareness and investors opinion for risk in derivatives market. Thus the study is carried out to find out the investor's awareness for derivatives in particular equity derivatives in Indore city and also to get insight about the risk opinion of such investors about equity derivatives being traded over the exchanges.

2 DATA AND METHODOLOGY

Market participants are massively dealing in derivatives even in states like Madhya Pradesh. And Indore being business capital of state attract highest stock market turnover in the state of Madhya Pradesh and as per the SEBI data, Indore also stands at eleventh position in top cities of India that generate highest turnover in cash segment of stock market in India. For the purpose of this study primary data was collected. For this a well structured questionnaire is designed for investors of Indore city trading into equity derivatives market. The data of investors already having investment in derivatives market and involved in trading of equity derivatives were obtained from few of the brokers and sub brokers personally contacted by researcher to make the study work successful. Thus judgmental sampling method of data collection is employed to collect the responses. The collected data from primary sources was studied and analyzed using SPSS 22 and the output data results were used to evaluate their awareness and risk opinion. Total 163 derivatives traders were approached to fill the responses and give their opinion but 143 responded positively and finally 137 responses were considered for study as 6 responses needed to be dropped as they were incomplete.

One way ANNOVA was applied to find out the association between demographic profiles of respondents with awareness and risk opinion for retail derivatives market investors.

3 DATA ANALYSIS AND INTERPRETATION

Table1: Sample Statistics

Demographic variable		Frequency	Percentage
Gender	Male	122	89%
	Female	15	11%
Age	Upto 30 years	49	36%
	30 to upto 50 years	53	39%
	50 years and above	35	25%
Education	Higher Secondary	28	20%
	Graduation	71	52%
	Post Graduation	38	28%
Experience of trading	0-4 years	42	31%
	4-8 years	62	45%
	Above 8 years	33	24%
Income	less than equal to 5 Lakhs	48	35%
	5 Lakh to less than 10 Lakhs	70	51%
	Equal to or Above 10 lakhs	19	14%
Investment in Stock Market	Upto 4 lakhs	75	55%
	4-8 lakhs	50	36%
	Above 8 Lakhs	12	9%

Source: Primary data

Investors purpose of investment into derivatives market.

Table2: Purpose of investment in derivatives

	Frequency	Percentage
Speculation	107	78%
Hedging	27	20%
Arbitrage	3	2%

Source : Primary data

Majority of the respondents were male with 89% participation in the study three fourth of the respondents were under the age of 50 years .More than half of the respondents were graduates with 52% presence and 285 respondents were post graduates in the study. Nearly 70% of the

respondents were having more than 4 years of trading experience hence symbolizes good participation from the point of view of experience in trading. 65% of the sample under the study has annual income of more than 5 lakh. More than half of the derivatives investors studied in this study had invested up to 4 lakh as investment amount into the stock market.

Majority of investors who are participating in derivatives and had entered into this market were having the purpose of speculation with 78% responses in the study and only 20% of the investors enters with the purpose of hedging and only 2% respondents involved in arbitrage in the derivatives market. The motivation behind the speculation is only to earn higher profit in small span of time. Thus speculation in market done by retailers is no more less than the gambling activities.

H₀₁ There is no significant difference between income and investors awareness for derivatives market.

H₀₂ There is no significant difference between age and investors awareness for derivatives market.

H₀₃ There is no significant difference between investor's investment in market and their awareness for derivatives market.

H₀₄ There is no significant difference between investors trading experience and their awareness for derivatives market.

H₀₅ There is no significant difference between investors education qualification and investors awareness for derivatives market.

Table 3 : - Association between demographic variables and investors awareness for derivatives.

Between Groups	Sum of Squares	Df	Mean Square	F	Sig.	Result
Income	.084	2	.042	.971	.381	Insignificant
Age	.068	2	.034	.250	.480	Insignificant
Investment	.035	2	.018	.403	.669	Insignificant
Trading Experience	.033	2	.017	.380	.685	Insignificant
Education	.090	3	.045	.363	.280	Insignificant

H₀₆ There is no significant difference between income and investors risk opinion for derivatives market

H₀₇ There is no significant difference between age and investors risk opinion for derivatives market.

H₀₈ There is no significant difference between age and investors risk opinion for derivatives market.

H₀₉ There is no significant difference between investors trading experience and investors risk opinion for derivatives market.

H₁₀ There is no significant difference between investors education and investors risk opinion for derivatives market.

Table 4 : - Association between demographic variables and investors risk opinion for derivatives.

Between Groups	Sum of Squares	df	Mean Square	F	Sig.	Result
Income	.159	2	.080	.446	.641	Insignificant
Age	.361	2	.181	1.021	.363	Insignificant
Investment	.114	2	.057	.040	.461	Insignificant
Trading Experience	.544	2	.272	1.551	.216	Insignificant
Education	.372	3	.186	1.055	.371	Insignificant

It is clear, from the table, that all the demographic variables have no significant relationship with the respondents' opinion for risk and awareness for derivatives. Investors were found much aware regarding derivatives as an investment avenue and also investors understand the risk of investing into derivatives and consider derivatives as a risky investment and were found concerned for their principal investment.

4 CONCLUSION AND SUGGESTION

It is clear from the results that there is no significant relation of demographic variable like age, income, investment in market, trading experience, education qualification with the respondents (investors) awareness and risk opinion for derivative market (Geetha and Ramesh, 2012; Paul and Bajaj, 2012; Jain and Mandot, 2012). In order to elucidate investor's opinion it was found that investors know about derivatives trading and understand their investment risk and return but their objective to gain higher return is so strong that the investors accepted the heavy risk of trading into derivatives. Although this study covers only the basic parameter for studying investor awareness and needed a higher order awareness scales to measure their awareness. Ultimate aim of the respondents in the study is to earn greater rate of return over their investment with in short span of time giving support to more speculation and speculative based trading and hedging comes after that. Regulator and brokers of the market need to impart proper guidance and education to all such participant to create a healthy market. This will somehow eliminate the risk of panic losses to small investors as they will understand how to trade and invest in a better way in the derivatives market.

REFERENCE

- Al-Tamimi, H.A.H. and A.A.B. Kalli, 2009. Financial literacy and investment decisions of UAE investors. *The Journal of Risk Finance*, 10(5), 500–516.
- Almenberg, J. and A. Dreber, 2015. Gender, stock market participation and financial literacy. *Economics Letters*, 137(C), 140-142.
- Baker, M., & Wurgler, J. (2007). Investor sentiment in the stock market. *Journal of economic perspectives*, 21(2), 129-152.
- Bali, T., O. Demirtas, H. Levy and A. Wolf, 2009. Bond versus stocks: Investors' age and risk taking. *Journal of Monetary Economics*, 56(6), 817-830.
- Chang, C., 2008. The impact of behavioural pitfalls on investors' decisions: The disposition effect in the Taiwanese warrant market. *Social Behaviour and Personality: An International Journal*, 36(5), 617-634.
- Chitra, K. and V. Sreedevi, 2011. Does personality traits influence the choice of investment? *IUP Journal of Behavioural Finance*, 8(2), 47-57
- Constantinides, G.M., J.B. Donaldson and R. Mehra, 2002. Junior can't borrow: A new perspective on the equity premium puzzle. *The Quarterly Journal of Economics*, 117(1), 269-296.
- Dey, D.K., Y.K. Chauhan and R. Chakraborti, 2015. Does advertising strategy matter in influencing mutual fund purchase? *Journal of Financial Services Marketing*, 20(1), 23-33.
- Fellner, G. and B. Maciejovsky, 2007. Risk attitude and market behaviour: Evidence from experimental asset market. *Journal of Economic Psychology*, 28(3), 338- 350.
- Ferguson, E., J. Heckman and P. Corr, 2011. Personality and economics: Overview and proposed framework. *Personality and Individual Differences*, 51(3), 201-209.
- Geetha, N., & Ramesh, M. (2012). *A study on relevance of demographic factors in investment decisions* (No. 1231-2016-100817, pp. 14-27).
- Georgarakos, D. and G. Pasini, 2011. Trust, sociability, and stock market participation. *Review of Finance*, 15(4), 693-725.
- Girish, G. P., & Rastogi, N. (2013). Efficiency of S&P CNX Nifty Index Option of the National Stock Exchange (NSE), India, using Box Spread Arbitrage Strategy. *Gadgah Mada International Journal of Business*, 15(3), 269-285.
- Hong, H., J. Kubik and J. Stein, 2004. Social interaction and stock-market participation. *Journal of Finance*, 59(1), 137-163.
- Hunter, K. and S. Kemp, 2004. The personality of e-commerce investors. *Journal of Economic Psychology*, 25(4), 529-537.
- İslamoğlu, H. (2011). *Sosyal Bilimlerde Araştırma Yöntemleri* (2nd Baskı). İstanbul: Beta Basım Yayım Dağıtım. Retrieved from <http://aop.eogrenme.anadolu.edu.tr/eKitap/ARY201U.pdf>
- Jain, D., & Mandot, N. (2012). Impact of demographic factors on investment decision of investors in Rajasthan. *Researchers World*, 3(2), 81.
- Kourtidis, D., Šević, Ž., & Chatzoglou, P. (2011). Investors' trading activity: A behavioural perspective and empirical results. *The Journal of*

Socio-Economics, 40(5), 548-557.

Klapper, L., A. Lusardi and V.P. Oudheusden, 2015. Financial literacy around the world. Insights from the Standard & Poor's Ratings Services Global Financial Literacy Survey. New York, US: Standard & Poor's.

Maxfield, S., M. Shapiro, V. Gupta and S. Hass, 2010. Gender and risk: Women, risk taking and risk aversion. *Gender in Management: An International Journal*, 25(7), 586-604.

Mishra, S., M. Lalumiere and R. Williams, 2010. Gambling as a form of risk-taking: Individual differences in personality, risk-accepting attitudes, and behavioural preferences for risk. *Personality and Individual Differences*, 49(6), 616-621.

Ozmen, O. and Z. Sumer, 2011. Predictors of risk-taking behaviors among Turkish Adolescents. *Personality and Individual Differences*, 50(1), 4-9.

Paul, T., & Bajaj, S. (2012). Influence of demographic profile of equity investors on their level of awareness about equity market. *The International Journal of Management*, 1(4), 1-12.

Prasad, B. and M.S. Subhas, 1991. Equity cult: The role of a small investor. Emerging trends in the capital market in India. New Delhi: Global Business Press. pp: 97-118.

Ravichandran, K. (2008). A study on Investors Preferences towards various investment avenues in Capital Market with special reference to Derivatives. *Journal of Contemporary research in Management*, 3(3), 101-112.

Ramiah, V., Xu, X., & Moosa, I. A. (2015). Neoclassical finance, behavioral finance and noise traders: A review and assessment of the literature. *International Review of Financial Analysis*, 41, 89-100.

Rooij, V.M., A. Lusardi and R. Alessie, 2011. Financial literacy and stock market participation. *Journal of Financial Economics*, 101(2): 449-472.

Sahoo, A., & Sahoo, S. (2020). What Drives Derivatives: An Indian Perspective. *Journal of Risk and Financial Management*, 13(6), 134.

Sarathkumar, K., & Dhandhayuthapani, S. P. (2016). Analytical Study on Indian Derivatives Market With Reference to Investors' Attitude. *International Journal for Innovative Research in Science and Technology*, 2(11), 680-682.

Sarkar, A. K., & Sahu, T. N. (2017). Effect of Demographic Factors and Awareness on Investment Behaviour in Stock Market: Evidence from West Bengal. *Asian Journal of Research in Banking and Finance*, 7(7), 34-51.

Semnani, B. L., & Benesloo, R. (2015). Ranking of Hedging Tools from the Perspective of Tehran Stock Exchange Investors. *Asian Economic and Financial Review*, 5(7), 926.

Shollapur, M.R. and A.B. Kuchanur, 2008. Identifying perceptions and perceptual gaps: A study on individual investors in selected investment avenues. *ICFAI Journal of Behavioral Finance*, 5(2), 47-61.

Tripathi, G. (2014). An Empirical Investigation of Investors Perception towards Derivative Trading. *Global Journal of Finance and Management*, 6(2), 99-104.

Varadharajan, P., & Vikkraman, P. (2011). A study on investor's perception towards investment decision in equity market. *International Journal of Management, IT and Engineering*, 1(3), 62-81.

Vidhya, B., & Magesh, S. (2018). Evaluation of Investor Awareness on Techniques used in Stock Trading before their Investment. *International Journal of Engineering & Technology*, 7(3.12), 98-107.

Vohra, T., & Kaur, M. (2016). Awareness and Stock Market Participation of Women: A Comparative Study of Stock Investors and Non-Investors. *IUP Journal of Management Research*, 15(4).

Wood, R. and J.L. Zaichkowsky, 2004. Attitudes and trading behaviour of stock market investors: A segmentation approach. *Journal of Behavioral Finance*, 5(3), 170-179.

Young, S., G. Gudjonsson, P. Carter, R. Terry and R. Morris, 2012. Simulation and risk-taking and its relationship with personality. *Personality and Individual Differences*, 53(3), 294-299.