

## FACTORS AFFECTING DECISION TO INVEST IN A STOCK MARKET: A SURVEY OF INVESTORS ACROSS DELHI NCR REGION

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### Abstract

**Purpose** – The purpose of this paper is to evaluate the effect of factors that influence investment decision of individual investors in the stock market. **Design/methodology/approach** – The study is based on primary data collected from 107 respondents. Stepwise regression analysis was used to validate the relevance of the study model. **Findings** – The results indicated that there is a positive association between independent variables considered in the paper and the dependent variable. The statistically significant model obtained in this study, revealed that the independent variables accounted for 10% of the variation in dependent variable. Out of these, financial socialization turned out to be a significant one depicting its influence on the dependent variable considered. **Practical implications** – A glance into the investor psychology given by this study has deeper implications for the financial/monetary institutions. The results point towards a mix of factors that influence the investor while he invests in the stock market. Institutes can design their product mix strategies and marketing mix i.e. what they offer and how do they offer to the potential investors by considering the factor(s) underlined in this study. Nevertheless, it underlines the significance of financial socialization in influencing the stock market decisions made by the individual investors. **Originality/value** – The study presents an exciting mix of variables from different theories, tests a model and points to the significant factors in the arena of stock market investment. The survey findings from Delhi-NCR are at the core of this paper.

**Keywords:** Stock Market, Personal Factors, Rational Factors, Emotional Factors, Demographic factors, Investment.

### Introduction

Investments are the most crucial parts of any economy. They are an important link in the prosperity cycle (income, saving, investment, consumption/saving, production). There are various investment options for the investors in India. A few of them are driven by tax saving and less risk and others are driven by returns. Capital market investments are usually considered in the high-risk category. Stocks have always been associated with high risk- high return trade off. They are considered comparatively a risky option of investment. But there are varieties of options of risk in the stock market. Basically, risk continuum depended basic stock features e.g., penny stocks, blue chip stocks and large cap stocks. Investors commonly perform investment analysis by making use of fundamental analysis, technical analysis and judgement. Investment decisions are often supported by decision tools. It is assumed that information structure and the factors in the market systematically influence individuals' investment decisions as well as market outcomes. Stock markets are the money mobilizers in any country. Savings are turned into investments through stock market. Stock market is the heart of an economy and market indices are the barometers of the economy. In the past few decades, the Indian stock markets have developed in many ways. Investor's security has been improved with better regulations and more participation of the securities and Exchange Board of India (SEBI). Post pandemic there has been a strong shift in investors' behavior as they have realized that traditional ways of investments lead to no gains after adjusting inflation as explained by Talwar et al (2021). Also, past experience, risk tolerance and financial literacy also contributes to investment decision making (Sharma, 2014). In India, people are seemed to have a cultural affinity for gold (Singh and Joshi, 2019) and a smaller number of people invest in stock market as compared with the other developed countries. It's observed that India has more passive investors rather than active and direct investors in stock market. In conventional financial theory, investors are assumed to be rational wealth-maximisers, following basic financial rules and basing their investment strategies purely on the risk return consideration. However, in practice, the level of risk investors is willing to undertake is not the same, and depends mainly on their personal attitudes to risk. Research in behavioral finance has developed rapidly in recent years and provides evidence that investors' financial decisions are also affected by internal and external behavioral factors (Shefrin, 2000; Shlcifcr.2000; Wameryd, 2001). It is generally believed that investment decisions are a function of several factors such as market characteristics and individual risk profiles, in addition to accounting information.

Traditional finance has always worked on the principles of rationality, for the performance of markets as well as individual investing in any avenues of investment. But in reality it has been observed that there is deviations from rationality. The judgements are based on the individual beliefs, their past experiences and their effectiveness' of processing the information relating to the investments they decide to invest in. Individual investments behavior is concerned with choices about purchases of small amountsof securities for his or her own account (Nofsinger and

Richard, 2002). No matter how much an investor is well informed, has done research, studied deeply about the stock before investing, he also behaves irrationally with the fear of loss in the future. This different behavior in the individual investors is caused by various factors which compromise the investor rationality. John Grey's classic book "Men are from Mars, Women are from Venus" illustrates how they view the world through different lenses. The literature also supports gender biases in investing, yet few studies have empirically connected these conditions to differences in the information acquisition behavior of male and female investors. Zuckerman and Kuhlman (2000) found in their study that "men engage in more overall risky behavior than women" and within financial matters Prince (1993) found that men perceive themselves as more competent. Powell and Ansic (1997) found that gender is an important explanatory factor affecting confidence in investment decisions. Females were less confident about their decisions after controlling for factors such as age, experience, education, knowledge, and asset holdings. The impact of various psychological and emotional factors in the investment decision of Indian middle class retail individual investors and give a new insight for the retail investors who do not have complete idea of market information and sentiments of the market. Individual investors are often guided by the emotions and feelings which in turn based on various psychological and advice from experts they assume so. The element of emotions silently contributes towards increasing the probability of mistake on the part of investors' itself and consequently resulting in false or biased decision making. Robert R. Prechter, Jr. study entitled by Unconscious Herding Behavior as the Psychological Basis of Financial Market Trends and Patterns explains that the human herding behavior results from impulsive mental activity in individuals responding to signals from the behavior of others. Impulsive thought originates in the basal ganglia and limbic system. Herding behavior while appropriate in some primitive life-threatening situations, is inappropriate and counterproductive to success in financial situations. According to (Grinblatt et. al., 1995) and (Nofsinger & Sias, 1999) proposed the broader meaning of herding behavior, as a group of market participants conduct the trade similarly way for a given time. This relationship may observe if factors and common information independently influence investors. Similarly, (Abhijit V. Banerjee, 1992) also defined that herding occurs as individuals do what others do, even when their concealed information suggests they ought to obtain a different decision. Financial socialization is a process when individuals obtain something from the environment regarding the skills, knowledge, or attitudes needed to maximize one's role in the financial market (Sohn, Joo, Grable, Lee, & Kim, 2012). Agents of financial socialization can be parents, school, friends, and the mass media (Hilgert, Hogarth, & Beverly, 2003). This is because financial information obtained from various sources (parents, school, friends, or the media) can assist investors in making an investment decision. In the process of financial socialization, individuals not only acquire theoretical knowledge of finance matters but also learn attitudes and behaviors affecting their financial behavior. Financial socialization occurs through different channels, e.g., school, work and family (LeBaron et al., 2018; Shim et al., 2010). Socialization agents—e.g., parents, peers, and school—influence mental and behavioral outcomes—e.g., the process through which parents teach consumer skills to children—and have long-term implications (Gutter et al., 2014).

As investment is a sensitive arena and customers themselves involve into thorough analysis before investment (Soam, Bhatia and Sharma, 2019), hence it is important to understand how is their investment decision being influenced by gender biases, emotions, herding behavior, regency effect, and financial socialization.

### **Literature Review**

Agrawal and Vichore, (2020) explains that Investment in the stock market of India imparts a huge opportunity for investing and producing gains for an individual. The people would also like to invest as per the financial investment preference and individual's risk. At last, they concluded that management of portfolio aims to expand the portfolio and simultaneously reduce the total risk and able to give rise to return base on the amount of the risk taken. In debt market, the time horizon differs from instrument to instrument. Hence, the portfolio must be regularly valued and the duration must be kept long term.

Arasu et al (2021) suggests that the assessment of stocks is headed either by considering their finance related strength or by evaluating their prior expense behaviour in the optional market or both. It's important to use realistic variables to criticize the introduction of stocks. Hence, three excellent mixes of variables were considered at 69 non-financial stocks written down in the NSE, which were selected based on their market value. The results stated that three courses of action of elements taken for the survey help inside the prominent evidence of good stocks.

Umamaheshwari et al (2021) stated that the price instability of the stock market is a certain part of an investment decision taken by independent investors. It is important to identify factors like EPS, DPO, PE, ROI as the financial statement information affects the share price of the listed companies and these are taken as dominant factors in investment decision making for the investors. Therefore, the conclusion is that all the cos must pivot on providing complete information about their financial statement indicators and it becomes easier for the investors in investment decisions.

Herding is a process where investors in the market are trading in the same direction, mimicking the decisions and

actions of previous investors, without paying any attention to their own beliefs or information (Bikhchandani and Sharma, 2000). The empirical literature on the topic highlights that herding behaviour by market participants can distort the value of the underlying stocks and increase volatility (Furman and Stiglitz, 1998; Morris and Shin, 1999). Testing of herding behaviour in financial markets is, therefore, increasingly researched in the recent period by employing different scenarios and assumptions in the context of developed and developing countries. However, except for a few studies, most of the studies are based on models developed by Christie and Huang (1995) and Chang et al. (2000). These models primarily identify herding behavior based on return dispersions, particularly cross-sectional absolute deviations of returns. In the security market, herding investors base their investment decisions on the masses' decisions of buying or selling stocks. In contrast, informed and rational investors usually ignore following the flow of masses, and this makes the market efficient. Herding, in the opposite, causes a state of inefficient market, which is usually recognized by speculative bubbles. In general, herding investors act the same ways as prehistoric men who had a little knowledge and information of the surrounding environment and gathered in groups to support each other and get safety (Caparrelli et al., 2004, p. 223). Singh (2021) explained that the stock market of India has always been full of unreliability. It has seen many frauds and slowdowns. Hence, it is also looked as gamble by many people in India. So, the investors pick shares not on a single basis but several factors. Those factors might be rational, emotional, personal, investment objectives and opinion based. The conclusion is, from ages it was considered that the factors influencing stock investment is based on risk taking ability of an individual, his/her demographic profile and investment needs. Although, some push factors such low interest rates on risk-less investments and medium returns on mutual funds have also influenced an investor to enter into stock market.

Kanojia et al (2018) stated that Stock market investment is an issue of interest for all those who have extra money in hand. All individuals have their own reasons of investment. It might be appraisal of capital, better returns, benefits of tax etc. The widely known purpose of investments is to have great profits. The Sensex has increased from 100 since its inception in the year 1980 to 36000 level in the beginning of 2018. There is a broad extent of producing great returns in the stock market of India.

Singh and Yadav (2016) explained that Behavioural finance research is rather latest. In behavioural finance, it is imperative that information configuration and the features of capital market participants scientifically impact a person's decisions regarding investments and also market results. Investors hardly act rationally while taking the decisions of investments. This study concluded that the investors must try to make basic, technical and financial analysis before investing in the shares. Since behavioural finance is a new and promising branch of finance, financial advisors must scan the behaviour of investors and their priorities specifically the city investors when trading in mutual funds, stocks and investing in other instruments. This is further explained by Raut and Kumar (2018) that traditional finance argues that the involved agents are rational who first upgrade their knowledge correctly and secondly make choices that are regularly acceptable. Sadly, after several years of efforts, it has become clear that a person's trading behaviour is not easily understood in this structure.

Nosic and Weber (2010) declared that investment can be based on risk attitude, confidence in the financial instrument and risk perception. This study will examine the influence of psychological behaviour on investment decision-making (Koutsoyiannis, 1982; Zhu, 2017). Risk perception is an assumption by an investor regarding the future risk based on their own experiences (White & Fan, 2006; Zajac 2004). Hamid (2013) described how the perception behaviour of an investor may alter the thinking s/he has about the investment. However, it does not fully influence the investment decision. Khan's (2016) study examined the positive relationship between risk perception and investment decisions. Plaman's (1975) micro-production model describes the anxiety behaviour of investors concerning investment decisions. FitzGerald (1999) discussed market volatility influences on portfolio investments. Sansa (2020) investigated the impact of COVID-19 on the financial markets of the USA and China. The research was carried out using one-month financial market data from the share market of USA and China. The results from the study show that COVID-19 has had a significant impact on the financial markets. It has made individual investors look for the long-term viability of the company before investing (Singh, Makhija and Chacko, 2021).

Slovic (1972) describes the psychological factors which influence investment decision making. Lyn and Zychowicz's (2010) study confirm how "The influence of filtering the investment depends on belief and the investment performance". Arup et al., (2017) stated that the behaviour of investors in response to the market conditions is not strongly influenced by investment decisions. This contrasts with the research results of Ngoc (2014), who states that "the market condition plays a vital role in the investment decision". The investors' motive for investing is to earn money from the capital they invest. They do not consider protection against fear since they believe that when they take a risk, they can earn more from it. Annual income and reserve funds influence the dynamics of financial specialists (Banerjee & Masulis, 2012).

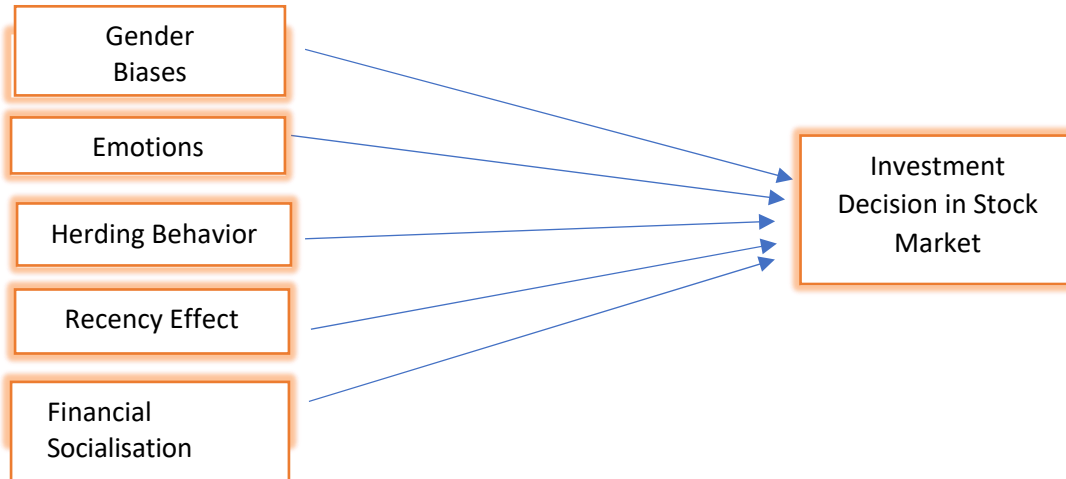
According to the traditional market theories, it is not only the markets that do not behave neatly but also the individual decision makers who do not behave in accordance with the tenets of expected utility theory. Allais (1959), who undertook the earliest works on Behavioural Finance, pointed out that neither the markets nor the individual

decisional makers behave neatly. Kahneman and Tversky (1979), Machina (1982) and others have looked at how people make choices under uncertainty. They studied human behaviour traits that violate the axioms of the expected utility maximizing model of financial economics.

**Research model**

**Independent Variable**

**Dependent Variable**



From the proposed research model, the research methodology is as follows:

The present study is descriptive as well as more of exploratory in nature. There is good number of studies that have found many factors influencing the stock market investment decision. This study however is an attempt to make a comprehensive analysis and propose a scale to measure the influencing factors in the Indian stock market.

The data has been collected from 107 respondents (150 questionnaires were circulated, out of which 120 fully filled in questionnaires were received and 107 were found fit for the study). The respondents were chosen on the basis of random sampling. Primary data refers to data, which is collected for a specific purpose and which is required in order to complement secondary data (Wiedersheim-Paul & Eriksson, 1997). Self-completion questionnaire seems to be one of the most common methods of descriptive researches.

With a self-completion questionnaire, respondents answer questions by completing the questionnaire themselves. This method is chosen for some reasons. The first reason is that as the research questions are defined clearly, questionnaire is the best choice to have standardized data, which is easy to process, and analyze.

For analyzing the data, The SPSS software was used. The analysis was based upon Descriptive frequencies, Correlation and Regression table. The independent variables that were taken in this study of research was Gender, emotions, herding behavior, recency effect and financial literacy.

**Data analysis and interpretations**

The data has been collected from 107 respondents (150 questionnaires were circulated, out of which 107 filled questionnaires were received and 107 were found fit for the study). The respondents were chosen on the basis of random sampling. Following factors are taken to know about the investment decisions of individual investors.

Table 1: Demographic Characteristics

Demographic Factors	Category	Respondents	%Age
Gender	Male	68	63.5
	Female	39	36.5
Age in years	20-30	89	83.1
	31-40	13	12.1
	41-50	4	3.7
	51-60	1	0.93
Annual Income	Up to 1 lac	76	71
	1-5 lac	14	13.1

	5-10 lac	8	<b>7.5</b>
	10 lacs above	9	<b>8.4</b>
Occupation	Student	83	<b>77.6</b>
	Professional	17	<b>15.9</b>
	Self Employed	7	<b>6.5</b>
Education	Up to 12 <sup>th</sup>	10	<b>9.3</b>
	Graduation	55	<b>51.4</b>
	Post-Graduation	39	<b>36.4</b>
	Others	3	<b>2.8</b>

Table 1 gives the demographic characteristics of the respondents. The males comprised the majority of the respondents which constituted 63.5 percent. The females constituted the rest of the sample (36.5 percent). The maximum respondent belonged to the age category of 25-30 years, which comprised of 83.1 percent of the respondents. Occupation wise, the majority of the respondents belonged to the category of Students which represented 77.6 percent of the total respondents. Since the level of education has an effect on investment decisions (Kalyan and Gupta, 2021), the study collected data about the highest level of education of respondents, and it emerged that the majority of the study respondents were graduates (51.4 %). Income –wise, there was predominance of the respondents belonging to the annual income category of up to 100,000 which accounted for 71 percent of the total respondents. Correlation analysis was carried out to determine the relationship between the variables considered in the proposed model. The results depicted statistically significant and positive relationship between all the variables with the exception of gender and emotion biases. This means that the set pattern between these two biases was not found.

Table 2: Correlation Analysis

	Mean_ Gender Bias	Mean_ Emotion Bias	Mean_ Herding Effect	Mean Recency Effect	Mean_ Financial Socialization
Mean_ Gender Bias	1				
Mean_ Emotion Bias	.173	1			
Mean_ Herding Effect	.192*	.528**	1		
Mean_ Recency Effect	.228*	.313**	.473**	1	
Mean_ Financial Socialisation	.313**	.269**	.227**	.267**	1

\*\*Correlation is significant at 0.01 significance level (2-tailed)

\* Correlation is significant at 0.05 significance level (2-tailed)

Correlation between Investment Decision in Stock Market and factors such as financial socialization, Herding effect, Gender biases, recency effect, emotional biases).

Correlation values always range between -1 (strong negative relationship) and +1 (Strong positive relationship). In the above table correlation between Investment Decision in Stock Market and factors such as (financial socialization, Herding effect, Gender biases, recency effect, emotional biases) are 1.000, .227, .313, .267, .269 respectively which states that there is a positive relationship between investment decision and these factors.

Regression analysis which was carried out in order to check the hypothesized model revealed that overall model was significant (significance value is less than 10%). Independent variables considered accounted for variation in the dependent variable (adjusted R square is 0.107 or 10.7%), nevertheless, there is a need to include other variables to appreciably predict the movement of the dependent variable. Model is significant as the P value is less than .05. Financial socialization (independent variable) was found to have a significant impact on investment decision in the stock market (dependent variable).

Table 3: Regression model summary

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.386 <sup>a</sup>	.149	.107	.728
a	Predictors: (Constant), Mean_ Financial Socialisation, Mean_ Herding Effect, Mean_ Gender Biases, Mean_ Recency Effect, Mean_ Emotional Biases			

**ANOVA<sup>a</sup>**

Model	Sum of Squares	df	Mean Square	F	Sig.
<b>1 Regression</b>	9.406	5	1.881	3.546	.005 <sup>b</sup>
<b>Residual</b>	53.584	101	.531		
<b>Total</b>	62.991	106			
a.	Dependent Variable: I always learn about the financial instruments and then invest.				
b.	Predictors: (Constant), Mean_ Financial Socialisation, Mean_ Herding Effect, Mean_ Gender Biases, Mean_ Recency Effect, Mean_ Emotional Biases				

**Coefficients<sup>a</sup>**

Model	Unstandardized B	Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
<b>1 (Constant)</b>	3.040	.513		5.925	<.001
<b>Mean_ Gender Biases</b>	0.69	0.93	0.73	.744	.459
<b>Mean_ Emotional Biases</b>	-.171	.130	-.154	-1.321	.189
<b>Mean_ Herding Effect</b>	-.186	.103	-.223	-1.803	.074
<b>Mean_ Recency Effect</b>	.183	.105	.191	1.735	.086
<b>Mean_ Financial Socialisation</b>	.342	.121	.293	2.826	.006
a.	Dependent Variable: I always learn about the financial instruments first then invest.				

**Conclusion and Implications**

This study was conducted to find out the factors that have an influence on the investment decision of the investors while they opt for (or do not opt for) investing in stock market. The influencing factors were filtered through literature and were built into a primary study. The investors based in geographical area of Delhi NCR was chosen. An interesting mix of factors from various walks of life was used and their effect on the decision of investors to invest in the stock market was deciphered. Out of these factors, financial socialization turned out to be a significant one depicting its influence on the dependent variable considered. Financial socialization refers to “the process of acquiring and developing values, attitudes, standards, norms, knowledge, and behaviors that contribute to the financial viability and individual well-being” (Danes, 1994, p. 128). Social processes are important to raise children into capable producers, consumers, and agents of financial socialization in adulthood (Gudmunson et al, 2016). Parents are the first and a very crucial interface through which children learn (or do not learn) about the matters of money and finance (Gudmunson and Danes 2011). Studies have confirmed the tendency of investors to imitate the financial behavior learned during their growing years (Gouskova et al. 2010, Shim et al. 2010). Besides family, there are other agencies such as peers, media, financial education imparted by the school and financial literacy programs and workshops that aid in financial socialization (LeBaron and Kelley, 2021)

Our findings underline the importance of acquiring financial education not only through proper educational programs, but also in the family environment during adolescence, where teens can learn positive attitudes towards money that are maintained throughout their life (Buccioli et al, 2021). Further, the study contributes in the current strand of theory by giving a across-the-board list of variables that have a bearing on stock investment. Dependent variable is studied by combining different variables in the light of their significance. The implications of the study extend to the various mediators in the field of stock market like brokers, venture consultants, financial advisors etc. yet the financial institutions/ monetary institutions can also be benefited from the results of this paper as they can pinch their speculation and banking items, which might incorporate control in the current and future loan costs. Thus it may help them decide upon their offerings (product mix) and the way they offer (marketing mix) their products/services to the potential market.

## References

- Abhijit V. Banerjee. (1992). A Simple Model of Herd Behavior. *The Quarterly Journal of Economics*, 107(3), 797–817.
- Agostino, M., Drago, D. and Silipo, D.B. (2011) ‘The value relevance of IFRS in the European banking industry’, *Review of Quantitative Finance and Accounting*, Vol. 36, No. 3, pp.437–457
- Agrawal, S. M., & Vichore, S. Study of Financial Sector & Portfolio Management.
- Arasu, B. S., Kannaiah, D., Nancy Christina, J., & Shabbir, M. S. (2021). Selection of variables in data envelopment analysis for evaluation of stock performance. *Management and Labour Studies*, 46(3), 337-353.
- Bikhchandani, S., & Sharma, S. (2000), “Herd behaviour in financial markets, IMF Staff Papers”, Vol-47-3, pp-279–310.
- Bennet, E., Selvam, M., Vivek, N., & Shalin, E. E. (2012). The impact of investors sentiment on the equity market: Evidence from Indian stock market. *African Journal of Business Management*, 6(32), 9317-9325.
- Buccioli, Alessandro, Manfrè, Martina and Veronesi, Marcella. "Family Financial Socialization and Wealth Decisions" *The B.E. Journal of Economic Analysis & Policy*, vol. 22, no. 2, 2022, pp. 281-309. <https://doi.org/10.1515/bejeap-2021-0065>
- Caparrelli, F. D., Arcangelis, A. M., & Cassuto, A. (2004). Herding in the Italian stock market: a case of behavioral finance. *Journal of Behavioral Finance*, 5(4), 222–230. [http://dx.doi.org/10.1207/s15427579jpfm0504\\_5](http://dx.doi.org/10.1207/s15427579jpfm0504_5)
- Chandra, A. (2008, December). Decision making in the stock market: Incorporating psychology with finance. In *National Conference on Forecasting Financial Market of India*.
- Danes, S.M. (1994), “Parental perceptions of children's financial socialization”, *Financial Counseling and Planning*, Vol. 5 No. 1, pp. 127-149.
- Dash, M. K. (2010). Factors influencing investment decision of generations in India: An econometric study. *Int. J. Buss. Mgt. Eco. Res.*, 1(1), 15-26.
- Furman, J., Stiglitz, J.E., (1998), “Economic crises: evidence and insights from East Asia”, *Brookings Papers on Economic Activity*, Vol-2, pp-1–136
- Gouskova, E., Chiteji, N., & Stafford, F. (2010). Pension participation: Do parents transmit time preference? *Journal of Family and Economic Issues*, 31(2), 138–150. <https://doi.org/10.1007/s10834-010-9181-8>.
- Grinblatt, B. M., Titman, S., & Wermers, R. (1995). Momentum Investment Strategies, Portfolio Performance, and Herding: A Study of Mutual Fund Behavior, *The American Economic Review*, Vol. 85, No. 5, pp. 1088-1105.
- Gudmunson, C. G., & Danes, S. M. (2011). Family financial socialization: Theory and critical review. *Journal of Family and Economic Issues*, 32(4), 644–666. <https://doi.org/10.1007/s10834-011-9275-y>.
- Gudmunson, C.G., Ray, S.K., Xiao, J.J. (2016). Financial Socialization. In: Xiao, J. (eds) *Handbook of Consumer Finance Research*. Springer, Cham. [https://doi.org/10.1007/978-3-319-28887-1\\_5](https://doi.org/10.1007/978-3-319-28887-1_5)
- Hamid, F. S. (2013). The effect of reliance on international funding on banking fragility: Evidence from East Asia. *Margin: The Journal of Applied Economic Research*, 7(1), 29- 60. doi:10.1177/0973801012466102.
- Hilgert, M., Hogarth, J., & Beverly, S. (2003). Household financial management: The connection between knowledge and behavior. *Federal Reserve Bulletin*, 309–322.
- K. Chitra, T. Jayashree, Does Demographic Profile Create a Difference in the Investor Behaviour? *The International Journal of Business & Management*, 2 (7), 2014, 24-30.
- Khan, Shadnan, Impact of Financial Literacy, Financial Knowledge, Moderating Role of Risk Perception on Investment Decision (2016). doi.org/10.2139/ssrn.2727890.
- LeBaron, A.B., Kelley, H.H. Financial Socialization: A Decade in Review. *J Fam Econ Iss* 42, 195–206 (2021). <https://doi.org/10.1007/s10834-020-09736-2>
- Machina M (1982) “Expected Utility Analysis without the Independent Axiom” *Econometrics*, 50: 277-323.
- Morris, S., Shin, H.S., (1999), “Risk management with interdependent choice”, *Oxford Review of Economic Policy*, Vol-15, pp-52–62.
- Nofsinger, J. R., & Sias, R. W. (1999). Herding and Feedback Trading by Institutional and Individual Investors. *The Journal of Finance*, LIV(6).
- Nofsinger and Richard, (2002). *Individual investments behaviour*. New York. McGrawHill.
- Pavan, A, Gupta, B (2016) “Does Level of Education / Experience Affects Investors Decision Making”
- Plasman’s, J. E. (1975). Investment behaviour based on micro-production models. *Production investment behaviour*, 34-146. doi:10.1007/978-94-011-7825-9\_2.



- Powell, M. and Ansic, D. (1997) Gender differences in risk behaviour in financial decision making: An experimental analysis, *Journal of Economic Psychology*, 18, pp.605-628.
- Prechter, Robert. (2001). Unconscious Herding Behavior as the Psychological Basis of Financial Market Trends and Patterns. *The Journal of Psychology and Financial Markets*. 2. 120-125. 10.1207/S15327760JPFM0203\_1.
- Rajashekar, H., & P., A. (2016). Factors Influencing Investment Decisions of Retail Investors: A Descriptive Study, *International Journal of Business and Management Invention*, 5(12), 06-09.
- Raut, R. K., & Kumar, R. (2018). Investment decision-making process between different groups of investors: a study of Indian stock market. *Asia-Pacific Journal of Management Research and Innovation*, 14(1-2), 39-49.
- S. Lodhi, Factors Influencing Individual Investor Behaviour: An Empirical study of City Karachi. *The Business Review*, 5(2), 2006,225–232.
- Shim, S., Barber, B. L., Card, N. A., Xiao, J. J., & Serido, J. (2010). Financial socialization of first-year college students: The roles of parents, work, and education. *Journal of Youth and Adolescence*, 39(12), 1457–1470. <https://doi.org/10.1007/s10964-009-9432-x>.
- Sohn, S. H., Joo, S. H., Grable, J. E., Lee, S., & Kim, M. (2012). Adolescents' financial literacy: The role of financial socialization agents, financial experiences, and money attitudes in shaping financial literacy among South Korean youth. *Journal of Adolescence*, 35(4), 969–980.
- S. T. Sultana, & S. Pardhasaradhi, An Empirical Analysis of Factors Influencing Indian Individual Equity Investors Decision Making and Behaviour. *European Journal of Business and Management*, 4(18), 2012, 50–61.
- Sansa, Nuhu A. (2020), The Impact of the COVID-19 on the Financial Markets: Evidence from China and USA. <http://dx.doi.org/10.2139/ssrn.3562530>.
- Shafi, M. (2014). Determinants influencing individual investor behavior in stock market: a cross country research survey. *Nigerian Chapter of Arabian Journal of Business and Management Review*, 62(1100), 1-12.
- Sharma, R., D. (2014). Study of Factors Influencing Investment Decision of Households in Oman, *Unpublished Ph.D. Thesis*, AIHM, Haldwani, Nainital, 1-16.
- Shefrin, H. (1999), *Beyond Greed and Fear*. Harvard Business School Press. Boston.MA.
- Singh, N. P., & Joshi, N. (2019). Investigating gold investment as an inflationary hedge. *Business Perspectives and Research*, 7(1), 30-41.
- Singh, N. P., Makhija, P., & Chacko, E. (2021). Sustainable investment and the COVID-19 effect-volatility analysis of ESG index. *International Journal of Sustainable Economy*, 13(4), 357-368.
- Singh, J., and Yadav, P. (2015). A Study on the Factors Influencing Investors Decision in Investing in Equity Shares in Jaipur and Moradabad with Special Reference to Gender, *Amity Journal of Finance* 1(1), 117-130.
- Slovic, P. (1972). Psychological study of human judgment: Implications for investment decision making. *The Journal of Finance*, 27(4), 779-799. doi:10.1111/j.1540-6261.1972.tb01311.x.
- Soam, B. K., Bhatia, S., & Sharma, K. (2019, October). Optimization of a Multi-Server Stochastic Financial Queue. In *Proceedings of International Conference on Advancements in Computing & Management (ICACM)*.
- Talwar, S., Talwar, M., Tarjanne, V., & Dhir, A. (2021). Why retail investors traded equity during the pandemic? An application of artificial neural networks to examine behavioral biases. *Psychology & Marketing*, 38(11), 2142-2163.
- Umamaheswari, S., Suresh, C. K., & Sampathkumar, S. (2022). An empirical study on effect of financial accounting indicators towards stock market price volatility. *World Review of Science, Technology and Sustainable Development*, 18(1),99-106.
- Wazal, M., S., and Sharma, K. (2017). Participation of Retail Investors in Indian Equity Market, *IOSR Journal of Business and Management*, 19(9), 1-3.
- White, C., & Fan, M. (2006). A review of theory concerning risk and the foreign investment decision. *Risk and Foreign Direct Investment*, 7-22. doi:10.1057/9780230624832\_2.
- Zuckerman, M. and Kuhlman, D. M. (December 2000) Personality and Risk Taking: Common Biosocial Factors, *Journal of Personality*, pp.999-1029.