Factors Affecting the Retail Investor's Participation in the Derivatives Market: Evidences from Tier II Cities of Madhya Pradesh, India

Umang Mehta
Prestige Institute of Management and Research, Indore, India
umangmehta88@gmail.com

Minal Uprety
Prestige Institute of Management and Research, Indore, India
minal_uprety@pimrindore.ac.in

[Abstract] Derivatives were developed with the intention to give risk management platform through hedging to investors. This study is conducted to give insight on the factors affecting participation of retail investors in derivatives market, and was carried out in tier II cities of Madhya Pradesh, India. After applying factor analysis complexity to understand, profit maximization, information and knowledge, guidance and recommendation, and risk management emerge as the factors affecting retail participation in the derivatives market. The results highlight the importance of effective financial education in stock market for investors that not only increase investor's confidence but also boost their participation.

[Keywords] derivatives, financial education, retail investors, risk management.

Introduction

India is becoming the one of the favorite countries for investors across globe to invest in. Investor's interest in any economy is judged by their investment or to be more specific by their participation in stock market. With the big dreams of making Indian economy of 5 trillion dollars by 2024 which is currently struggling to achieve GDP growth of even 5.00% in financial year 2019-20 is something seems to be a farfetched target. But even looking at the positive side of it and if India wants to be a 5 trillion economy? Then the economic numbers must reflect it. This can be initialized with improving valuations of companies listed in its stock market, as stock markets are considered to be barometer of the economy. Retail investor's investment in stock market through mutual funds witnessed stable and steady growth in past few years. Therefore, retail investors study on participation in stock market cannot be kept aside, as retail investors investment via mutual funds in Indian stock market has increased year on year even presently in the worst scenario also, when FII are pulling back their money from the Indian stock market and corporate across the globe are dealing with economic slowdown. Thus potential of retail investors in stock market cannot be ignored. In the previous studies major focus were given on the companies and banks users and non users of derivatives and thus they were studied extensively, as these companies and banks were considered as major participants in derivative segment. This study is carried out with the objective to explore the factors that affect retail investors to participate in derivatives market.

Literature Review

Derivatives were used frequently by large companies than medium or smaller ones with hedging as the main purpose but many of the companies were not found to have enough exposure to use derivatives for risk management and their main concerns are disclosures about derivatives trading as per the rules (El-Masry, 2006).There are many factors accountable for the majorly non-participation of even those investors, whose families can manage to save a substantial sum and these includes cognitive ability or skills (Grinblatt *et al*., 2011), lack of awareness about stock market or poor social networking (Hong *et al*., 2004; Guiso & Jappelli, 2005), trust (Guiso *et al*., 2008), and risk aversion (Halko *et al*., 2012; Dohmen *et al*., 2010).

Apart from these some factors that were considered in the earlier researches like return on investment, risk involved, transaction charges, market conditions influences the individual investors in participating into the securities market or other investment avenues (Chang, 2008; Morse, 1998; Ferguson *et al*., 2011) McDonald and Sandada (2018) found the trust amongst investors plays crucial role especially in financial assets. Financial institutions have key responsibility to present their product to investors. Trust help investors to overlook the higher returns offered by the stock market. Trust develops a positive node in the minds of investors and this help an individual to accept the harshness of stock market and its ground realities. The study also claims that risk involved in stock market can be complex as there are various ways of entering into market with different products. Srivastava *et al*., (2008) in their study concluded that at the higher end proprietary traders and HNI's have major role in the turnover of brokers and 32% of brokers studied in the study said that their 25-50% of derivatives turnover comes from retail segment. Also majority of respondents perceived that risk adjustment and return enhancement as the two most important benefits of derivatives security.

Barasinska and Schafer (2017) investigated the relationship of gender and their involvement in European nation's stock market, and their findings suggested that women have fewer opportunities to have information and knowledge about stock market in the societies, where there is higher level of dissimilarity in gender among people. Also women were less comfortable in gaining knowledge about stock market as it becomes only showcase knowledge for them received from their male counterparts in a family. They also found that higher brokerage cost prevents low income group to take part in stock market even if they wish to do so, where as it is the social norms which are responsible for high level income group. According to Almenberg and Dreber (2012) lesser participation of women in stock market with low financial literacy and investors approach for accepting risk is itself an important factor affecting investors to participate in stock market. They also highlighted that there is considerable wellbeing loss for non-participating in stock market.

Fong *et al.,*(2005) identified no relationship between performance of portfolio and risk over derivative users and non users. Anbil *et al*., (2016) observed the usefulness of hedging programs and said that firms will have low credit risk if they efficiently be able use hedge programs also two fifth of the derivatives traders use it as a tool for speculation. Risk management is the most important reasons for the firms to use derivatives. Arora and Marwaha (2014) conducted a research and found that investor's attitude for investment plays important role in investing in stock market or any other investment avenue and this attitude varies as per the investment avenue. Also investors opinion to invest in any avenue remains indifferent from one another. Investors are conscious while taking risk of investing in stock; also investors need higher returns and rate it as important factor to invest in stock market.

Apart from this risk association, investor's trend and news were important variable identified by the researchers to invest in stock market. (Sivaramkrishnan *et al*., 2017) in his research said that product knowledge in financial products referred as financial numeracy by the authors is the key for the investors to decide for participation in financial market. The study also reveals that social interaction encourages stock market participation whereas investment environment and man-made factors hinders the intention of investment. The research results also show that effective communication from market experts and regulators will reduce the risk avoidance attitude among investors. Developing nation like India with good house hold savings showed poor response towards financial products and financial literacy needs strict measures for improvement.

Investor's carry a set of image about stock market and certain concerns for investing in stock market like the possible return, safety of investment , fairness of market. And this perception of investors might be incorrect as per their knowledge and available information processed by individuals with pre-established image of market. As per him hobby and speculation carry similar dimensions for stock market investment. Investors entering in market either as a hobby or for speculation also believe for the presence of effective regulator in market which they can trust upon and trade without any fear (Dobni & Racini, 2016).

In one of the research work done by Guiso and Sodini (2013) it was said that investors requires faith in trades of risky assets , not only faith but confidence from the regulators information sources , market experts to relay on the stock market participation who frame an affirmative image about the market. Dimmock and Kouwenberg (2010) during their research found that directly or indirectly high level of risk avoidance is associated with a very low possibility of investors for participation in the stock markets. In similar study conducted at Singapore indicated an inverse association between intention to invest in stock market and risk avoidance (Lim *et al*., 2013).

Koonce *et al*., (2008) in their research experiment on MBA students for investment judgment about the managers using derivatives for risk management to its non-users found that before the potential investors were made learned about output which is same, they thought derivatives use as riskier than non-users whereas after knowing results there mindset changes and investors reacted into the favor of companies using derivatives for risk exposure and think that such companies are more caring in decision making while investment. Yoong (2011) suggested that investor's participation in stock market is deeply affected by the financial illiteracy among people. People usually do not have any formal access to the financial literacy after their schooling which hampers the stock market participation. The study highlights the strict need of financial education keeping in mind the financial behavior of investors as financially educated individuals has more involvement in the financial activities. Chandrasekhar *et al.,* (2016) in their research said for countries the problem is not the absence of retail investors but for them concerns were more about the uninformed investors in the market.

SEBI needs to work on its mechanism for probing and disclosing stock market scandals because its role as regulator sometimes increases the volatility into the market. The study also spotted the loop in the awareness and expertise of brokers, sub brokers and focused on their improvement (Kaur, 2018).

Data and Methodology

For data collection primary data of retail investors trading in derivatives market were considered from the tier II cities of Madhya Pradesh namely Indore, Bhopal, Jabalpur, and Gwalior. The selected cities were not only the top four highly populated cities of Madhya Pradesh but also as per personal interaction of author with a few of the brokers from leading broking firms in Indore these tier II cities witnesses highest trading turnover in Madhya Pradesh.

To extract responses from primary data a survey was done using questionnaire's based on five point likert scale (ranging as 1 for strongly disagree to 5 strongly agree). Finally, a convenience sampling is applied and responses were collected from retail investors belonging to different demographic aspects and were trading in derivatives segment of stock market. The survey was conducted from December 2019 to March 2020. Out of 190 survey questionnaires distributed for data collection and rigorous personal follow ups of existing stock broker's clients of tier II cities we successfully received error free 176 valid responses from retail investors trading into the derivatives market and for arriving at the results data were analyzed by factor analysis techniques using SPSS 20.

Data Analysis and Interpretation

As per table 1 it is well evident that more than three fourth of the retail investors in derivatives market were male with 77.85% which signifies their preponderance among participation in market. Investment amount of respondents reveals that respondents with up to 5,00,000 investment amount in market, shows the highest participation with 76.15 % followed by 15.34% in 5,00,001 to 10 lakhs category and 8.52% have more than 10 lakhs of investment. Business doing people participate more into derivatives and are leading with 60.22% of the total responses received. Trading experience of more than half of the respondents is less than 5 years representing 52.27% of total responses and highest trading experience that is more than 10 years in market is observed in 32.39% of sample received.

Table 1
Demographic Characteristics of the Respondents

Demographic variable	Category	Percentage
	Up to 35 years	58.53%
Age	Between 35 to 55 years	34.66%
	Above 55 years	6.81%

Gender	Male	77.85%
	Female	22.15%
	Business	60.22%
Occupation	Service	39.78%
	Government	13.06%
	Private	26.70%
Investment amount	Upto 5 lakhs	76.14%
	5,00,001 – 10 lakhs	15.34%
	More than 10 lakhs	8.52%
Trading experience	0-5 years	52.27%
	5-10 years	15.34%
	Above 10 years	32.39%
Education Qualification	Under Graduate	63.64%
	Post graduate	36.36%

Source: Authors field survey.

Reliability and Validity

Cronbach's alpha a diagnostic measure and reliability assessing measure is used for the consistency of entire scale. In our case Cronbach's alpha was found to be .807 for 28 items (Table 2) indicating a very good level of consistency.

Table 2
Reliability Statistics

Cronbach's Alpha	N of items
.807	28

Source: Authors results for reliability test using SPSS 20.

Bartlett's test of sphericity determines the significance of all correlations within a correlation matrix. Significance value of 0.000 in the results (Table 3) indicates that correlation exist among the variables to move further with factor analysis. As shown in table the data was found to be significant with KMO value of 0.751 indicating suitability of data for the application of exploratory factor analysis.

Table 3
Results of KMO Statistic and Bartlett's test of sphericity

Kaiser-Meyer-Olkin Measure of Sampling Adequacy	0.751
Approx. Chi-Square	2489.484
Df	369
Sig.	0.000

Source: Authors results for KMO test using SPSS 20.

Results and Discussion

This study was conducted to find out the factors that affect investor's participation in derivatives market. After applying factor analysis using SPSS total 70.19% (Table 5) of the total variance is being explained by the derived five factors two items S12 and S15 were removed as their factor load was found to be less than 0.500 thus 28 items out of 30 were retained with factor loading more than 0.500 which were derived into five factors (refer table 4) namely complexity to understand, profit maximization, information and knowledge, guidance and recommendation and risk management.

Table 4

Exploratory Factor Analysis Results and Factor Nomenclature

Factor	Item	Individual factor loading	Cumulative factor loading	% of variance explained
Complexity to Understand	Hedging strategies of derivatives are complicated for me.	0.871	5.681	20.53%
	Derivatives are complex to understand and trade.	0.835		
	High prices of lots in derivatives make it out for retailers.	0.798		
	High level of monitoring and control is required to trade in derivatives.	0.693		
	I lack in understanding to trade in derivatives to minimize my losses.	0.676		
	Derivatives itself carry their own risk.	0.621		
	Improper use of derivatives leads to unbelievable losses.	0.596		
	Derivatives are riskier than cash market trading.	0.591		
Profit Maximization	I trade in derivative to make huge profits in short span of time.	0.844	4.450	14.66%
	High profit opportunities are available in the derivatives market.	0.790		
	I speculate in derivatives to earn profit.	0.773		
	Derivatives provide high profit opportunities than cash market.	0.720		
	Derivatives help in earning profit in both bull and bear run of market.	0.672		
	Derivatives contract are very much expensive to trade.	0.651		
Information and Knowledge	Retailers suffer from lack of information about trading into derivatives.	0.829	3.812	14.02%
	Less knowledge of derivatives make it of no use to minimize risk.	0.796		
	High level of monitoring and control is required to trade in derivatives.	0.747		
	More investor's education is required to be	0.719		

	provided from market regulator.			
	I am having lack of knowledge about various risk reducing strategies of derivatives market.	0.721		
	Broker's guidance is needed to understand and trade derivatives.	0.783		
Guidance and Recommendation	I trade in derivatives based on advisory company's information and recommendation.	0.759		
	My friends and colleague help me to trade in derivatives.		3.524	10.71%
	I trade in derivatives on advice of market expert on news channels.	0.709		
	More support from broker and regulator is required to encourage investors to trade in derivatives.	0.672 0.601		
	Trading in derivatives helps to manage stock market risk efficiently.			
	Derivatives offer different hedging strategies to trade in risk oriented market.	0.706		
	Adverse movement in stock make derivatives trade more speculative.	0.623		
Risk Management	Trading in derivatives helps me in exiting with minimum loss.	0.638		
		0.571		
			2.538	10.60%
		Total		70.19%

Source: Authors research results as per output of factor analysis using SPSS 20.

The very first factor which emerges out from the study was named complexity to understand this consists of eight items explaining 20.53% of the total variance with factor load of 5.681. This factor gets in line with research done by (Pasha, 2013) on perception of retail investors for derivatives which quoted derivatives as high-tech products. Complexity to understand refers to the difficulty of the retail investors to understand the derivatives market and its trading. Derivatives are complex tool to use even for analyst and companies that utilizes it as a hedging tool. For retailers to select the best derivatives trade is a hard nut to crack. Number of strategies and their possible combinations make derivatives difficult to understand. And to select the best course of action based on market volatility makes market experts also trapped *s*ometimes into derivatives complexity. Apart from this the regulatory measures of derivatives for retailers create complexity to trade and understand the market. Regulatory for derivatives is complex problem to understand this market (Pallavi, 2014). Complex nature of derivatives instrument is one of the reasons for non participation in derivatives market by its retail client base (Nagaraju, 2014).

Entrop (2010) in an attempt to figure out whether investor make profit from derivatives or not said that actually they did not, based on the investigation of their risk adjusted actual performance because investors were having the inability to understand the complex payoff's and learn the fair price of stock in its derivatives segment for investment. Complexity of financial product increases the issuers market power due to low financial literacy among investors (Carlin, 2009).Financial decisions were hard to be taken especially for retail investors in stock market and one needs to understand the investments complexity than only investors can made justifiable investment decision (Gumbo , 2018).

Second factor profit maximization consists of six items explaining 14.66% of the total variance with factor load of 4.450. Many researchers have pointed out the profits or return they earn on their investment is key factors for putting money in any investment pocket and derivatives are profit enhancers**.** Our second factor profit maximization is also in line with the research done by (Raghavan, 2017) in which return on investment is the second highest rated factor in their research done to find out the degree of satisfaction of retail investors. Pallavi (2014) through her research findings said that more than 55% of the sample investigated said that return is the most important factor which motivates investors to trade in derivatives market.

Third factor information and knowledge consists of five items explaining 14.02% of the total variance with factor load of 3.812. Any of the financial instruments success depends upon how information related to any financial product is made available to investors and how the knowledge is being imparted to them. The knowledge and availability of information to the investors are directly proportional to the performance of the market. Information and knowledge is the key to success for the investors also from regulators point investors participation can be improved with confidence, if market regulators made investors educate and brief them about the financial products and resolve any query or doubt in the mind of investors, this in return also improves market participation (Guiso and Jappelli, 2005). (Mishra 2018) also had the same findings, and the research work highlighted the fact that knowledge plays a significant role in increasing the investment and improving participation in the securities market. In the words of Vashishtha (2010) although derivatives are risky but good knowledge of derivatives will earn great reward for investors. People gather substantial amount of information from casual acquaintance and neighbours to learn (Hong, 2004) so here the regulators had a very crucial role to make informed and educated investors. (Chandrashekhar *et al.,* 2016*)* mentioned in their concluding remarks said that listed companies must disclose information to market in easy way that can be understood well by retail investors, that help retail investors arrive at a decision to invest, also he stated the importance of educating the investors so that sensible investment can be seen from investors with increase in their participation.

Fourth factor guidance and recommendation consists of five items explaining 10.71% of the total variance with factor load of 3.524.This factor was named guidance and recommendation because investors seeks for guidance whenever making any investment and if this guidance comes from a renowned and recognized body, will develop a cohesive trust into investors. Investor guided through recognized source is strong investor into the market. Hon (2013) noticed that recommendation from market consultants for investment is a major determinant in derivatives market. Similarly Kumar (2018) said that recommendation is one of the important factors for investor's decision making into stock market.

The last factor risk management consists of four items explaining 10.26% of the total variance with factor load of 2.538. All investments are risky and risk management is the solution for all (Nuruzzaman, 2013). Likewise Raghavan (2017) found that risk management helps investors or market participants to enhance their activities. Derivatives emerged as a risk management tool. Investor may suffer loss in stock market, but derivatives counter balances those losses to minimize the risk. Handy investors use different strategies in future and options or their combination to hedge their position in stock market. This not only gives investors more exposure in the market but also increases their participation.

Conclusion and Policy Implications

Derivatives are no doubt the advance version of the stock market but without investors this tool cannot be called as good initiative by regulator. Although Indian derivatives market has seen tremendous growth in almost two decades but retail participation in this market is a big question mark. Under same regulator retail contribution in mutual funds is at its highest level nowadays, with consistency in growth for investment, whereas on other hand in derivatives segment retail investors face challenges in proving their remarkable presence in derivatives. Investor's participation in derivatives can be increased if retail investors concerns that emerges in this study resolved, except the profit maximization factors if SEBI and brokers were able to give sincere efforts over these factors retail participation in Indian equity derivatives can be increased with substantial numbers. The investors who were jumping into stock market just for maximizing the profits, if made educated about the participation in market, SEBI can justify its role of protecting the investors, as more educated and aware investors in this market hedges itself in a better way from losses. Also increased turnover from retail investors can also help exchanges in improving liquidity and reducing the transaction cost. Improved retail participation and educated investors provides nourishment to the companies fundraising activities also.

Most important suggestion from our finding is that improved communication through regulatory guidance can simplify the information made available to investors that can enhance the market operations. Financial literacy specifically towards financial market from high school level must be created by policymakers so that financially educated investors can be made available to society .Brokers can work over the factors evolved by creating awareness amongst investors and making them understand derivatives trading in simplified way which will increase market participation and in turn increases the broker's turnover by reducing the friction of complexity in the segment.

This study and its findings can be useful to policymakers, regulators and brokers so that they can develop a sound and healthy system which not only increases investors confidence and participation but also improve the viability of capital market. This study is restricted to four tier II cities of Madhya Pradesh only so for more specific results the study can cover more regions of India including those from where major participation in the form of market turnover is coming. Future research can be done on financial literacy and to find its relationship with demographic profile.

References

Almenberg, J., & Dreber, A. (2012). Gender, stock market participation and financial literacy. SSE (No. 737). EFI Working Paper Series in Economics and Finance.

Anbil, S., Saretto, A., & Tookes, H. (2016). Does Hedging with Derivatives Reduce the Market's Perception of Credit Risk? *Finance and Economics Discussion Series, 2016-100,* 1-56.

Arora, S., & Marwaha, K. (2014). Variables influencing preferences for stocks (high risk investment) vis-à-vis fixed deposits (low-risk investment). *International Journal of Law and Management, 56*(4), 333-343.

Barasinska, N., & Schäfer, D. (2018). Gender role asymmetry and stock market participation–evidence from four European household surveys. *The European Journal of Finance, 24*(12), 1026-1046.

Chandrasekhar, C. P., & Malik, S. Akriti (2016). The elusive retail investor: How deep can (and should) India's stock markets be? Securities Exchange Board of India, *DRG Study No. 2.*

Carlin, B. I. (2009). Strategic price complexity in retail financial markets. *Journal of financial Economics, 91*(3), 278-287.

Chang, C. (2008). The impact of behavioral pitfalls on investors' decisions: The disposition effect in the Taiwanese warrant market. *Social Behavior and Personality: An International Journal, 36*(5), 617-634.

Dimmock, S. G., & Kouwenberg, R. (2010). Loss-aversion and household portfolio choice. *Journal of Empirical Finance, 17*(3), 441-459.

Dobni, D. M., & Racine, M. D. (2016). Investors' images of the stock market: Antecedents and consequences. *Financial Services Review, 25*(1), 1-28.

Dohmen, T., Falk, A., Huffman, D., & Sunde, U. (2010). Are risk aversion and impatience related to cognitive ability? *American Economic Review, 100*(3), 1238-60.

El-Masry, A. A. (2006). Derivatives use and risk management practices by UK nonfinancial companies. *Managerial Finance, 32*(2), 137-159.

Entrop, O., McKenzie, M., Wilkens, M., & Winkler, C. (2016). The performance of individual investors in structured financial products. *Review of Quantitative Finance and Accounting, 46*(3), 569-604.

Fong, K., Gallagher, D. R., & Ng, A. (2005). The use of derivatives by investment managers and implications for portfolio performance and risk. *International Review of Finance, 5*(1-2), 1-29.

Ferguson, E., Heckman, J. J., & Corr, P. (2011). Personality and economics. *Overview and Proposed Framework, 51*(3), 201-209.
Grinblatt, M., Keloharju, M., & Linnainmaa, J. (2011). IQ and stock market participation. *The Journal of Finance, 66*(6), 2121-2164.
Guiso, L., & Jappelli, T. (2005). Awareness and stock market participation. *Review of Finance, 9*(4), 537-567.
Guiso, L., & Sodini, P. (2013). Household finance: An emerging field. In *Handbook of the Economics of Finance* (Vol. 2, pp. 1397-1532). Elsevier.
Guiso, L., Sapienza, P., & Zingales, L. (2008). Trusting the stock market. *The Journal of Finance, 63*(6), 2557-2600.
Halko, M. L., Kaustia, M., & Alanko, E. (2012). The gender effect in risky asset holdings. *Journal of Economic Behavior & Organization, 83*(1), 66-81.
Hon, T. Y. (2012). The behaviour of small investors in the Hong Kong derivatives markets: A factor analysis. *Journal of Risk and Financial Management, 5*(1), 59-77.
Hong, H., Kubik, J. D., & Stein, J. C. (2004). Social interaction and stock market participation. *The Journal of Finance, 59*(1), 137-163.
Kaur, J. (2018). Investors' probable solutions to their problems: a study of Punjab. *International Journal of Law and Management, 60*(2), 355-372.
Koonce, L., Lipe, M. G., & McAnally, M. L. (2008). Investor reactions to derivative use and outcomes. *Review of Accounting Studies, 13*(4), 571-597.
Kumar, K. S., & Vasumathi, S. (2018). Investors' Perception towards Equity Market. *International Journal on Global Business Management & Research, 7*(2), 58-66.
Lim, K. L., Soutar, G. N., & Lee, J. A. (2013). Factors affecting investment intentions: A consumer behavior perspective. *Journal of Financial Services Marketing, 18*(4), 301-315.
McDonald, G., & Sandada, M. (2018). The determinants of stock market participation: Evidence from individual investors in Zimbabwe. ACTA Universitatis Danubius. *Economica, 14*(4), 642-654.
Mishra, R. (2018). Financial Literacy, Risk Tolerance and Stock Market Participation. *Asian Economic and Financial Review, 8*(12), 1457-1471.
Morse, W. (1998). Risk taking in personal investments. *Journal of Business and Psychology, 13*(2), 281-288.
Nagaraju, S., & Reddy, S.S (2014). A study on investors' perception towards derivative instruments and markets. *International Journal of Research in Commerce, Economics & Management, 4*(7), 33-41.
Nuruzzaman, A. (2013). Retail investor's attitude towards future trading: An empirical investigation. *AIMA Journal of Management & Research, 7*(2/4) 1-16.
Pallavi, E. V. P. A. S., & Raju, T. K. (2014). An empirical analysis on perception of retail investors towards derivatives market With reference to Visakhapatnam district. *Indian Journal of Management Science, 4*(1), 54.
Pasha, S. A. M. (2013). Retail Investor's Perception on Financial Derivatives in India. *European Scientific Journal, 9*(22), 366-383.
Raghavan, M. S., & 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), 214-18.
Sivaramakrishnan, S., Srivastava, M., & Rastogi, A. (2017). Attitudinal factors, financial literacy, and stock market participation. *International Journal of Bank Marketing, 35*(5), 818-841.
Srivastava, S., Yadav, S. S., & Jain, P. K. (2008). Derivative trading in Indian stock market: Brokers' perception. *IIMB Management Review, 20*(3), 311-323.
Vashishtha, A., & Kumar, S. (2010). Development of financial derivatives market in India-a case study. *International Research Journal of Finance and Economics, 37*(37), 15-29.

assessment and evaluation studies, Financial Econometrics, Financial Modeling and Agricultural financing.

Prof Umang Mehta has been associated with Prestige Institute of Management and Research, India, as an assistant professor and has experience of 7 years in the field of education. Prior to this, he served into industry for two years in the field of insurance and investment. His research area of interest includes Derivatives and Insurance. He has published more than 10 papers and cases in International and National Journals. He has conducted training programs for the employees of leading insurance companies in life and non-life business and continuously providing his consultancy and counseling in the area of Insurance and Investment.

Dr. Minal Uprety has done Ph.D is Statistics, Master of Science in Statistics and Master of Business Administration in Operations Management. She has 12+ years of experience in teaching. She is a recognized Ph. D supervisor in the faculty of Management, Devi Ahilya Vishwavidhyalaya, Indore. She has published 25+ research papers in several national and international journals. She has also attended and presented papers in national and international conferences. Her research area of interest includes Statistics, Operations management and Service Quality.

Prof. Shaan Malhotra is working as an Assistant Professor in Marketing Department at Prestige Institute of Management and Research, Indore, India. Her areas of academic interest include Marketing Management, Service Marketing, Advertising and Brand marketing. She has completed various certifications in Digital Marketing. She has around 9 years of extensive and excellent experience in Academics. Before joining Prestige she has worked with Global Institute of Management and Research (Jabalpur). She has attended and presented papers in various National and International Conferences. She has also attended various development programs like Case Writing Workshop, Research Methodology Workshop and Faculty Development programs.

Dr. Khushboo Makwana is presently working as Assistant Professor in Marketing Department of Prestige Institute of Management and Research (PIMR), Indore, India. She has twelve years of teaching experience and two years of industry experience. Her areas of interest include subjects like Advertising, Brand Management, Marketing, Digital Marketing and Events. She is a recognized Ph.D. Guide of Management in Devi Ahilya University, Indore. She has also received two best research paper awards from the institutions like SP Jain Mumbai, JBIMS Mumbai. She has worked as referee in editorial review board of NOLEGEIN Journal of Advertising and Brand Management, NOLEGEIN Journal of Consumer Behavior and Market Research, Journal of Scientific Research and Reports. She has done corporate training for the Post and Telegraph department.

Dr. Rajwinder Kaur is Ph.D. in Management from the Institute of Management, Nirma University, India. She had done her post-graduation in HRM from Punjabi University, Patiala. She has around 6 years of experience in corporate as an HR Manager. This helped her to bring first-hand experience in end-to-end HR processes. Her research interest is in Employer Branding, Employee Engagement, Recruitment, and employee behavior. She has attended various national and international conferences and published papers.

Dr Reena Shah, a Ph. D. in Management from Nirma University, India, holds over 20 years of industry and academic experience. She is a certified trainer by Thomas International and has conducted various training programmes for reputed organisations like the MICA, Adani, NDDB, Nirma University (ADR) Cell, NTTTR to name a few. Dr. Shah has edited three books and has 27 publications in reputed national and international academic journals, chapters in edited books and over 7 presentations in international conferences held outside India. She is an editorial review member for 2 international peer-reviewed journals. She is a member of the International Association for Media and Communication Research (IAMCR), Indian Society of Training and Development (ISTD) and Work-Family Researchers Network (WFRN). Her research interests include Work-life Balance and computer-mediated behaviour in form of Selfies and Emojis.