

---

---

Open Access Article

## PERCEPTION OF INVESTMENT DECISION MAKING AMONG ASPIRING TRADING INVESTORS

**Dr. Hemalatha Ramakrishnan**

Associate Professor, School of Business and Management, Christ (*deemed to be*) University  
Bangalore

**Dr. Ruchi Jain**

Associate Professor, Dept. of Financial Studies, IIS(*deemed to be*) University, Jaipur

**Dr. Anupam Mitra**

Associate Professor, Department of Commerce & Management, St. Xavier's University, Kolkata

**Dr. Lamaan Sami**

Assistant Professor, Department of Commerce, Aligarh Muslim University, Aligarh

**Dr. Pavnesh Kumar**

Department of Management Sciences Mahatma Gandhi Central University Motihari  
Bihar

**Dr. Somanchi Hari Krishna**

Associate Professor, Department of Business Management, Vignana Bharathi Institute of  
Technology, Aushapur Village Ghatkesar Mandal, Medichal Malkajigiri Distt. Telangana

### Abstract

An investment bank is a financial services company or corporate division that engages in advisory-based financial transactions on behalf of individuals, corporations, and governments. Traditionally associated with corporate finance, such a bank might assist in raising financial capital by underwriting or acting as the client's agent in the issuance of securities. An investment bank may also assist companies involved in mergers and acquisitions (M&A) and provide ancillary services such as market making, trading of derivatives and equity securities, and FICC services (fixed income instruments, currencies, and commodities). Most investment banks maintain prime brokerage and asset management departments in conjunction with their investment research businesses. As an industry, it is broken up into the Bulge Bracket (upper tier), Middle Market (mid-level businesses), and boutique market (specialized businesses).

**Keywords:** *investment, banking, market, research, brokerage*

### Introduction

Received: April ,24 , 2022 / Revised: May ,17, 2022 / Accepted: 21, May , 2022 / Published: 14 , June, 2022.

About the authors :Dr. Hemalatha Ramakrishnan

Email:

---

The influence of risk perception on the investment decisions of a prudent investor is an emerging subject in the area of finance literature. Risk is an inherent feature of all types of financial investments. It is the probability that the actual return on an investment will be lower than the expected return.

Perception is the process by which an individual is in search of pre-eminent clarification of sensory information so that the investor can make a final judgment based on their level of expertise and past experience. The concept 'risk perception' means the way in which investors view the risk of financial assets, based on their concerns and experience. Risk perception is the belief, whether rational or irrational, held by an individual, group, or society about the chance of occurrence of a risk or about the extent, magnitude, and timing of its effects is a critical success factor that promotes effective decision-making in risky situations. Complicating the analysis of financial risk is the fact that each investor has his or her own tolerance of risk and perception towards risk. The risk perception of investors is an important factor that influences the investment decisions.

Investment decision generally means the determination made by investors as to where, when, how, and how much funds will be invested on various avenues of financial products/instruments with the objective of generating income or appreciation in value. Here, the concept investment decision is defined as the decision taken by individual investors while investing in various investment avenues. Some finance scholars found out that decisions could be influenced by unavoidable psychological and emotional factors. Better understanding of these factors will help the investors to take an appropriate investment decision and also help them to avoid their repeating mistakes in future in extracting the best financial investment avenue. Usually, the investors are evaluating the risk and return of an investment decisions. The decision making behaviour of an investor is affected by their attitude towards risk. At different levels of perception towards risk, the individual investors think differently about their investment and make decisions differently. Investors take risks according to their interpretation and perception which ultimately affect their behaviour towards risky investment decisions. In this situation, in the present study an attempt is made to examine the influence of risk perception of individual investors on their investments in investment decisions.

### **Need for research**

This study analyses the risk of investors in various investment avenues and their perception towards taking risk. Risks arise out of the fact that returns do not remain constant. Every change in return is a situation of risk for the investor. So, through this study investigator has analysed the relationship between risk and other variables related to perception of investors.

Different people react differently when they perceive risk in a given situation. Their psychological reaction is called attitude. It could be an attempt to avoid the negative fallout of that situation or they may attempt to take advantage of that situation i.e. they may think of exploiting the situation in their own favour. Risk taking attitude could be termed as risk seeking or propensity to take risk and risk avoidance is usually called risk aversion. Weber (2003) stated that risk attitude is a reaction that results from the subjective perception of risk. Some people perceive risk as something enjoyable and then try to take advantage of it by putting themselves in risky situations. They try to enjoy the uncertainty and want to explore what could be the outcome of this uncertain situation. Others may like to avoid such

a situation and they take safe position and thus avoid the risk. Markowitz (1952), in his classical portfolio theory stated that investors are compensated for taking systematic risk. Therefore, risk attitude depends on whether one is interested to increase his returns by taking a certain degree of risk.

### **Purpose of the study**

The purpose of this study is to examine the influence of risk perception on investors' confidence in the various investment avenues and to explain their attitude and trading practice during various market conditions. The study takes into account the demographic factors mainly age and gender as the independent variables (IV) and risk perception, risk tolerance and comfortability in investment as the dependent variable (DV).

### **Literature Review**

After a careful examination of the literature we found that the previous empirical literature was focused on the relationship between risk perception, attitude towards risk and investment decision of individual investors; it is obvious that investment decision largely depends on risk perception and risk attitude.

Yadav Devi Prasad Behera, Dr. Saroj Kumar Sahoo, Prof. (Dr.) Biswajit Satpathy,(2017), factors like fundamentals information, demographic factors, life style characteristics of investors, psychological factors and the risk bearing capacity continuously influence the investors' attitude towards risk. It is suggested that a strong & positive attitude towards risk leads to investment confirmation with more intensity and hence the investors take less time to involve in investment action. On the other hand, if the strength of the attitude is less, then the investment confirmation will be of less intensity, which leads to delayed investment action carried out a research to find out the preferences of the investors and their perception about the risk in the Indian markets. Madhumarthy.(1998). Three classes of investors had been identified based on their risk perception namely, risk seekers, risk bearers and risk avoiders. The result indicated that a majority of the investors were influenced by the operating performance of the companies. The risk perception influenced the investment decisions of the investors and the profit earned by them.

Diacon (2004) presented the results of a detailed comparison of the perceptions by individual consumers and expert financial advisers of the investment risk involved in various UK personal financial services' products. Factor similarity test showed that there were significant differences between expert and lay investors in the way financial risk were perceived. Financial investors were likely to be less loss averse than lay investors, but were prone to affiliation bias, believed that the products were less complex, and were less cyclical and distrustful about the protection provided by the regulators. The traditional response to the finding was that experts and non-experts had different perception and understanding about risk. Veld and Veld-Merkoulova (2008) studied risk perception of individual investors by asking experimental questions to 2,226 members of a consumer panel. Their responses were analysed in order to find which risk measure they implicitly used. They found that most investors implicitly use more than one risk measures. For those investors who systematically perceive risk according to the same risk measure, semi-variance return was most popular. As pointed out by Slovic (2000), 'risk is inherently subjective', context dependent and prone to an assessment process relying on assumptions and judgements. Moreover, people conceptualize risk in a number of

---

ways and may use different risk measures and more than one at the same time. Kaufmann (2013) find that greater risky allocations are associated with decreased risk perception, increased confidence in financial instruments and a lower estimation of the probability of a loss. Dolan (2012) explored the role of 'contexts' in determining people's investment choices. They argue that raising the level of information and education and changing the context, i.e. the environment and the architecture of choices may successfully improve investors' financial capability and change investment habits. Olsen (1997) and Vlaev (2009) used open question method and found that loss of capital, returns below expectation, and economic uncertainty are prevalent associations with investment risk. Other responses are related with perceived knowledge deficits and a feeling of lack of control. their studies, asked financial experts to rate the risks of various types of investments. In addition, participants had to assess various other aspects of the investment situation and the investment product, both economic and psychological features. The results of these two studies are comparable and in line with each other: Quantitative aspects (volatility, probability and magnitude of loss) and qualitative aspects (worry, knowledge) were both significant predictors of perceived risk. In both studies, worry was the predictor with the highest predictive power. These findings are of particular interest since all participants were professionals whose risk judgements were expected to be based on quantitative information only. Since it is known that there are usually differences in the risk perception of experts and laymen, the results of MacGregor et al. (1999) and Koonce et al. (2005) cannot be directly transferred to explain investment risk perception of individual investors. Robert A. Olsen & Constance M. Cox (2010) noted that even with equivalent training, experience and information, investment managers make different decisions based on identifiable cultural differences. It is found that women investors' weight risk attributes, such as possibility of loss and ambiguity, more heavily than their male colleagues. In addition, women tend to emphasize risk reduction more than men in portfolio construction. While gender differences appear to influence perceptions of risk and recommendations to clients, these differences tend to be the most significant for assets and portfolios at risk extremes. D. P.Chandrakala (2014) in her study observed that the most of the women investors are able to take conceptualized moderate rate of risk and they believe Mutual fund investment is a flexible investment done in which they are able to make greater returns at lower rate of risk. In descriptive statistics chi-square test and ANOVA test concludes that the demographic factors are concerned age, income and education, employment have shown significant influence on risk perception on Mutual fund investment. Kahneman and Amos Tversky (1979) originally described "Prospect Theory" and found that individuals were much more distressed by prospective losses than they were happy by equivalent gains. Some economists have concluded that investors typically consider the loss of \$1 twice as painful as the pleasure received from a \$ gain. Many investors do not have data analysis and interpretation skills. This is because, data from the market, supports the merits of index investing, passive investors are more likely to base their investment choices on information from objective or scientific sources. Investor fund selection behaviour influences marketing decisions of fund management and has captured the attention of researchers. Sitkin and Pablo (1992), defined risk perception as risk assessment in uncertainty and it depends on the familiarity with organizational and management system. The authors also developed a model of determinants of risk behaviour and identified personal

risk preferences and past experiences are the important risk factors and social influence also affects the individual's perception. Rajarajan V (2000) had conducted a study on the title of "Investors life styles and investment character". The study reveals that active investors are dominated by the age group below 35 years, individuals group by above 50 years and passive investors by the age group of 35 to 50 years. Active investors group and passive investors group have short term perspective while making their investment decision. Most of the investors read two or more sources of information to make investment decisions and most of them tend to make investment decisions on their own. Singh and Vanita (2002) have examined the investors' preferences and perception towards MF investments by conducting a survey of 150 respondents in the city of Delhi. The findings of the study were that the investors' preferred to invest in public sector MFs with an investment objective of getting tax exemptions and stayed invested for a period of 3-5 years and the investors evaluated past performance. The study further concludes by stating that majority of the investors were dissatisfied with the performance of their MFs and belonged to the category who held growth schemes. Ranganayaki N (2003) has concluded a study on the title of "investor's perception towards investment with special to women investors." A sample of 100 respondents in Sullur and adjoining areas was taken. It is concluded that recurring deposit and post office savings are most preferable investment avenues in the banking sector. It may be due to safety, liquidity and also for the benefits. Whenever, one thinks of women and investment the first thing that comes to mind is gold and Jewellery. But now-a-day's women are disproving the above said belief. Susan Coleman (2003) examined and compared the attitude towards risk and holding of risky assets of black, white and Hispanic households using data from the 1998 survey of Consumer Finances. The result shows that Hispanic heads of household were more risk averse and they are unwilling to take any risk in exchange for investment returns. Black and white households are not more risk averse even though there is different asset mix. The study has also found that women and older heads of household express a higher degree of risk aversion and hold a lower percentage of risky assets. Similarly, it is found that more highly educated individuals and wealthier heads of households express a lower degree of risk aversion and hold a higher percentage of risky assets. Shylajan C. S. and Sushama Marathe (2006) in their research article "A study of attitudes and trading behaviour of stock market investors", identify the major factors responsible for determining the attitudes and trading behaviour of stock market investors. Based on their shared investing attitude and behaviour, the stock market investors are classified into two categories i.e. aggressive investors and non-aggressive investors. Kavitha M (2006) discussed that investors in Coimbatore city are aware of the various investment opportunities. They are also aware that no investment can be made without risk. Each and every investment has its own risk, even the more Secured investment like bank deposits, land, gold, and silver etc. Investments made in land and buildings, gold etc. has comparative value in long run. The private sector investments consists of equity shares and preference shares, debentures and public deposits with companies, the predominance of Govt. sector serves the purpose of bringing about confidence to the individual investors. Jayanthi B (2006) conducted a study entitled "A study on customer perception towards UTI mutual fund" with special reference to Karvy Stock Broking Limited. The study was undertaken to know the perception of the customers towards UTI mutual fund and thereby improve the efficiency of UTI. The study revealed that the investors have greatest

---

preference for capital appreciation. The level of awareness about UTI mutual fund schemes can be enhanced through the efforts of the company. Since many investors are not sure of investing again in UTI mutual fund, the company should take efforts to make them invest again. The statistical analysis of data has given insight into investor demographics and their investment preference. UTI mutual fund has its own brand name and thereby it must improve its operations through its performance and service. Geethanjali (2006) conducted a study entitled “Investors awareness towards commodity market” in Erode with special reference to Karvy Stock Broking Limited. The study is made to find out the investors knowledge towards commodity market. The expectations of the investors are quite high. Many expect high rate of return for further investment through commodity market. The study also examines the phenomenal growth in commodity market which is ten times greater than the share market. The study reveals that commodity market is in a nascent stage in Erode. The investment avenues of individual investors depend mainly on annual income and risk taking capacity. The investors in Erode are not much aware of commodity market so proper awareness program should be conducted to improve the awareness level of investors. Devasena S (2006) made an attempt to find out “Risk perception and portfolio management of equity investors”. The study reveals that the investors in Tirupur are not aware of portfolio which would minimize risk and maximize the return. And also it is clear that the investors in Tirupur, have low level of understanding about risk and the importance of portfolio management as they are not aware of the portfolio management. Proper steps need to be taken in order to improve the awareness level in the minds of the investors. Desigan (2006) conducted a study on women investor’s perception towards investment and found that women investor’s basically are indecisive in investing in MFs due to various reasons like lack of knowledge about the investment protection and their various investment procedures, market fluctuations, various risks associated with investment, assessment of investment and redressal of grievances regarding their various investment related problems. Ayyappan S (2009) made an attempt to analyse investor’s satisfaction and their awareness. On the basis of the results of the study, he has made some definite suggestions like taking good decision while investment, carefully selecting proper avenues, to compare the performance of return and investors could easily receive updated information for the further development of investment. It hopes that, the awareness of investors will be raised to a considerable extent if all the suggestions are implemented. Walia and Kiran (2009) conducted a research on investors’ risk perception towards the mutual fund services. In this study they identified investor’s expectations and parameters that caused dissatisfaction. In this study innovation of mutual funds portfolio are also highlighted that these innovations should be according to investors’ expectations. Major finding of this study is that investors want innovative products and want to add quality in existing services. Sanjay Das (2010) in his study reveals that the investors’ perception is dependent on the demographic profile and assesses that the investor’s age, marital status and occupation has direct impact on the investors’ choice of investment. The study further reveals that female segment is not fully tapped and even there is low target on higher income group people. Hence, fund managers should take steps to tap the female segment and higher income group segment to enhance more investment in MF Investment Avenue which would really help the industry to flourish. Further, the findings of the research were on the factors influencing Investor’s perception on public private MF’s. It reveals that

liquidity, flexibility, tax savings, service quality and transparency etc. are the factors which have a higher impact on perception of investors. These factors give them the required boosting in the investment process. Therefore, it becomes imperative on the part of fund managers to enhance these features for attracting more investors and also to retain the trust, the investors have in them. Lakshmana Rao (2011) stated in his study on “Analysis of investors’ perceptions towards mutual fund schemes (with reference to awareness and adoption of personal and family considerations)” that Investors between 31 to 40 years of age have highest awareness and adoption of different mutual fund schemes. It is also concluded that there is an association between respondents’ residential status and awareness of balanced fund and debt fund schemes. Rao (2011) conducted a study on “Analysis of individual investor behaviour towards Mutual Fund Scheme”. In this study author presents mutual fund investor awareness and adoption of different schemes with educational level. The research findings showed that with increased level of education is linked with greater risk tolerance. This tends to support the hypothesis developed in previous researches i.e. positive relationship exists between educational attainment and financial risk tolerance. Kousalya P R and Gurusamy P (2012) observed in their study on ‘Women Investors’ Perception towards Investments’ that there is no significant relationship between age of the women investors and level of awareness on investment. They have also concluded that the educational level of women investors does not influence the level of awareness. The nine factors namely security, risk tolerance, lucrative return, investment duration, periodic return, share preference, long-term investment, futuristic return and investment dynamics influenced the investor’s perception. The author conclude that investors compared their returns and calculate the inverse proportionality between time and the return. Among these factors, the futuristic goals of equity investors are considered as an important factor for estimating their level of satisfaction. Muruganandam (2016) examined the evidence that investor’s intention and investor’s perception towards risk and return on investment shares in an organization, their portfolio constructions and the strategies of portfolio management. He suggested that successful company’s must thoroughly understand psychology of the investors, revealed that proper diversification of portfolio would make sure the investors to get higher return, higher salary and high liquidity with least risk.

### **Research Methodology**

Research methodology refers to the design of the study method and processes by which data is gathered for a research project. It includes the blueprint for the collection, measurement, and analysis of data to achieve the objectives of a research project. Here the researcher explicitly defines the operational definitions of the concepts used in the research. In the research methodology the researcher is required to mention the method of data collection, which can either be primary data or secondary data. This chapter also discusses the selection of population, data collection and the analysis to be made.

### **Objectives of the study**

- To analyse the influence of risk perception of individual investors on their investment decisions making sequence.

- To find whether there exists a relation between the demographic factors and risk taking behaviour of the investors.

## **Hypothesis**

### **Hypothesis 1:**

Ho: There is no significant relationship between gender and associating risk with opportunity.

H1: There is a significant relationship between gender and associating risk with opportunity.

### **Hypothesis 2:**

Ho: There is no significant relationship between age and allocation of fund for trading.

H1: There is a significant relationship between age and allocation of fund for trading.

### **Hypothesis 3:**

Ho: There is no significant relationship between age and disturbance factors while investing.

H1: There is a significant relationship between age and disturbance factors while investing.

### **Hypothesis 4:**

Ho: There is no significant relationship between Knowledge of Investment and Alignment in the Allocation of fund, time period and returns.

H1: There is a significant relationship between Knowledge of Investment and Alignment in the Allocation of fund, time period and returns.

### **Hypothesis 5:**

Ho: There is no significant relationship between trading experience and trading practice.

H1: There is a significant relationship between trading experience and trading practice.

### **Hypothesis 6:**

Ho: There is no significant relationship between age and high risk/high returns trading practice.

H1: There is a significant relationship between age and high risk/high returns trading practice.

### **Hypothesis 7:**

Ho: There is no significant relationship between trading experience and quality of investment.

H1: There is significant relationship between trading experience and quality of investment.

### **Hypothesis 8:**

Ho: There is no significant relationship between current status of income and allocation of fund for trading.

H1: There is a significant relationship between current status of income and allocation of fund for trading.

## **Methodology**

Primary data were collected from 85 individual investors mainly young generation from known referrals in south region, India. In order to achieve the objective of the study, a well-structured questionnaire was developed and used for collecting primary data. The questionnaire developed for collecting primary data was administered to the respondents and their responses were collected through filled up questionnaire. In the present study, the reliability of the scale of measurement was assessed

by using Cronbach Alpha coefficient, which was above the minimum acceptable level, 0.647 there by confirmed the reliability of the scale of measurement. The statistical tool used for the study is SPSS from which Reliability Test, Factor Analysis Test, Chi Square Test, Regression and Correlation were chosen with SPSS software application.

### **Limitations of the study**

Following are the limitations of the study.

- The study is conducted with 85 samples and it cannot be generalized.
- The interpretations of the study is based on the assumption that respondents have given the correct information.
- The respondents may be reluctant to provide information about their investment plans.
- Respondents may be unaware of the various investment avenues and market.
- Statistical tools may not guarantee 100% accuracy.

### **Analysis and Interpretation**

The concept of 'risk perception of individual investors' is operationally defined here as their beliefs, feelings, concerns, experiences and judgements about these factors. In order to measure the risk perception of individual investors twenty statements were developed based on these factors and the opinions of the respondents were measured.

#### **Reliability test using cronbach's alpha**

Cronbach's alpha is a measure of internal consistency, that is, how closely related a set of items are as a group. It is considered to be a measure of reliability. Reliability statistics provides the actual value for Cronbach's Alpha, as shown below:

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.647	.355	19

### **Inference**

From the above table it is found that Cronbach's Alpha is 0.647 which indicates a good internal consistency for the scale with the specific samples. In this study, a questionnaire was sent out to study the risk perception of investors in the investment decision making. A high reliability means it measures the risk perception and low reliability means it measures something else.

### **Factor analysis**

Factor analysis is a technique that is used to reduce a large number of variables into fewer numbers of factors. This technique extracts maximum common variance from all variables and puts them into a common score. As an index of all variables, we can use this score for further analysis.

#### Kaiser-Meyer-Olkin (Kmo) and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.588
Bartlett's Test of Sphericity	Approx. Chi-Square
	Df
	Sig.
	350.880
	153
	.000

#### Inference

KMO test is a measure of how suited your data is for Factor Analysis. It measures sampling adequacy for each variable in the model. In this study, the KMO value is 0.588 which is close to 0.6 which tells that there is a good sampling adequacy which determines that the responses given with the sample are adequate. Therefore a satisfactory factor analysis can be proceeded.

Bartlett's test is another indication of the strength of the relationship among variables. From the same table, it is found that the Bartlett's Test of Sphericity is significant (0.012). This is significant (less than .05), indicating that the correlation matrix is significantly different from an identity matrix, in which correlations between variables are all zero. This means that the variables are correlated highly enough to provide a reasonable basis for factor analysis as in this case.

#### Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.610	20.058	20.058	3.610	20.058	20.058
2	1.842	10.235	30.293	1.842	10.235	30.293
3	1.623	9.015	39.307	1.623	9.015	39.307
4	1.431	7.951	47.259	1.431	7.951	47.259
5	1.276	7.090	54.348	1.276	7.090	54.348
6	1.114	6.186	60.535	1.114	6.186	60.535
7	1.009	5.605	66.140	1.009	5.605	66.140
8	.908	5.042	71.182			
9	.887	4.926	76.108			
10	.799	4.441	80.549			
11	.705	3.915	84.464			
12	.612	3.398	87.862			

13	.525	2.919	90.782
14	.459	2.553	93.334
15	.392	2.178	95.512
16	.336	1.864	97.376
17	.274	1.521	98.897
18	.198	1.103	100.000

### Inference

Total Variance Explained table determines the number of significant factors. From the above table, it is interpreted that the total of the Eigenvalues refer to the variance accounted for, in terms of the number of items. So, Factor 1 explains almost as much variance as in the items.

Percent of variance in the above table determines the Percent of covariation among items accounted for by each factor before and after rotation. It is also found that 66.14% variation of output can be explained with the help of the 7 components.

### Chi square Test analysis of Gender and Association of 'risk' with the idea of 'opportunity'

Ho: There is no significant relationship between gender and associating risk with opportunity.

H1: There is a significant relationship between gender and associating risk with opportunity.

### Cross tabulation

			associate the word 'risk' with the idea of 'opportunity'		Total
			0	1	
2. Gender	0	Count	40	7	47
		Expected Count	40.9	6.1	47.0
		Residual	-.9	.9	
	1	Count	34	4	38
		Expected Count	33.1	4.9	38.0
		Residual	.9	-.9	
		Count	74	11	85
Total	Expected Count	74.0	11.0	85.0	

### Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.356	1	.551		
Continuity Correction	.074	1	.786		
Likelihood Ratio	.361	1	.548		
Fishers Exact Test				.747	.397
Linear by-Linear Association	.352	1	.553		
N of Valid Cases	85				

- The key result in the Chi-Square Tests table is the Pearson Chi-Square:
- The value of the test statistic is 0.356
- The corresponding p-value of the test statistic is  $p = 0.397$

### Inference

Since the p-value is greater than the chosen significance level ( $\alpha = 0.05$ ), the null hypothesis is not rejected. Rather, it is concluded that there is not enough evidence to suggest an association between gender and association of the word risk with the idea of opportunity.

### Chi square Test analysis of Age and Allocation of fund for trading in a month.

Ho: There is no significant relationship between age and allocation of fund for trading.

H1: There is a significant relationship between age and allocation of fund for trading.

### Cross tabulation

		Allocation of fund for trading in a month			Total	
		0	1	2		
	Count	54	9	5	78.0	
	0	Expected Count	54.1	19.3	4.6	
		Residual	-.1	-.3	.4	
		Count	4	1	0	5

Age	1	Expected Count	3.5	1.2	.3	5.0
		Residual	.5	-.2	-.3	
		Count	1	1	0	2
	3	Expected Count	1.4	.5	.1	2.0
		Residual	-.4	.5	-.1	
		Count	59	21	5	85
Total		Expected Count	59.0	21.0	5.0	85.0

### Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.205	4	.877
Likelihood Ratio	1.507	4	.825
Linear by-Linear Association	.000	1	.997
N of Valid Cases	85		

- 7 cells (77.8%) have expected count less than 5. The minimum expected count is .12.
- The key result in the Chi-Square Tests table is the Pearson Chi-Square:
- The value of the test statistic is 1.205
- The corresponding p-value of the test statistic is  $p = 0.877$

### Inference

Since the p-value is greater than the chosen significance level ( $\alpha = 0.05$ ), the null hypothesis is not rejected. Rather, it is concluded that there is not enough evidence to suggest an association between age and allocation of fund for trading in a month.

### Chi square Test analysis of Age and Disturbance Factors while investing.

Ho: There is no significant relationship between age and disturbance factors while investing.

H1: There is a significant relationship between age and disturbance factors while investing.

### Cross tabulation

			Is trading limited to you			Total
			0	1	2	
		Count	9	37	32	78
	0	Expected Count	10.1	36.7	31.2	78.0
		Residual	-1.1	.3	.8	
		Count	2	2	1	5
Age	1	Expected Count	.6	2.4	2.0	5.0
		Residual	1.4	-.4	-1.0	
		Count	0	1	1	2
	3	Expected Count	.3	.9	.8	2.0
		Residual	-.3	.1	.2	
		Count	11	40	34	85
Total		Expected Count	11.0	40.0	34.0	85.0

### Chi Square Test

	Value	df	Asymp..Sig.(2 sided)
Pearson Chi-Square	3.836	4	.429
Likelihood Ratio	3.191	4	.526
Linear-by-Linear Association	.096	1	.757
N of Valid Cases	85	1	

a. 6 cells (66.7%) have expected count less than 5. The minimum expected count is .26.

- The key result in the Chi-Square Tests table in the Pearson Chi-Square:
- The value of the test statistic is 3.836
- The corresponding p-value of the test statistic is  $p = 0.429$

### Inference

Since the p-value is greater than the chosen significance level ( $\alpha = 0.05$ ), the null hypothesis is not rejected. Rather, it is concluded that there is not enough evidence to suggest an association between age and disturbance factors while investing.

**Chi square Test analysis of Knowledge of Investment and Alignment in the Allocation of fund, time period and returns.**

Ho: There is no significant relationship between Knowledge of Investment and Alignment in the Allocation of fund, time period and returns.

H1: There is a significant relationship between Knowledge of Investment and Alignment in the Allocation of fund, time period and returns.

Cross tabulation

			11. Is allocation of fund, time period and return aligned with your plan?		Total
			0	1	
8. I would describe my knowledge of investment as:	0	Count	1	10	11
		Expected Count	6.9	4.1	11.0
		Residual	-5.9	5.9	
	1	Count	34	22	56
		Expected Count	34.9	21.1	56.0
		Residual	-.9	.9	
	2	Count	17	0	17
		Expected Count	10.6	6.4	17.0
		Residual	6.4	-6.4	
	3	Count	1	0	1
		Expected Count	.6	.4	1.0
		Residual	.4	-.4	
Total	Count	53	32	85	
	Expected Count	53.0	32.0	85.0	

### Chi Square Test

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	24.226 <sup>a</sup>	3	.000
Likelihood Ratio	30.850	3	.000
Linear-by-Linear Association	22.811	1	.000
N of Valid Cases	85		

- The key result in the Chi-Square Tests table in the Pearson Chi-Square:
- The value of the test statistic is 24.226
- The corresponding p-value of the test statistic is  $p = 0.0003$

### Inference

Since the p-value is lesser than the chosen significance level ( $\alpha = 0.05$ ), the null hypothesis is rejected. Rather, it is concluded that there is enough evidence to suggest an association between knowledge of investment and alignment with allocation of fund, time period and return.

### Logistic Regression

Logistic regression is applicable when the dependent variable is not continuous or scale variable but are binary variables; it takes one of the two values.

#### Variables in the Equation

	B	S.E	Wald	df	sig	Exp(B)	95% C.I. for Exp(B)	
							Lower	Upper
Age	.298	.850	.123	1	.726	1.347	.254	7.132
Gender	-.868	.730	1.412	1	.235	.420	.100	1.757
Allocation of fund for trading in a month	.523	.664	.620	1	.431	1.687	.459	6.202
I feel comfortable about investing in stock market	2.580	.934	7.634	1	.006	13.203	2.117	82.346
Constant	-3.321	.941	12.463	1	.000	.036		

This table shows the relationship between explanatory variable and response variable. The regression function can also be derived from this table.  $y$  (association of risk with opportunity) =  $-3.321 + 0.298$  (age) -  $0.868$  (gender) +  $0.523$  (fund) +  $2.580$  (comfort ability)

It can be inferred from the table, except for gender all other variables are significant

#### Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	54.348a	.123	.229

a. Estimation terminated at iteration number 6 because parameter estimates changed by less than .001.

Model Summary table gives the values for two pseudo  $R^2$  values which try to measure something similar. From the table above, it is concluded that between 12.3% to 30% variation in associating risk with opportunity can be explained by this logistic model.

#### Hosmer and Lemeshow Test

	Chi-Square	df	Si

Step			
1	6.742	6	.345

The test assesses whether or not the observed event rates match expected event rates in subgroups of the model population. The goodness of fit suggests the model is a good fit to the data as  $p=0.345$  ( $>.05$ ). However the chi-squared statistic on which it is based is very dependent on sample size so the value cannot be interpreted in isolation from the size of the sample.

Step 1	Observed	Predicted		
		associate the word 'risk' with the idea of 'opportunity'		Percentage Correct
		0	1	
	associate the word 'risk' with the idea of 'opportunity'	74	0	100
		11	0	.0
	Overall Percentage			87.1

a. The cut value is .500

This table is based on the model that includes the explanatory variables. The model is classifying the outcome for 87.1% of the cases.

### Correlation

#### Correlation analysis to test the relationship between trading experience and practices.

Ho: There is no significant relationship between trading experience and trading practice.

H1: There is a significant relationship between trading experience and trading practice.

		How long have you been trading with stocks? (Years)	When the market goes down, I tend to sell some of my riskier investments and put the money in safer investments
How long have you been	Pearson Correlation	1	-.145

trading with stocks? (Years)			
	Sig. (2-tailed)		.186
	N	85	85
	Pearson Correlation	-.145	1
When the market goes down, I tend to sell some of my riskier investments and put the money in safer investments.	Sig. (2-tailed)  N	.186  85	  85

### Inference

Correlation of trading experience and trading practice  $r = -0.145$ , based on  $n = 85$  observations with pairwise non missing values. The correlations in the *main diagonal* are all equal to 1. This is because a variable is always perfectly correlated with itself. It is found that the Pearson correlation coefficient for trading experience and trading practice is  $-0.145$ , which implies it is negatively correlated. Therefore it means that as the number of years of trading experience increases, the tendency to sell the risky assets decreases which proves that both the factors are inversely proportional. In this case, null hypothesis is rejected and there is a significant relationship between trading experience and trading practice.

### Correlation analysis to test the relationship between age and high risk/high returns trading practice.

Ho: There is no significant relationship between age and high risk/high returns trading practice.

H1: There is a significant relationship between age and high risk/high returns trading practice.

		Age	Has high risk/high returns given an experience of excitement to raise the fund allocation in trading practice
Age	Pearson Correlation	1	-.075
	Sig. (2-tailed)		,495
	N	85	85
Has high risk/high returns given an experience of excitement to raise the fund allocation in trading practice	Pearson Correlation	-.075	1
	Sig. (2-tailed)	,495	
	N	85	85

### Inference

Correlation of age and high risk/high returns trading practice  $r = -0.075$  on  $n = 85$  observations with pairwise non-missing values. The correlations in the *main diagonal* are all equal to 1. This is because a variable is always perfectly correlated with itself. It is found that the Pearson correlation coefficient for age and high risk/high returns trading practice  $r = 0.075$ , which implies it is negatively correlated. Therefore, it means that as the days of funding practice increases, the high risk/high returns trading practice decreases which proves that both the factors are inversely proportional. In this case, null hypothesis is rejected and there is a significant relationship between age and high risk/high returns trading practice.

### Correlation analysis to test the relationship between trading experience and quality of investment.

Ho: There is no significant relationship between trading experience and quality of investment.

H1: There is significant relationship between trading experience and quality of investment

		How long have you been trading with stocks? (Years)	In investment decision making sequence, much of my concern is to identify for
	Pearson Correlation	1	-.154

How long have you been trading with stocks? (Years)	Sig. (2-tailed)		.160
	N	85	85
In investment decision making sequence, much of my concern is to identify for	Pearson Correlation	-.154	1
	Sig. (2-tailed)	.160	
	N	85	85

### Inference

Correlation of trading experience and quality of investment  $r = -0.154$  on  $n = 85$  observations with pairwise non-missing values. The correlations in the *main diagonal* are all equal to 1. This is because a variable is always perfectly correlated with itself. It is found that the Pearson correlation coefficient for trading experience and quality of investment  $r = -0.154$ , which implies it is negatively correlated. Therefore it means that the number of years of experience in trading does not matter while choosing the best quality investment as they are negatively correlated. In this case, null hypothesis is accepted and there is no significant relationship between trading experience and quality of investment.

### Correlation analysis to test the relationship between current status of income and allocation of fund for trading.

Ho: There is no significant relationship between current status of income and allocation of fund for trading.

H1: There is a significant relationship between current status of income and allocation of fund for trading.

		Current status of income:	Allocation of fund for trading in a month
Current status of income:	Pearson Correlation	1	.028

	Sig. (2-tailed)		.789
	N	85	85
Allocation of fund for trading in a month	Pearson Correlation	.028	1
	Sig. (2-tailed)	.798	
	N	85	85

### Inference:

Correlation of current status of income and allocation of fund for trading  $r = 0.028$  on  $n = 85$  observations with pairwise non-missing values. The correlations in the *main diagonal* are all equal to 1. This is because a variable is always perfectly correlated with itself.

It is found that the Pearson correlation coefficient for income and allocation of fund for trading  $r = 0.028$ , which implies it is negatively correlated. Therefore it means that the current status of income and allocation of fund for trading does not have significance to each other.

In this case, null hypothesis is rejected and there is significant relationship between the current status of income and allocation of fund for trading.

### Findings

In this present study the questionnaire was framed into three sections and the collected data consists of demographic information, knowledge and comfortability in investing, and investment behaviour during various market conditions. The results emanated from the analysis of the data collected from 85 respondents. Various statistical techniques were used to analyze the surveyed data for the study. Firstly, Cronbach's alpha was measured for internal consistency, which is, how closely related a set of items are as a group. It is considered to be a measure of reliability. Factor analysis, the principal component method is applied and the 27 variables are deduced into 8 predominant factors.

- Maximum number of respondents were in the age group of 20-30 years (91.8%)
- Out of the 85 respondents 47 (55.3%) were male and 38 respondents (44.7%) are female.
- Out of the 85 respondents 61 (71.8%) are investors
- More than half of the respondents do not feel comfortable in investing.
- 66% of the respondents have limited knowledge about investment.
- Unavailability of fund acts as a major disturbance factor for investment.
- There is no significant relationship between gender and associating risk with opportunity.

- 
- There is no significant relationship between age and allocation of fund for trading.
  - There is no significant relationship between age and disturbance factors while investing.
  - There is a significant relationship between Knowledge of Investment and Alignment in the allocation of fund, time period and returns.
  - There is a significant relationship between trading experience and trading practice.
  - There is a significant relationship between age and high risk/high returns trading practice.
  - There is no significant relationship between trading experience and quality of investment.
  - There is a significant relationship between current status of income and allocation of fund for trading.

### **Conclusion**

A sample group of 85 randomly selected respondents who are individual investors within the country were studied with the help of a structure questionnaire. Analysis of the responses from this population was done and the results were tested. The study was tested by performing Reliability Test, factor Analysis Test, Chi Square, Regression and Correlation in order to arrive at whether the dependent and independent variables have significance relation to one another. The test has shown that there is no significant relationship between age and risk perception, there is no significant relationship between age and allocation of fund for trading, and there is no significant relationship between age and disturbance factors while investing. The study has also concluded that there is a significant relationship between age and high risk/high returns trading practice, there is a significant relationship between trading experience and trading practice and here is a significant relationship between current status of income and allocation of fund for trading.

### **Suggestions**

The following suggestions emanate from the findings of the study. Investment is undertaken in the expectation of a return which is in proportion to the risk the investor assumes. Several investment opportunities are available to an investor and in many combinations. However, the returns offered by them vary depending upon their nature and qualitative features.

- Investment risk must be minimized which will increase the investment of aged people.
- Awareness of various investment avenues must be made to the retail investors with their relative merits and demerits.
- Investors must be educated about the various avenues of investment.
- Investor knowledge regarding online investments can be improved by providing subsequent SMS/mail updates.
- The transparency must be made about the companies and their performance so that the investors can decide their investment on suitable shares.

- More training is needed for the investors to make investments in various avenues. They must go for consultation before investing.
- The procedural formalities regarding certain investments must be reduced.
- Investors should concentrate on medium term investments rather than long term and short term.
- Strategies must be employed to encourage women investors. Awareness programmes has to conducted in all institutions..

### Scope for further study

Investment analysis and investors risk perception is a wider area. The research activities in investment is never ending process. Investor risk perception research work can be extended to online trading, micro finance, and investment analysis in various industries. Investor risk perception research are not only limited to individual investors, but also to institutional investors, FDI, investor protection, investment analysis in banks, hotel industries, cement industries, textile industries. Hence separate study could be undertaken in these areas. A study could be undertaken on how retired persons have investment risk perception and businessman have the investment pattern, behaviour and risk perception which could bring startling results.

### References

- Ayyappan S (2009), Mutual fund investor's awareness –A study with special reference to Coimbatore Dist. Unpublished Ph.D. Thesis.
- Behrman, J. R., Kohler, H., & Watkins, S. C. (2003). Social Networks, HIV/AIDS and Risk Perceptions. *SSRN Electronic Journal*. doi:10.2139/ssrn.382844
- Chandrakala, D. (2014). (n.d.). An Empirical Analysis of Risk Perception towards Mutual Funds – A Study on Women Investors in Bengaluru. *The Accounting Review*.
- C Gnana Desigan , S. Kalaiselvi , L. Anusuya,(2012) Women Investors' Perception Towards Investment-An Empirical Study, *Indian Journal of marketing*,
- Volume 36, Issue 4,
- Desigan et al. (2006), “Women Investor's Perception towards Investment: An empirical Study”, *Indian Journal of Marketing*. Retrieved from: <http://www.google.com>. (accessed on 22nd May 2010).
- Devasena S (2006), Risk Perception and Portfolio Management of Equity Investors in KARVY Stock Broking Limited, Tirupur
- DP, C., & Narayanarao, S. (2016). An Empirical Analysis on Risk Perception towards Mutual Funds a Study on Women Investors in Bengaluru (with Reference to Share Khan). *SSRN Electronic Journal*. doi:10.2139/ssrn.3068642
- Dr. Sindhu K. P and Dr. S. Rajitha Kumar,(2014) Influence of Risk Perception of Investors on Investment Decisions: An Empirical Analysis, *Journal of Finance and Bank Management* June 2014, Vol. 2, No. 2, pp. 15-25
- Geethanjali (2006), “Investors awareness towards commodity market” in Erode with special reference to Karvy Stock Broking Limited.

- 
- Jayanthi B (2006), A Study on Customer Perception towards UTI Mutual fund for Karvy
    - Stock Broking Limited, Coonoor, Master of Business Administration
  - Kavitha M ( 2006), A study on investment opportunities and investors preference in
    - Coimbatore city, Unpublished M.Phil dissertation submitted to Salem Sowdeshwari
    - College, Salem.
  - K.Lakshmana Rao,(2011) Analysis of Investors Perceptions towards mutual fund schemes International Journal of Multidisciplinary Research, Vol.1 Issue 8, December , ISSN 2231 5780
  - Kahneman, D., & Tversky, A. (1977). Prospect Theory. An Analysis of Decision Making Under Risk. doi:10.21236/ada045771
  - Kaufmann, C., Weber, M., & Haisley, E. (2013). The Role of Experience Sampling and Graphical Displays on One's Investment Risk Appetite. *Management Science*, 59(2), 323-340. doi:10.1287/mnsc.1120.1607
  - Keller, L., & Gollwitzer, P. M. (2017). Mindsets Affect Risk Perception and Risk-Taking Behavior. *Social Psychology*, 48(3), 135-147. doi:10.1027/1864-9335/a000304
  - Koonce, L., McAnally, M. L., & Mercer, M. (2005). How Do Investors Judge the Risk of Financial Items? *The Accounting Review*, 80(1), 221-241. doi:10.2308/accr.2005.80.1.221
  - Madhumarathi, R. (1998). Risk Perception of Investors . In Madhusoodanan, Indian Capital
    - Markets Theories and Empirical Evidences. Mumbai: Quest Publications
  - Muruganandam, s. (2016). Perception towards risks and returns on investment on shares.
    - World wide journals .
  - Nidhi Walia, Ravi Kiran (2009), An Analysis of Investor's Risk Perception towards Mutual Funds Services, International Journal of Business Management, Vol.4.No.5,May
  - Olsen, R. A., & Cox, C. M. (2001). The Influence of Gender on the Perception and Response to Investment Risk: The Case of Professional Investors. *Journal of Psychology and Financial Markets*, 2(1), 29-36. doi:10.1207/s15327760jpfm0201\_3
  - P. R. Kousalya P. R. Kousalya(2012), Women Investors' Perception Towards Investments,
    - June ,International Journal of Scientific Research 1(6):80
    - 81,DOI: 10.15373/22778179/NOV2012/30
  - Rao (2011), Analysis of Individual Investors' Behaviour Towards Mutual Fund Schemes (A
    - Study on Awareness And Adoption of Educational Levels - Journal Of Banking
    - Financial Services & Insurance Research, Vol. 1, Issue 7.
  - Ranganayaki N (2003), Investors perception towards investment with special reference to women investors, Unpublished thesis.
  - Rajarajan V (2000), "Investors life styles and investment character", unpublished thesis.
  - Sanjay Kanti Das,(2012) Semi Urban Investors Attitude and Preferences in Mutual Funds investment: a case study of Nagaon districts of Assam ,International
  - Journal of Marketing, Financial Services & Management Research Vol.1 Issue

- 
- 9, September 2012, ISSN 2277 3622
  - Shylajan C and Sushama Marathe,(2006), A Study of Attitudes and Trading behavior of stock market investors, The IUP Journal of Financial Economics, 2006, vol. IV, issue 3, 54-68
  - Stephen Diacon, (2004) "Investment risk perceptions: Do consumers and advisers agree?", International Journal of Bank Marketing, Vol. 22 Issue: 3, pp.180-199, <https://doi.org/10.1108/02652320410530304>
  - Sitkin, S. B., & Pablo, A. L. (1992). Re-conceptualizing the Determinants of Risk Behavior. *The Academy of Management Review*, 17(1), 9. doi:10.2307/258646
  - Slovic, P. (2016). The Perception of Risk. doi:10.4324/9781315661773
  - Singh, Y.P., and Vanita (2002), "Mutual Fund Investors' Perceptions and Preferences-A Survey", The Indian Journal of Commerce, Vol. 55, No. 3, 8-20.
  - Walia,N and Kiran R (2009), "An analysis of investor"s risk perception towards Mutual Funds services". *International Journal of Business and Management*", Vol. 4, Issue 5, pp. 106
  - Yadav Devi Prasad Behera, Dr. Saroj Kumar Sahoo, Prof. (Dr.) Biswajit Satpathy,(2017)
  - *International Journal of Business Economics and Management Research*,Vol.8,Issue 7, July, ISSN: (2229-4848)