MUTUAL FUND AS AN INVESTMENT AVENUE AMONG THE RETAIL INVESTORS OF KERALA

Thesis submitted to the

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for the Award of the Degree of

DOCTOR OF PHILOSOPHY IN MANAGEMENT

By

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DECLARATION

I, Siby Joseph. K, do hereby declare that the thesis entitled "**Mutual Fund as an Investment Avenue among the Retail Investors of Kerala**" is a bonafide record of research work done by me under the supervision of Dr. M. A. Joseph, Associate Professor, Department of Commerce and Management Studies, University of Calicut. I further declare that no part of this thesis has been presented before for the award of any degree, diploma or other similar title of recognition.

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CERTIFICATE

This is to certify that the thesis entitled **"Mutual Fund as an Investment Avenue among the Retail Investors of Kerala"** is a bonafide record of research work carried out by Mr. Siby Joseph. K under my supervision and guidance for the award of Ph.D Degree of the University of Calicut and no part of this thesis has been presented before for the award of any degree, diploma or other similar title of recognition.

He is permitted to submit the thesis to the University.

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Dr. M. A. Joseph
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CONTENTS

List of Tables

List of Figures

Abbreviations

AIF	Alternative Investment Fund
AMC	Asset Management Company
AMFI	Association of Mutual Fund in India
AuM	Assets under Management
CAGR	Compound Annual Growth Rate
ELSS	Equity Linked Savings Schemes
ETFs	Exchange Traded Funds
FATF	Financial Action Task Force
FMPs	Fixed Maturity Plans
FOFs	Fund of Funds
GDP	Gross Domestic Ratio
GETFs	Gold Exchange Traded Funds
GIC	General Insurance Corporation of India.
INR	Indian Rupee
IPOs	Initial Public Offerings
LIC	Life Insurance Corporation of India
MFs	Mutual Funds
NAV	Net Assets Value
NBFC	Non Banking Finance Company
PoS	Point of Service
QFI	Qualified Foreign Investors
R & T	Registrar and Transfer Agent
RBI	Reserve Bank of India
SEBI	Securities and Exchange Board of India
SIP	Systematic Investment Plan
SRO	Self-Regulatory Organization
STT	Securities Transaction Tax
TER	Total Expense Ratio
ULIP	Unit Linked Investment Plan
UTI	Unit Trust of India

Chapter 1

INTRODUCTION

1.1 Background of the Research

The financial system plays a central role in the economic development of a country by facilitating the allocation of scarce resources. It intermediates the flow of fund between those people who save their income and those who invest in various assets. With the opening of the Indian economy and the subsequent reforms in the financial sector, the Indian financial market has been growing immensely over these years. Mutual Fund (MF) is one such financial intermediary which has played a significant role in the development and growth of capital market in India. Mutual fund is a major investment media in the advanced countries, as they provide a great opportunity to invest in a diversified portfolio. Since the beginning of mutual funds in India in 1964 there were only 25crore Assets Under Management (AUM), but now it has grown AUM of INR 7,01,443 crore at the end of fiscal year March 31, 2013 with 1,294 mutual fund schemes and 44 fund houses *(AMFI Update, March 2013).*

However the Indian mutual funds have not attained equal status as their counterparts in other developed countries like USA, UK etc."The penetration of mutual funds in India (as measured by the AUM/GDP ratio) remains low at 7 percent compared to 77.0 percent in the US, 41 percent in Europe and 40.3 percent in the Brazil" (*ICI, USA, 2012).* There is a significant scope for further expansion of the mutual fund industry in India as evidenced by the cross country comparison of AUM-GDP ratio.

It is well established fact that, in India the household savings have a major role to play in capital formation in the country. "The gross domestic savings rate had increased continuously from an average of around 10.0 percent of GDP during the 1950s, 18.6 per cent in the 1980s and 23 per cent in the 1990s. The savings rate exceeded 30 per cent for the first time in 2004-05 and has remained above that level ever since. It peaked in 2007-08 at 36.8 per cent and reached an eight-year low in 2011-12 to 30.8 per cent and went up to 31.7 percent during 2012-13" *(CSO Report,*

2013). Though India has a high household saving ratio, the mutual funds have not been able to make a profound impact in channelising these savings from the households to the securities market. It is widely believed that mutual funds are retail product, designed to target retail investors who are intimidated by the stock market who are unique and highly heterogeneous group. With the high savings rate and increased deployment of investmenst through capital market, the scope of mutual fund as an investment vechile has increased greately.

Further the globalization and liberalization by the government led to a paradigm shift in investment avenues of retail investors. In the present dynamic financial environment, exploring investment avenues are of great importance. The success of investment depends upon the knowledge and ability of the investors. The retail investors have become unfriendly due to the instability in the capital market and mutual fund is said to be the best investment option to reap the benefits of stock market.

Though , mutual funds in India is flourishing due to the booming economy and increased savings , it further need to create more rewarding solutions to match the investor's expectations.The AUM as a percentage of GDP in India during FY2012 was 6.6 percent *(RBI Annual Reoprt, 2013)*. The mutual fund industry has been remarkably resilient over the last decade in spite of varying economic conditions, capital market scams, and increasing competition.

Despite the fact that the global financial industry continues to grow, the research of mutual funds has been confined to only a few developed markets. Although emerging market such as India has attracted the attention of investors all over the world they have remained devoid of systematic research, especially in the area of mutual funds. In an effort to plug the gap, the study attempts to find out the extent to which mutual funds has become a preferred investment avenue among the retail investors of Kerala.

1.2 Statement of the Problem

As stated, Indian mutual fund industry is yet to catch the attention of the investors to a great extent, but the potential for growth is tremendous in the long run with a vast investor base yet untapped.

Investments in financial assets is one of the most vital and challenging decisions faced by the retail investors. Retail investors are more comfortable in investing in a good representation of the capital market, but unfortunately they are unfamiliar with risk and diversification, thus making them exposed to the fluctuations within the market.

Mutual Fund has become an important portal for retail investors as it offers the advantage of portfolio diversification, professional management at low cost and high level of operational transparency. Innovations in information technology and increased financial disclosure are creating an investor friendly environment. Meanwhile with the increasing number of funds, the task of picking up the right funds that match ones investment objective is challenging for the retail investors and little is known about the mutual fund selection process also.

The decision making process of retail investors is extremely important and the fund choice can have a substantial impact on the investor's wealth and satisfaction. The mutual fund can survive and thrive only if it can perform up to the expectation of investors and more and more retail investors opt mutual fund as a preferred investment option.

Individual investors are generally constrained by inadequate knowledge, non availability of information, lack of investment skill, etc. that effect the formation of investment perception as well as the investment activities. Their decision making on investment choices often relies on observable socio-demographic variables. The research seeks to answer the following questions by undertaking an in-depth study by examining the behavioural aspects of the investors. In this regard, it asserts certain questions as to: What is the preference of retail investors towards mutual fund as an investment option? What type of information sources and communication mode are preferred? What are the issues related to mutual fund investment? What are the factors that influence the purchase of mutual fund? What are the perceptual factors? How do the demographic variables influence the risk tolerance level of investors?.

Hence the study aims to find out the solutions to these questions by analysing the investors behavioural issues based on the broad socio-demographic variables and tries to unveil some extremely valuable information's to support

financial decision making on mutual funds for both the regulators, AMCs and retail investors.

1.3 Significance of the Study

The Indian financial services sector has undergone a complete transformation since the liberalization and in particular, the most dramatic changes have occurred in the mutual fund industry. There has been a distinct change both in the quality and the range of products offered by the various AMC's. The industry was a monopoly for a long time. Since the entry of new public, private as well as foreign players in the market, Indian investors are being offered the best and the choicest of products. The bullish run of the stock market has certainly helped the industry, but it is not only the factor behind the industry's growth. Today, investors have realized the opportunity cost of keeping their funds idle. They are looking for better return from their investments. Mutual funds present a safe way of investing, along with its advantages over other investments and have reached a level of acceptance where they are replacing traditional investment avenues.

The Indian mutual fund industry has recorded a tremendous growth in size during the last decade with an asset size rising from Rs. 90,587 crore in 2001 to 7,01,443 crore in March 2013. Indian mutual fund industry grew 7.74 times during this period. The Asset under Management (AUM) as percentage of GDP in India was 4.7 percent in 2001 and 6.6 percent as on March 2012 *(AMFI Update, 2013).* Small investors are being crowded out of the primary and secondary market and mutual funds are becoming the only way for small investors to invest in capital market. Mutual fund comes to the rescue of those people who do not excel at the stock market due to certain mistakes they commit which can be minimized with mutual fund investments. As the Indian markets and investors mature, financial advisers, product diversification and multi distribution channels are critical for long term success. Increasing investor awareness will help to propel growth for the Indian mutual fund industry.

"The business of Indian mutual fund industry is largely confined within the Tier 1 cities; however, the industry is focussed on developing the penetration ratio and increasing its presence in other cities. Currently, the top five cities of India contribute to 74 percent of the entire pie, with the remaining 26 percent

distributed among other cities". *(Mutual Fund Submit, CII - PwC Report, 2013).* AUM by geography - consolidated data for MF industry in three major corporations of Kerala as on 31-Mar-2013 is less than 1% (Cochin 0.42%, Trivandrum 0.15% and Calicut 0.05%) where as top 5 metros in India contribute 74.04 percent.

It is widely believed that mutual fund is retail product designed to target small investors. *SEBIs Annual Report 2012-13* states that, the unit holding pattern of individuals as on March 2013, were 96.9 percent of the total folios, and their share in total net assets was 47.75 percent. The role of mutual fund as a financial intermediary for resource mobilisation and for the growth of capital market is very obvious. Thus the Indian mutual funds industry is yet to catch the attention of the retail investors to a great extend and the potential for growth is tremendous with a vast investor's base yet to be tapped. The current reforms in public pension system will provide an opportunity for individuals to invest in capital markets through mutual funds. Although mutual funds industry is responding to the dynamism in investor's perception towards the instrument, still it persists to address information asymmetries.

The existing research on mutual funds is largely done on the return on funds or comparison of funds with benchmarks. Few studies are carried out on investor's objective, risk orientation and perception of investors. With the growing importance of mutual fund investments, understanding of investor behaviour is very significant as it help the players and policy makers to meet the challenges and opportunities of the investors. The study aims to deepen the knowledge on investor's behaviour by examining the investor's decision on mutual fund investments.

Financial markets are becoming more competent by providing better investment opportunities to the investors. Mutual fund industry is also responding by designing new and innovative products but these changes should be in accordance with the investor's expectations. Thus, it has become critical to study mutual funds by focussing on investor's expectations and also the reasons for their dissatisfaction, if any.The study proposes to identify decisive gaps in the existing frame work for mutual funds and to understand the need for reframing the existing mutual fund services by acknowledging investors perception.

1.4 Need for the Study

India's savings rate is 31.7 percent of GDP as on 2012-13 *(GoI, Economic Survey, 2013)* which is one of the highest in the world. To increase the economic development of the country, along with the increase in the savings rate, the financial savings also shoud be accelerated for rapid economic growth. The efforts towards channelisation of savings and the general reluctance of the investing populous demand the active role of mutual funds. As investment in equity shares are too risky, mutual funds have to become efficient in mobilization and allocation of resources. The rate of conversion of household savings into financial investment in our country is very low. "The percentage of household savings that flew into the capital market in India is as poor as 7 percent, as against 25 percent in the U.S.A. and 19 percent in Japan". (*ICI, USA, 2012).* As the household sectors share is much higher in the country's savings, it is of utmost importance to show a right path for their deployment.

The Indian household investors largely try to avoid risk and are very reluctant to invest into capital markets. Hence intermediaries like mutual funds are required to attract surplus funds possessed by this sector into capital markets. Though mutual funds were intended to cater the needs of the retail investors, the industry has not won the investors confidence to attract the share of retail investors. Today more and more of players are entering into thee market and a naive investor is unable to invest in the right fund. Thus the study intends to help the retail investors to make value judgement in terms of their investments into capital markets through mutual funds.

1.5 Scope of the Study

The scope of the study was limited to Kerala State focussing on the retail investors who have invested in mutual funds. The sample of the study was collected from three zones based on the geographical spread focussing panchayath, municipalities and corporation from each zone. The main intention of the study was to assess the retail investor's preference and perception towards mutual fund as an investment option.

1.6 Objectives of the Study

The primary objective of the study was to know about the behavioural aspects of mutual fund retail investors, for which the following objectives were framed:

1. To assess the preference towards mutual fund as an investment option among the retail investors.
2. To analyse the importance of information sources and the preferred communication mode among the mutual fund investors.
3. To identify the issues related to mutual fund investment.
4. To ascertain the factors that influences the investment in mutual fund.
5. To identify the perceptual factors and examine investors perception towards mutual fund investment.
6. To determine the risk tolerance and satisfaction level of the mutual fund retail investors.
7. To find out the variables that positively mediates between perception and satisfaction.

The study also critically analysed the Indian mutual fund industry since its inception and investment and saving of India since 2000 to 2013.

1.7 Hypotheses

For testing purpose, some of the above research issues were converted into hypotheses. The dimensions of risk, satisfaction level, micro and macro and demographic factors were used for forming the corresponding hypotheses, each addressing the overall constructs. The dimensions, namely perception of mutual fund investors, issues faced by mutual fund investors and important factors considered for mutual fund investment were also used for formulating the hypothesis relating to the various dependent factors identified using factor analysis

Following are the hypotheses for the study:

H_1: There is significant difference in the preference towards mutual fund among investors with respect to demographic factors.

H_2: There is association between demographic variables and source of information.

H_3: There is association between demographic variables and communication mode.

H_4: There is significant difference among demographic variables for core issues (*Complexity, Non performance and Management Issues*) in mutual fund investment.

H_5: There is significant difference among investors depending on different sources of information for various issues in mutual fund investments.

$H_{6:}$ There is significant difference among demographic factors and factors influencing purchase *(Fund, Investor, AMC- Sponsor)* of mutual fund.

$H_{8:}$ There is significant difference in perceptual factors *(Convenience and Flexibility, Regulation and Transparency, Knowledge and Awareness, Return and Affordability)* with respect to demographic factors.

$H_{9:}$ There is association between demographic variables and risk tolerance level.

H_{10} There is association between demographic variables and level of satisfaction.

$H_{11:}$ There is significant difference among risk tolerance level of mutual fund investors and their satisfaction level.

1.8 Methodology

In pursuance of the objectives and hypotheses stated above, the following methodology was adopted to conduct the research study.

1.8.1 Search for Literature

An earnest attempt was made by the researcher to collect all available literature from different journals, magazines, newspapers, books and websites. The researcher visited libraries at IIM Bangalore, IIM Calicut, IFMR Chennai, Madras University, IIT Chennai, Kerala, CUSAT, Calicut and MG Universities and CDS Thiruvananthapuram. The researcher also approached AMFI, the regional offices of BSE, SEBI, CDSL, NSDL, Fund Houses and Depository Participants for various supporting documents and literature for the study.

1.8.2 List of Variables Analysed

Table 1.1

Variables used in the Study

No	Purpose	No. of Variables	Name of Variables
1	To profile the respondents	8	Gender, Age , Education, Area of Residence, Zone, Occupation, Annual Income, Annual Savings
2	To assess the preference towards various investment options and rank them	12	Bank Deposit, POS, NSC, Pension & Provident Fund, RBI/Infrastructure Fund, Mutual Fund, Equity, Debentures, Insurance, Chit, Gold/ Silver, Real Estate
3	To find out the saving objectives of mutual fund investors	6	Capital appreciation, Supplement the current income, Tax saving, To meet contingencies, Income after retirement
4	To identify the importance of information source	3	Advertisement, Data and Information, Advice and Recommendation
5	To identify various issues related to mutual fund investment	3	Complexity, Non performance, and Management Issues
6	Factors considered for selection of mutual fund	3	Fund related factors , Investors related factors, AMC/ Sponsor related factors
7	To identify the perceptual factors towards mutual fund investment	4	Knowledge and Awareness, Regulation and Transparency, Convenience and Flexibility, Return and Affordability
8	To assess the satisfaction level	3	Satisfied, Moderately satisfied, Dissatisfied
9	To assess the risk tolerance level of mutual fund investors	3	High, Moderate and Low

1.8.3 Item Generation, Content Validity and Instrument Development

Extensive literature survey enabled the researcher to identify all variables and statements related to the study. Detailed discussions were made with subject experts, fund house managers and various depository participants for item generation process (Churchill, 1979 and Muraki, 1990). The draft questionnaire was submitted to eminent academicians and industry experts for examining the validity of the instrument. The statements with respect to major issues, important factors for selection, perception of investors and risk attitude in mutual fund investment were thoroughly scrutinised, and those statements highly rated were included in the final questionnaire. The five point and seven point Likert scaling techniques were applied in the instrument along with some close ended questions for additional inputs.

1.8.4 Pilot Survey and Instrument Pre-test

A pilot study was conducted for testing the appropriateness of the research questions and methods adopted. The pilot study helped in selecting the appropriate data collection plan and also to check which sampling technique was appropriate. In addition the reliability of the questionnaire was also tested through the pilot study. *(Churchil, 1979 and Nunnally, 1978)* The initial survey was conducted by the researcher personally among 100 retail investors in central Kerala. Based on their responses, the reliability of the instrument was checked. Cronbach alpha, KMO measure of adequacy and Bartlett's test of sphericity were done. Cronbach alpha was calculated to measure the internal consistency and reliability of the instrument. Those items having their communalities below 0.4 and Cronbach's alpha below 0.6 were removed from the final questionnaire resulting in 13 statements for *issues faced in mutual fund investment*, 27 statements for *important factors for mutual fund selection* and 22 statements for *perception of investors towards mutual funds*.

1.8.5 Research Design

The quality of research depends upon the suitability of the method selected for it. According to the intent, descriptive research and according to the method analytical study was adopted. Descriptive research, also known as statistical research, describes data and characteristics about the population or phenomenon and focus on particular aspects or dimensions of the problem studied. On the other hand, analytical study is primarily concerned with testing hypothesis and specifying and interpreting relationships. Thus, the research design was appropriate for the present study to gauge the various sources and impact of mutual fund as an investment option among the retail investors and also to understand the dynamics of problems, factors influencing purchase and perception of mutual fund investors. Both primary and secondary data were used for the study.

1.8.6 Sample Design

Universe

The population for the research study is the mutual fund retail investors of Kerala.

Sampling Unit

The sampling unit of this survey is an individual, who is technically called as a '*retail investor'* who has invested in mutual funds during the period of study. For the research study, Kerala state was divided into three zones viz: South, Central and Northern zones. To analyse the geographical distribution of unit holders, the study was focused on Corporations, Municipality and Panchayath from each of these three zones.

Sampling Frame (Source List)

Clients of Depository Participants (DP) from each zone constituted the source list.

Sample Size Determination

Sample size calculation is concerned with how much sample is required to make a correct decision on particular research. This doesn't necessarily mean that more is always best in sample size calculation. One of the major challenges is to determine the sample size accurately, especially a study like this where there is no reliable source to determine the correct number of mutual fund investors in Kerala. So in this case researcher used the power analysis based on the pilot study with 5% level significance (p value) and 90% power to determine the sample size using software Sigma-plot 11.0. The result of the analysis is given in the following table.

The maximum required sample size turns to be 442. The result of the analysis given in the following table:

Table 1.2

Sample Size – Power analysis

Type of test	Minimum Sample	Maximum Sample
Correlation	87	312
Z test	67	442
ANOVA	83	296
Chi Square	47	339
So required Sample Size	442	

Sampling Procedure

Survey method was used as a technique for data collection among the retail investors and interview method for exploring practitioner's perspectives due to the qualitative nature of the information. To obtain a probability sample, considerable effort was devoted for selecting the appropriate sample plan.

For conducting the survey among retail investors a multistage random sampling was applied. For this purpose, Kerala state was divided into three zones viz: south, central and northern zones. South zone comprising of Thiruvanathapuram, Kollam, Alappuzha, and Pathanamthitta districts; Central zone comprising of Kottayam, Idukki, Ernakulam,and Thrissur districts; Northern zone comprising of Palakkad, Malappuram, Kozhikode Wayanadu, Kannur and Kasargodu districts. To analyse the geographical distribution of unit holders, the study was focused on panchayath, municipality and corporations in each of these three zones based on the broad socio-economic classes. To study the urban area, corporations viz; Thiruvanathapuram, Ernakulum and Kozhikode and to cover the semi-urban and rural areas, municipality and panchayats from Pathanamthitta, Kottayam and Palakkad were taken as sample from each zone. Respondents were selected on a random basis from the client list of Depository Participants.

Sample Profile

The collection of data was based on multistage random sampling based on geographical distribution of investors. A population sample survey among investors was collected from three zones. As the AUM by Geography - Consolidated data for MF Industry in three major Corporations of Kerala as on 31-Mar-2013 is less than 1% (Cochin 0.42%, Trivandrum 0.15% and Calicut 0.05%), it was evident that central Kerala has got more than double the size of mutual fund investors. Accordingly 150 copies of questionnaires were distributed in north and south zone respectively and 300 copies of questionnaires were distributed in central zone. After editing of questionnaire for completion, accuracy and consistency the researcher was left out with 472 numbers of questionnaires. The zone wise response is given in the following table:

Table 1.3

Cross Tabulation of Area of Residence and Zone

Particulars			Zone			Total
			South	Central	North	
Area of Residence	Panchayath	Count	27	105	41	173
		% within Area of residence	15.6%	60.7%	23.7%	100.0%
		% within Zone	23.1%	39.5%	46.1%	36.7%
	Municipality	Count	48	77	36	161
		% within Area of residence	29.8%	47.8%	22.4%	100.0%
		% within Zone	41.0%	28.9%	40.4%	34.1%
	Corporation	Count	42	84	12	138
		% within Area of residence	30.4%	60.9%	8.7%	100.0%
		% within Zone	35.9%	31.6%	13.5%	29.2%
Total		Count	117	266	89	472
		% within Area of residence	24.8%	56.4%	18.9%	100.0%
		% within Zone	100.0%	100.0%	100.0%	100.0%

Source: Primary data

1.8.7 Method for Data Collection

The study is based on both primary and secondary data. The primary data were collected using survey method. Surveys offer an appropriate tool because they can measure predefined constructs and test the hypothesis. The level for the data collection was individuals, because the focus of the research study was individual investors. The methodology adopted was through questionnaire method. In-depth interviews and focus group discussions with AMC, brokers and experts were also carried out to gain more insight into the issue. The purpose of the survey was to understand the behavioural aspects of individual investors, mainly their fund selection behaviour, various factors influencing this behaviour and also the perception among individual investors. Secondary data were collected from various sources viz; AMFI, Asset Management Companies, SEBI, RBI etc.

1.8.8 Data Analysis

Coding of variables in quantitative research is very critical for better interpretation of results. The questions and responses were coded and entered in the

data editor using SPSS software. Various statistical methods were applied on the data to get the results which were analyzed.

Descriptive statistics were used to describe and summarize the properties of the mass data collected from the respondents. The common measures such as frequency, percentage, mean, standard deviation, coefficient of variation were used.

The tests like independent sample Z test, one way ANOVA and Chi Square were used to test the significance of the hypothesis. Inferential statistics were used for comparison and advanced methods like Post Hoc Turkey HSD, Exploratory factor analysis, Confirmatory factor analysis and Regression model fit indices for CFA were used for modelling the data. Finally Mediation and Sobel test analysis were used to evaluate the mediation effect between the variables under study.

Tools used for Data Analysis

Mean

The mean, the measure of central tendency was calculated to find the simple arithmetic average of all the values in the distribution. The mean percentage score $\left[mps = \frac{mean \times 100}{maximum\ possible\ score}\right]$ were also calculated.

Standard Deviation

Standard deviation a measure of fit was used to measure how well the mean represents data. Standard deviation is the square root of the variance. It measures the spread of a set of observations and larger standard deviation sshows e more spread of the observations. Small standard deviation (relative to the value of the mean itself) indicates that data points are close to mean. A large standard deviation (relative to mean) indicates that the data points are distant from the mean (i.e. the mean is not the representation of the data).

Coefficient of Variation

Based on this the mean and SD score of the respondents for the variables, its Coefficient of Variation $\left[CV = \frac{Standard\ deviation \times 100}{mean}\right]$ was calculated to find out the variation among factors in different groups.

Chi-Square Test

Chi-square is used as a non parametric test. It is used to determine if the categorical data shows dependency or two classifications are independent. It is also used to make comparison between theoretical population and actual data when categories are used. The test of independence explains whether or not two attributes are associated. Chi-square test of independence was carried out for finding the relationship between demographic variable and the qualitative variables considered. A level of 0.05 was established a priori for determining statistical significance.

One Sample Z-Test

One sample z- test is a statistical procedure used to examine the mean difference between the sample and the known value of the population mean. In one sample z-test, the population mean is known $z = \frac{(\bar{x}-\mu_0)\sqrt{n}}{s}$. An independent sample Z test was carried out to identify whether the mean score of variables under study differ significantly with respect to demographic factors.

ANOVA

Analysis of Variance (ANOVA) is used to compare the means of more than two populations. It uncovers the main effect and interaction effects of classifications or independent variables or one or more dependent variables. ANOVA uses the F-statistic, which test the means of the groups formed by one independent variable or a combination of independent variables are significantly different. One-way ANOVA is the generalization of the t-test for independent samples with more than two groups.

Post- Hoc Multiple Comparison

Rejection of null hypothesis in ANOVA only tells that all population means are not equal. Post hoc tests are a set of comparisons between group means. Multiple comparisons were used to assess which groups mean differ from others, once the overall F-test shows at least one difference. This test involves comparing the means of all combinations of pairs of groups. Each group of participants were compared to the entire remaining group. For each pair of group the difference between group means is displayed, the standard error of difference, the significance level of difference, and a 95% confidence level. Tukey HSD (Honestly Significant Difference) test was used.

Factor Analysis

Factor analysis is a technique used to identify a smaller number of factors underlying a large number of observed variables. Variables that have high correlation between them and are largely independent of other subset of variables were combined into factors. Exploratory Factor Analysis (EFA) was done to explore the underlying dimensions that could have caused correlation among the observed variables. For extractions, Principal Component Analysis (PCA) with varimax rotation was used to reduce the number of variables. Since the factor analysis is based on correlation between variables, the factorability of data was ascertained by three important tests. First, an inspection of correlation matrix for coefficients of 0.3 and above was observed. Second, a Kaiser-Meyer-Olkin (KMO) measure of sample adequacy was calculated. If the KMO measure is greater than 0.6, then the factorability of data is assumed (*Tabachinick & Fidell, 2007).* Third, if the Barlett's Test of Sphericty (BTS) value is significant, i.e., 0.05 or smaller ($p<.05$), then the factorability is assumed.

The researcher used the Principal Component Analysis for the factor extraction because it is simple than the other method of Principle Axis factoring (*Steven, 2002)* the criterion Eigen value greater than 1 for determining the factor. The Scree test was used to select the correct number of factors as it was considered a good solution for selecting the accurate number of factors.

Communality is used to test the suitability of the factors considered under each of the statements and higher communalities are better. It is the extent to which an item correlates with all other items. If communalities for a particular variable are low, (between 0.0-0.4) then, the variables were removed from the analysis.

While using the factor rotation, factor loadings below 0.40 were suppressed. This process produced a clear rotated component matrix, but there were items that did not have a loading over 0.4 on any of the factors. Each item that did not have a loading of .04 was reviewed in terms of its content. These items were deleted and factor rotation was conducted again. This process was continued until it produced a clean loading structure.

Confirmatory Factor Analysis (CFA) - Structural Equation Modelling (SEM)

Confirmatory factor analysis (CFA) is a type of structural equation modelling (SEM), which deals specifically with measurement models that is relationship between observed measures or indicator. In social research works, researchers need to have measures with good reliability and validity that are appropriate for use across diverse populations. Development of psychometrically sound measures is an expensive and time consuming process, and CFA is one step in the development of process. Based on the past evidence and theory of the factors that exist in the literature, the researcher specified the number of factors. Structural Equation Models (SEM) with latent variables was used to analyze relationships among variables because of their ability to model complex system (where simultaneous and reciprocal relationships may be present, such as the relationship between quality and satisfaction) and their ability to model relationships among non-observable variables while taking measurement errors into account (which are usually sizeable in questionnaire data and can result in biased estimates if ignored).

For the analysis initially an input model was developed by using AMOS-18 graphics. The rectangle represents observed factors and oval drawn in the diagram represents unobserved variables. The curved double headed arrows represent correlations or co-variances among the unobserved variables and the straight headed arrow represents the regression coefficients of the observed variables. The small circles with arrows pointing from the circles to the observed variables represent errors unique factors, which are also known as, squared multiple correlation of the standard error. The value above each rectangular box represents the R-Squared value of the observed variables. R – Square is a statistical measure of how close the data are to the fitted to the regression line, also called as the coefficient of determination. The statistic measures how successful the fit is explaining the variation of the data. It is the percentage of the response variable variation that is explained.Zero percentage indicates that the model explains none of the variability of the response data around its mean. R^2 of 1 indicates that the regression line perfectly fits the data.

In using SEM, it is a common practice to use a variety of indices to measure model fit. In addition to the ratio of the $\chi 2$ statistic to its degree of freedom, with a

value less than 5 indicating acceptable fit, researchers recommended a handful of fit indices to assess model fit. These are the Goodness of Fit (GFI), Normal Fit Index (NFI), Standardized Root Mean Residual (SRMR), and the Comparative Fit Index (CFI). For the current model all the values satisfied the recommended level of acceptable fit.

The measures of "goodness of fit' followed in this research are;

Absolute Fit Measures:

Likelihood ratio Chi-square statistic (p): usually greater than 0.05 or 0.01 is the level of acceptable fit.

Goodness of fit index (GFI): higher values closure to 1.0, indicates better fit.

Root mean square error of approximation (RMSEA): values ranging from .05 to 0.08 are acceptable.

Root mean square residual: smaller values are better.

Incremental Fit Measures:

Tuker-Lewis Index (TLI): A recommended value of TLI is 0.09 or greater. The value closure to 1.0 indicates perfect fit.

Normal fit Index (NFI): A recommended value of NFI is 0.09 or greater. The value closure to 1.0 indicates perfect fit.

Adjusted goodness–of–fit index (AGFI): A recommended value of AGFI is 0.09 or greater. The value closure to 1.0 indicates perfect fit. The value of the fit indices indicates a reasonable fit of the measurement model with data. Considering the above values, a conclusion was reached about the final model for each factor and their relationships.

Mediation - Sobel Analysis

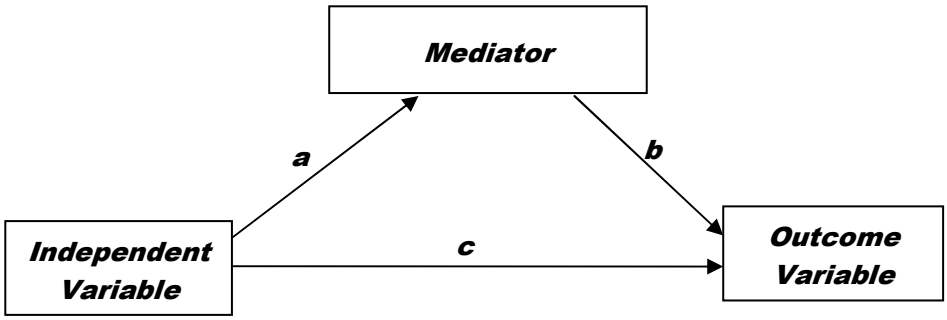
In general terms"a moderator is a qualitative or quantitative variable that affects the direction and/or strength of the relation between an independent or predictor variable and a dependent or criterion variable". Although the systematic search for moderator variables is relatively recent, psychologists have long recognized the importance of mediating variables.

In general, "a given variable may be said to function as a mediator to the extent that it accounts for the relation between the predictor and the criterion.

Mediators explain how external physical events take on internal psychological significance. Whereas moderator variables specify when certain effects will hold, mediators speak to how or why such effects occur". *Baron, Reuben. M and Kenny, David. A (1986).* To clarify the meaning of mediation, a path diagram as a model for depicting a causal chain is diagrammed in Figure 1.1.

Fig: 1.1

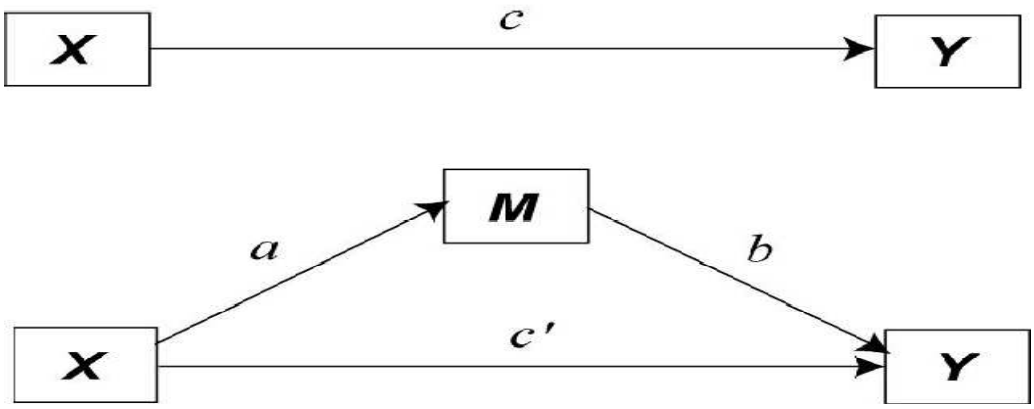
Median Path Diagram



The model assumes "a three-variable system such that there are two causal paths feeding into the outcome variable: the direct impact of the independent variable (Path c) and the impact of the mediator (Path *b).* There is also a path from the independent variable to the mediator (Path *a).* A variable functions as a mediator when it meets the following conditions: (a) variations in levels of the independent variable significantly account for variations in the presumed mediator (i.e., Path c), (b) variations in the mediator significantly account for variations in the dependent variable (i.e., Path *b),* and (c) when Paths *a* and *b* are controlled, a previously significant relation between the independent and dependent variables is no longer significant, with the strongest demonstration of mediation occurring when Path *c* is zero. In regard to the last condition we may envisage a continuum. When Path *c* is reduced to zero, we have strong evidence for a single, dominant mediator. If the residual Path *c* is not zero, this indicates the operation of multiple mediating factors. A more realistic goal may be to seek mediators that significantly decrease Path *c* rather than eliminating the relation between the independent and dependent variables altogether. From a theoretical perspective, a significant reduction demonstrates that a given mediator is indeed potent, although not both a necessary and a sufficient condition for an effect to occur". *Baron, Reuben. M and Kenny, David. A (1986).*

Fig: 1.2

Median Path Diagram



SOBEL estimates the total, direct, and indirect effects of causal variable xvar on outcome variable yvar through a proposed mediator variable mvar. It also calculates the Sobel test for the indirect effect as well as a percentile-based bootstrap confidence interval for estimating the indirect effect.

1.9 Period of Study

The study was based on both primary and secondary data. The pilot study was conducted between the months of January to March 2013. The primary data was collected during April-December 2013, among the retail investors of Kerala State. Sample questionnaire is given in Annexure1. The secondary data regarding the mutual fund industry was collected right from the inception year 1964 till March 2013.

1.10 Operational Concept and Working Definition

Individual investors also known as the Retail investors mean “an investor who buy and sell securities for his own behalf and not for an organization”. Retail investors typically trade in much smaller quantities than institutional investors (Bank of New York Mellon Glossary)

The unit of observation and analysis of survey is only among Individual Investors whose definition is “An individual who has currently invested (i.e. as on March 2013 in any Mutual Funds and this does not include high net worth individuals (i.e., those who saves above Rs. 5, 00,000/- per annum).

1.11 Limitations of the Study

- The study has not been conducted over an extended period of time in the stock market which will have a significant influence on investor's investment pattern and preferences.
- Lack of knowledge, unwillingness and bias in the response of certain investors.
- Reluctance to answer personal question which may affect the reliability of the study.
- Scattered and heterogeneous nature of retail investors.

1.12 Outline of the Study /Chapter Scheme

This research work was organised into five chapters as outlined below:

Chapter I - Provides the introduction to the research and presents the background of the study, statement of the problem, objectives, hypotheses, the methodology adopted for the study covering the data source, sampling technique, tools and techniques of analysis and time period and limitations of the study.

Chapter II- Deals with the comprehensive review of literature under five heads based on the variables studied, comprising of studies in foreign countries as well as in India.

Chapter III- The first part highlights the mutual fund concepts, growth, development SEBI (Mutual Funds) Regulations 1996, other details in terms of number of funds, number of schemes launched, category of schemes, types of schemes, resources mobilized, redemption of funds and assets under management and future prospects. The second part deals with investment and savings in India since the year 2000.

Chapter1V- Gives a detailed statistics analysis of data collected from mutual fund investors in Kerala based on demographics, micro and macro factors, issues related to mutual fund investment, factors influencing the choice of mutual funds, the perception of investors, satisfaction and risk analysis.

Chapter V- Comprehensively summarizes the entire study and presents the finding, suggestions, conclusion and scope for future studies.

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Chapter 2
REVIEW OF LITERATURE

2.1 Introduction

The review of literature was done on the broad frame work of the study. Articles were reviewed under behavioural finance to have a clear understanding and deep inight into the broad area of the study. The literature review was done under seven heads based on the objectives of the study namely; Factors influencing the purchase of mutual funds, Information source, Investments decision among households and individuals, Investor behaviour, Issues and Perception of mutual fund investors and Risk tolerance.

2.2 Behavioural Finance

Behavioural finance is part of finance that seeks to understand and explain the systematic financial market implications of psychological decision processes. The irrational behaviour of investors, not captured by the traditional models is explained by making use of cognitive psychology, social sciences and anthropology. Behavioural finance can be best described as that field of finance that proposes psychology and human emotion-based theories to explain certain investment anomalies that is seen in real life. It basically assumes that, the characteristics of market participants and their emotions influence the investor's financial decisions and thus the market outcomes. It replaces the traditional and idealized idea of rational decision makers with real and imperfect people who have social, cognitive, and emotional biases.

The behavioural finance literature falls into two primary areas: the identification of "anomalies" in the efficient market hypothesis that behavioural models may explain DeBondt and Thaler (1985)[1] and the identification of individual investor behaviours or biases inconsistent with classical economic theories of rational behaviour Odean (1999)[2].

According to prospect theory, people do not behave rationally. They behave differently in different context. According to Kahneman and Tversky (1979)[3] "people respond differently to same situation either it is presented in context of loss

or gain. Investors are distressed with prospects of loss and are pleasant with possible gain. Investors become risk averse when faced with sure loss and become risk takers when faced with sure gain".

Behavioural literature focuses on how individual investors manage their portfolios and that how an active portfolio management offers various strategies for beating the benchmarks. Among investors a common tendency of holding losers for long and selling winners quickly has been pointed out by Shefrin and Statman (1985)[4]. They named it as the disposition effect. They related their findings to the concepts of "loss aversion, the issue of self-control, mental accounting, and the aspiration to avoid regret."

Samuelson and Zeckhauser (1988)[5] defined the status quo bias. It is also related to the influence of default option on choices. The status quo is related to loss aversion (framing as gains and losses) in the sense that current position (status quo) is refereed as the reference point. Other explanations, such as anchoring, sunk costs, regret avoidance, the desire for uniformity, the avoidance of cognitive dissonance, and the illusion of control, may contribute to the perseverance of the status quo bias and all this leads towards poor management of portfolio. The status quo, familiarity bias, inclination for stable returns, poor diversification and not making the proper adjustment in the portfolio with the arrival of new information are the factors that result in less than optimal investment outcomes. In this condition investors invest in those funds that they have already purchased and do not change the investment model.

Festinger's theory of cognitive dissonance states that "people feel internal tension and anxiety when faced with conflicting beliefs. They try to reduce inner conflicts firstly by changing past values and beliefs, secondly try justifying their choices. Investors also exhibit this kind of behaviour when making investment decisions".

Goetzmann and Peles (1997)[6] examined the cognitive dissonance in mutual fund investor. According to this research "the mutual funds investors exhibit cognitive dissonance while selling and buying mutual funds and spend more moneyon leading mutual funds. Investors are reluctant to admit that they have made bad investment and do not want to sell it". According to regret theory, ''investors

anticipate regret if they have made wrong choice and take this recommendation into future reference. Fear of regret plays a great role in making investor to become risk averse or take great risk".

Behavioural finance attempts to explain human behaviours' in markets, importing theories of human behaviour from the social sciences Shiller (1998)[7]. Behavioural finance is an attempt to explain what causes some of the anomalies that have been observed and reported in the finance literature. Fuller (1998) [8]

Odean (1998)[9] found that particular group of investors sells winners more readily than losers. Even when the other rational motivations are controlled, these investors carry on selling winners and holding losers. Their actions are in accordance with two behavioural hypotheses: the prospect theory and an erroneous conviction that winners and losers will mean revert.This investor behaviour appears not to be motivated by a desire to rebalance portfolios or by a reluctance to incur the higher trading costs of low priced stocks. It is also not justified by subsequent performance, as it leads to lower return. Investors trade too much due to their overconfidence. Successful investors can exhibit overconfidence through self-attribution bias, i.e. they have conviction that their successful trade activity is the mere result of their specific skills and abilities.

According to Olsen (1998)[10] "most people consider themselves to be risk-avoiders rather than risk-takers. People will make decisions in which they are willing to accept a certain small return rather than a larger, but uncertain profit from their financial decisions". The measurement of risk tolerance should be differentiated on the willingness to take risk . Risk tolerance changes with experience of investment, age, work life, and changes in the market conditions.

Behavioural finance is defined by Shefrin (1999)[11] "as a rapidly growing area that deals with the influence of psychology on the behaviour of financial practitioners". Within behavioural finance, it is assumed that information structure and the characteristics of market participants such as their educational background and other demographic features systematically influence individuals' behaviour and their investment decisions. It is due to these factors that people feel more competent than others in interpreting and acting on the information to make investment decisions.

Barber, Odean, and Zheng (2000)[12] in their article highlighted three important behaviour of investor viz; "(i) investors buy only those funds that have showed good past performance. (ii) investors are reluctant to sell losing funds and are ready to sell winning fund. (iii) investors are less likely to buy the funds having high transaction fee i.e. brokerage fee, front end load fee. They argued that when purchasing a fund, investors show representative heuristic i.e. investors believe that past performance is overly representative of future performance. Thus investors exhibit over-confidence while selecting the past performing funds and overly estimates their future performance".

According to Simon (2000) [13] behavioural finance studies the psychological and sociological factors that influence the financial decision making process of individuals, groups and entities. In his study, "the theories of behavioural finance are discussed like cognitive dissonance, prospects theory and regret theory. When investor purchases intended security or mutual funds, experiences an emotional reaction. If security falls in value, investor does not want to sell it to avoid the regret of bad investment. Therefore investors buy the hot stock or mutual fund or follow crowd, in this case if the value of security declines investor can lessen the regret because a group of people also lost money on that bad investment".

Several studies have examined the link between gender and behavioural finance biases; of these, Barber and Odean (2001)[14] conclude that men are more subject to overconfidence bias than women in trading. The researchers found that, over a six year period, men on average traded 45% more than women and single men on average traded 67% more than single women.

While other studies have found that high overconfidence behaviour affected not only the frequency but also the volume of trading in the stock market. Glaser and Weber (2003)[15] show that high overconfidence investors defined as 'above average' in investment skill has a tendency to trade in large volumes. Statman et al (2003) [16] argues that the level of overconfidence has a positive effect on trading volume. Investors with high overconfidence tend to trade in large volume, and then modelled as overconfidence hypothesis. Several studies conclude that overconfidence causes excessive trading, and eventually lead to decline in investor returns.

According to Ranganathan (2006)[17] mostly in financial literature it is considered that "investors are rational but that is not the case the investors whose behaviour is dynamic, which is based upon belief, perceptions and expectations. Investor behaviour changes with the time period even if the variables are constant''.

Barak and Demireli (2006)[18] relates how stock prices are affected by investors' behaviours. In behavioural finance, investors are normal rather than rational. Behavioural finance is bases on the assumption that most investors make choices based on limited information. As a result, investors' choices typically are not the ones that would maximise the utility of rational investors; rather investors' choices satisfy investors whose rationality is bounded by the limited availability of information and limited cognitive ability.

Gurtler and Hartman (2007)[19] study reveals that most changes in attitudes take one time to emerge.

Finance theories, assumes that investors make decisions based on the expected return and risk calculation. Behavioural finance studies from the psychological angle and it depicts people's financial decisions being affected by the psychological factors viz; heuristics (too much weight on recent past), concervatism (slow to pick up change), disposition effect (avoid to realize paper loss), familiarity biases (prefer to invest in familiar stock, framing effect (loss averse and present the individual matters wrongly).

2.3 Factors Influencing the Purchase of Mutual Funds

It is widely believed that mutual funds (MFs) are targeted towards small investors who are afraid of stock market and would like to garner the advantage of stock market investment. Selection criterions that investors look are scope of mutual fund family, past performance, fund manager etc.

In India, the pioneering attempt was made by NCAER in 1964, by conducting a survey among the house hold investors to understand the attitude towards individual savings.

Lancaster (1966)[20] presents a multi-attribute model of consumer choice that consumer utility resides in the characteristics that a good possesses, rather than in the good itself.

Fishbein and Azjen (1975)[21] is the most quoted study to model the choice process. They opined that "choice is determined by each alternative's sum perceived values on multiple attributes and the alternative with largest score is selected".

The study of Kahneman and Amos (1979)[22] observes that the psychology of preferences have demonstrated. Kahneman and Amos who originally described 'Prospect theory' in 1979 found that contrary to expected utility theory, people place different weights on gains and losses and on different ranges of probability. They found that "individuals are much more distressed by prospective losses than happy by equivalent gains and concluded that investors typically consider the loss of $1 twice as painful as the pleasure received from a $1 gain". They also found that individuals would respond differently to equivalent situations depending on whether it is presented in the context of losses or gains.

Woerheide (1982)[23] done a study on suggested criteria for mutual funds and proved that factors like size of fund , effectiveness of marketing programme and past returns have strong impact.

Dunham (1984)[24] admits that "although personality factors can change over an extended period of time, the process is slow and tends to be stable from one situation to another and these factors are expected to influence the decision making behaviour of an individual".

De Bondt and Thaler (1985)[25] argue that "mean reversion in stock prices is an evidence of investor over reaction where investors over emphasise recent firm performance in forming future expectations".

Barnewall (1987)[26] finds that "an individual investor can be found by lifestyle characteristics, risk aversion, control orientation and occupation. He also suggests the use of psychographics as the basis of determining an individual's financial services needs and takes one closer to the truth from the customer's perspective of need to build a marketing programme".

Statman (1988)[27] observed "that people trade for both cognitive and emotional reasons. They trade because they think they have information, when in reality they make nothing but noise and trade only because trading brings them joy and pride. Trading brings pride when decisions made are profitable, but it brings

regrets when they are not. Investors try to avoid the pain of regret by avoiding realization of losses, employing investment advisors as scapegoats and avoiding stocks of companies with low reputations".

Gupta (1988)[28] brand or product features like price, quality, return and risk for the mutual fund purchase are widely believed to impact significantly upon the weighting of selection criteria.

Consumer survey report of muual fund investors (1990)[29] says that risk and return alone are not adequate as explanatory variable. Although past performance and level of risk (safety) were rated as the two most important factors in aggregate, several additional factors were also relevant: amount of sales charge, management fees, fund managers reputation, fund family, clarity of the fund's accounting statement, recommendation from a financial magazine or newsletter, availability of telephone switching, the fact that funds are already owned in that family, and friend's recommendation etc.

There is some empirical evidence that investors make mutual fund purchase decisions on the basis of past performance. Kane, Snatini, and Aber (1991)[30] Patel, Zeckhauser, and Hendricks (1992)[31] report that "previous fund performance, adjusted for risk appears to be associated with net inflows to mutual funds". However, Sirri and Tufano (1992) [32] find that "raw returns which are not adjusted for risk, appear to drive fund growth".

Ippolito (1992)[33] says that " fund/scheme selection by investors is based on past performance of the funds and money flows into winning funds more rapidly than they flow out of losing fund".

Gupta (1994)[34] made a household investor survey with the objective to provide data on the investor preferences on MFs and other financial assets.suggestions were given to the stake holders to design new financial products.

Capon, Fitzsimons and Weingarten (1994)[35] explored the mutual fund purchase decision by affluent consumers. They investigated the rationality assumption and compared the affluent with the previously studied sample of consumers. The variables included: sources of information, selection criteria, and mutual fund investment behaviour. In addition, they sought to integrate this

information with demographic data to develop profiles of distinct affluent mutual fund investor groups.

NCAER (1996)[36] analysed the structure of the capital market and presented the views and attitudes of individual shareholders.

Tripathy (1996)[37] in her study observed that "with the structural liberalization policies, Indian economy is likely to return to a high grow path in few years, at the same time mutual fund (and life insurance) organizations are needed to upgrade their skills and technology".

Madhusudhan V Jambodekar (1996)[38] study reveals that "income schemes and open ended schemes are more preferred than growth schemes and close ended schemes during the period of study. Investors look for safety of principal, liquidity and capital appreciation in the order of importance; newspapers and magazines are the first source of information through which investors get to know about MFs/Schemes and investor service is a major differentiating factor in the selection of mutual fund schemes".

Sujit Sikidar and Amrit Pal Singh (1996)[39] carried out a survey with an objective to understand the behavioural aspects of the investors of the North Eastern region towards equity and mutual funds investment portfolio. The survey revealed that "the salaried and self employed formed the major investors in mutual fund primarily due to tax concessions and UTI and SBI schemes were popular when the survey was done".

Shankar (1996)[40] points that "the Indian investors do view mutual funds as commodity products and AMCs to capture the market, should follow the consumer product distribution model".

Jambodekar (1996)[41] conducted a study to know the awareness of mutual fund, to identify the information source, factors influencing the choice of fund. The study reveals that, "income schemes and open ended schemes are more preferred than growth schemes and close ended schemes during the period".

Capon, et al; (1996)[42] investigates the manner in which consumers make mutual fund investment decision based on consumer behaviour, information sources and other selection criteria related on mutual fund purchase. Investors report that

"they consider many non-performance related variables. When investors are grouped by similarity of investment decision process, a single small group appears to be highly knowledgeable about its investments. However, most investors appear to be naive, having little knowledge of the investment strategies or financial details of their investments".

Goetzman and Peles (1997)[43] established that there is evidence of investor psychology affecting fund/scheme selection and switching. They present evidence from the responses of mutual fund investors about recollection of past performance. They found that the degree of bias is conditional upon previous investor's choice, a phenomenon related to the well known theory of cognitive dissonance.

According to Talluru (1997)[44] the objective of mutual fund selection process is to choose a fund from large number of available fund within the limits defined by investor preference, economic climate and constraints. In this study researcher argue that "it is very complex procedure to select appropriate fund and majority of investors lack awareness and expertise".

Syama Sunder (1998)[45] done a study on Kothari Pioneer, a private mutual fund player. The survey revealed that "awareness about mutual fund concept was poor during that time in small cities like Visakapatnam and agents play a vital role in spreading them mutual fund culture. Open-end schemes were much preferred then; age and income are the two important determinants in the selection of the fund/scheme; brand image and return are the prime considerations while investing in any mutual funds".

Khorana and Servaes (1999)[46] had experimented that "the decision to introduce a new type of fund is affected by a number of variables, including investor demand for the fund's attributes. Investment companies should continually introduce new types of funds in an effort to attract investor's capital and maximize assets under management".

Odean (1999)[47] says that"as investors are unique and are a highly heterogeneous group at the retail level, designing a general product and expecting a good response will be futile".

Rajarajan (2000)[48] envisage that individual investment choices (e.g., stocks, bonds, real estate) are based on lifestyle and demographic attributes.

SEBI – NCAER Survey (2000)[49] was carried out to assess the number of households and individual investors, their economic and demographic profile, portfolio size, investment preference for equity as well as other savings instruments. Some of the relevant findings of the study are "households preference for instruments match their risk perception; bank deposit has an appeal across all income class; 43 percent of the non-investor households lack awareness about stock markets and compared to low income groups, the higher income groups have higher share of investments in MFs signifying that they have still not become truly the investment vehicle for small investors".

Chakarabarti and Rungta (2000)[50] stressed the importance of brand effect in determining the competitive position of the AMCs. Their study reveals that "that brand image factor, though cannot be easily captured by computable performance measures, influences the investor's perception and hence his fund/scheme selection".

Shanmugham (2000)[51] conducted a survey of 201 individual investors to study the information sourcing by investors, their perceptions and the factors motivating investment decisions and reports that among the various factors, psychological and sociological factors, dominate the economic factors in investment decisions.

Anjan Chakarabarti and Harsh Rungta (2000)[52] stressed the importance of brand effect in determining the competitive position of the AMCs. Their study reveals that "brand image factor, though cannot be easily captured by computable performance measures, influences the investor's perception and hence the fund/scheme selection".

Hakan and Detzler (2002)[53] present a rigorous framework for asset allocation and selecting mutual funds and takes into account the unique preferences and constraints of individual investors. The AHP based mutual fund selection model is adopted in the study. They recommend AHP as a method to solve the complex decision problem for mutual fund selection. The proliferation of mutual funds has

made it a challenge for investors to select a right fund to invest. Most of the investors are not able to make asset allocation.

Wilcox (2002)[54] conducted research on investor's preferences for stock mutual funds in which they conducted a conjoint study on 50 investors. Analysis showed that "investors weighted past performance more than fee structure. The wealthier and the knowledgeable investors are more biased towards entry load and other charges while selecting the mutual funds. Apart from the past performance, there are other factors that affects decision making, but investors make cognitive errors while selecting funds".

Singh and Chander (2003)[55] has made a study on general investors with regard to their expectation from mutual funds , taking into consideration their age group and the occupation they are in. The characteristics like past record of organisation, repurchase of the unit, easy transferability, return, etc are rated as important factors.

Lynch and Musto (2003)[56] were of opinion that "this decade will belong to mutual funds because the ordinary investor does not have the time, experience and patience to take independent investment decisions on his own".

Bala Ramasamy and Yeung (2003)[57] conclude that transaction costs (i.e. the expense ratio) is often inversely related to the performance of a mutual fund. They surveys the relative importance of factors considered in selection of Mutual Funds by financial advisors in emerging market. The study focussed on Malaysia, pointed three important factors which dominate the choices of mutual funds. These are consistent past performance, size of fund, and cost of transaction.

Black (2004)[58] observed that" in recent years, investors' attitudes towards the securities industry dropped, in reaction to both the conflicted research and the mutual fund scandals and concluded that the most optimistic assessment is that, the SEC has plenty of unfinished business to attend to".

Keli (2005)[59] is of opinion that "past performance and funds' investment strategy continued to be the top two drivers in the selection of a new fund manager".

Rajeswari and Moorthy (2005)[60] observed that "investors demand inter-temporal wealth shifting as they progress through the life cycle and the investors are

basically influenced by intrinsic qualities of the product followed by efficient fund management".

Ramamurthy and Reddy (2005)[61] carried out a study to analyse recent trends in the mutual fund industry and concluded tha the major benefits delivered to the small investors by mutual funds are professional management, diversification of investment, convenient administration, return potential, liquidity, transparency, flexibility, affordability, wide choice and proper regulation. They also analyzed certain recent trends in the mutual fund industry such as, entry and exit of mutual fund companies, compulsory certification of mutual fund sales/marketing personnel, mutual fund schemes related to real estate, commodity, bullion and precious metals, etc; shift from income funds to money market funds, and shift from banks to mutual funds and buying and selling of mutual funds online.

Sharma (2006)[62] aims at identifying factors, which influence investment behaviour of Indian HNWIs to invest in mutual funds and to know whether there is any relationship between the factors that influence investment behaviour of Indian HNWIs to invest into mutual funds. It has been observed that these investors were highly focused in their mutual fund investments, both as regards to fund families and individual mutual funds, yet invested a small percentage of their liquid assets in mutual funds.

Singh and Chander (2006)[63] conducted a study to find out the investors preference in mutual funds investment. The result showed that"the investors belonging to salaried category and in age group of 20-35 years showed preference towards close ended growth schemes. A majority of investors support their investment on advice of brokers, professionals and financial advisors. The findings also reveal the varied experiences of respondents regarding the return received from investments made in mutual funds".

Donnor and Oxenstierna (2007)[64] examined the factors that investor value while choosing mutual fund on Swedish market and concluded that "company related factors i.e. reputation and availability is more valued by inexperienced investors because they lack necessary knowledge about complex financial products. The experienced investor's value fund specific attributes and demands good presence of company in market in order to recognize it".

Stefan Engstrom[65] (2007) study shows that "there are significant differences between men and women. Men tend to chase and invest with funds that have high past return and women invest with low fee funds. When examining individual characteristics that can serve as a proxy for familiarity and previous experience of investing in funds. The empirical findings are consistent concerning past experience of investing in funds and attitude towards fund fees".

Joshua and Mungo (2008)[66] identified that actively managed mutual funds suffer from diminishing returns to scale, funds should alter investment behaviour as assets under management increase. Although asset growth has little effect on the behaviour of the typical fund, they found that large funds and small-cap funds diversify their portfolios in response to growth. Greater diversification, especially for small-cap funds, is associated with better performance.

Nagpa and Bodla (2009)[67] in their study concluded that "the modern investor is a mature and adequately groomed person. In spite of the phenomenal growth in the security market and quality Initial Public Offerings (IPOs) in the market, the individual investors prefer less risky investments, viz., life insurance policies, fixed deposits with banks and post office, PPF and NSC. Occasions of blind investments are scarce, as a majority of investors are found to be using some source and reference groups for taking decisions. Though investors fall to cognitive illusions such as overconfidence and narrow framing, they consider multiple factors and seek diversified information before executing some kind of investment transaction. Investors have made media as a part of their investment life. According to them, financial dailies, TV channels and peer groups can play a pivotal role in making investment decisions. Moreover, psychographics play an important role in determining investment behaviour and preferences of individual investors".

Parihar, Sharma, etal (2009)[68] study analyses the impact of different demographic variables on the attitude of investors towards mutual funds. Apart from this, it also focuses on the benefits delivered by mutual funds to investors. The study reveals that majority of investors have still not formed an attitude towards mutual funds investments. The main reason is the lack of awareness of investors.

Nidhi Walia and Ravi Kiran (2009)[69] conducted a research on investors' perception towards the mutual fund services. The study suggested that innovations

in mutual fund should be in accordance with investor's expectations and they would like to get more quality in existing products.

Rao (2011)[70] presents mutual fund investor awareness and adoption of different schemes with educational level. The research findings showed that "increased level of education is linked with greater risk tolerance and tends to support the hypothesis that positive relationship exists between educational attainment and financial risk tolerance".

Kandavel D (2009)[71] makes an earnest attempt to study the attitude of the retail investors with regard to fund selection criterion in Puducherry. No significant relationship was found between the attitude of the respondents belonging to different gender, educational status, annual family income, occupation, and amount of wealth owned towards importance level of the fund selection criterion. However, a significant relationship was found among the attitude of respondents of different age groups towards importance level of the fund selection criterion.

Hayat M.Awan and Shanza Arshad (2012)[72] explore the factors that investors value while making investment decisions regarding mutual funds and type of behaviour they exhibit. Major findings arethat "investor age group and cities have different impact on fund selection schemes but income, education level and occupation has no effect. Attributes like past performance of fund, reputation of company, withdrawal facility, company services towards investor have greater impact on decision making. Investors are overconfident that they have selected best scheme. Investors are risk adverse, exhibit representativeness, status quo bias, and are conservative. Investors consider that losses in investment are due to incorrect recommendations of family and friends and gains are due to better result of investing companies. Image conscious investors are more inclined towards sponsor related services than professional investors".

Mehta Shantanu and Shah Charmi (2012)[73] has an objective to know preference of mutual funds investors and performance evaluation of the preferred schemes by the investors. The major findings reveal that the annual income of the individual investor and annual investment in mutual fund are independent of each other.

Wilkinson-Ryan, Tess and Fisch, Jill E (2012)[74] over time, mutual fund fees have striking effects on investor returns, but evidence suggests that most investors ignore or misunderstand the impact of fund fees. It is unclear whether this behaviour is due to the complexity of fee disclosures or to underestimation of the real cost of fees. They conclude that when fee information is presented simply, educating investors about the importance of fees updates their investment beliefs, motivates more thorough research, and yields higher-value investment choices.

2.4 Information Source

In the purchase decision process, consumers may receive two types of information namely, interpersonal (formal and informal sources) and impersonal (mass) communication. For the mutual fund purchase decision, impersonal sources of information include advertising, direct mails, TV shows, databases, literature from AMCs and published performance rankings/ returns or statistics. Interpersonal formal sources of information include advice from brokers or agents, advice from chartered accountants or bankers, advice from analysts, books, magazines, journals or newspapers. Formal interpersonal sources include fee-based advisors and commission-based advisors. Informal interpersonal sources include family and friends, recommendations from business associates and colleagues, etc. In the MF studies the role played by sources of information in mutual fund selection process is greately untouched. With the innovations and quantity of information picking the fund that most appropriately matches his/her personal risk- return trade off is a challenging task even for the knowledgable investors.

However, for that information to have a positive impact on the investor's decision-making process, it must be easily accessible and presented in a clear and understandable format. Vinson and Mc Vandon (1978)[75] establish that a strong relationship has been found between information source and purchase decision and subjects' information sources and their product concept recall.

Mazis, Richard et al (1981)[76] opined that "the provision of information in a choice situation typically can provide important consumer benefits such as improved decision making, enhanced product quality, and lower prices". On the other hand Verrecchia (1982) [77] shows that risk-averse investors acquire less information.

Engel, Blackwell, and Miniard (1986)[78] Research on the relationship between information sources and other purchase decision constructs is limited. In related research by Surprenant and Solomon (1987)[79] the degree of personalization of a service encounter has been shown to impact the level of consumer satisfaction. Crosby and Stephens (1987)[80] demonstrate that insurance customer's value, personal over impersonal information sources.

Carroll (1990)[81] argues that "a bank's retail customer mix may be enhanced through selective information presentation". In Murrays study[82] (1991) "related information source use to product category (goods versus services) and consumer experience; internal memory was preferred as a source of information to those with greater experience".

Capon, Fitzsimons and Prince (1996)[83] in respect of mutualfund "sources of information act both as information source presenting information about other selection criteria and at the same time selection criteria themselves".

Alexander, Jones and Nigro (1998)[84] analysis the responses from a nationwide telephone survey of 2,000 randomly selected mutual fund investors who purchased shares using the services of six different intermediaries, referred to as distribution channels; brokers, banks, mutual fund companies, insurance companies, employer-sponsored pension plans, and financial planners. The survey provides data on the demographic, financial, and fund ownership characteristics of mutual fund investors. Furthermore, it contains data on investors' familiarity with the costs and certain investment risks associated with mutual funds and the information sources used to learn about these costs and risks. Study suggest that there is room for improvement in investor knowledge of the expenses and risks associated with mutual funds and more can be done to make mutual fund prospectus more useful to investors.

Sirri and Tufano (1998)[85] studied the flow of funds into and out of equity mutual funds. Consumers base their fund purchase decisions on prior performance information, but do so irregularly and disproportionately in funds that performed very well during the past period. Search cost seems to be an important determinant of fund flows. High performance appears to be most salient for funds that exert higher marketing efforts, as measured by higher fees.

Jain and Shuang (2000)[86] examined a sample of 294 mutual funds that are advertised .They tested whether the sponsors select funds to signal continued superior performance or they use the past superior performance to attract more money into funds. Analysis shows that there is no superior performance in the post advertisement period. Advertised funds attract significantly more money in comparison with a group of control funds.

Wilcox (2003)[87] says that"the sources of information get transformed into selection criteria, which ultimately form intentions that help investors in decision making and researcher argue that sources of information and selection criteria are interrelated".

Peress (2004)[88] shows that wealthier investors value information more and poor investors trade little even with very precise information. Peress shows "very risk-averse investors benefit little from information because they would invest little in stocks even if they had very precise information". Investigating investors' financial knowledge and perceptions of investment products explores ways to facilitate the most important and challenging decisions made by investors.

The Federal Trade Commission, The Securities and Exchange Commission (SEC) and Woodward (2004)[89] have investigated the possibility of mandating a standardized summary disclosure in order to improve consumer comprehension, facilitate fund differentiation, and increase awareness of key information .

Graham, Harvey and Huang (2005)[90] found that investors who feel competent trade more often. Bruce and Nalinaksha (2005)[91] aims to investigate whether or not such information is present in advertisements for one investment vehicle – mutual funds. The major findings were (i) mutual fund advertisements are not providing the information necessary for optimal investment decisions. (ii) mutual funds use techniques to increase that their advertisements are noticed, but they also use techniques to decrease the readership of their advertisements and rarely included convenience information. Use of techniques known to influence advertisement noting (i.e. advertisement size and colour) and copy readership (i.e. visual size, text length, unique selling proposition/brand-differentiating message, celebrity endorsements, direct or indirect comparisons with competitors, and emotional appeals) was also investigated. The study concluded that, mutual fund

advertisements are not providing the information necessary for optimal investment decisions.

SEC (2006)[92] is sensitive that, the ordinary investor faces a complex decision when choosing a mutual fund and thus the SEC provides a detailed online guide that describes numerous relevant factors related to risk, return and expenses.

Fisher and Gerhardt (2007)[93] argue that "financial advice from professionals should lead to a better self-evaluation by investors of their own skills and therefore to more rational investment decisions, with a clear positive impact on trading".

Ivkovic and Weisbenner (2007)[94] claim that"the word-of-mouth effect is a broad phenomenon that affects financial decisions made by individual investors for they may seek to reduce search costs and evade their lack of expertise by relying on word-of-mouth communication with those around them".

Calvet, Campbell and Sodini (2007)[95] provide evidence that "active rebalancing is more pronounced for sophisticated households and irrational behaviour diminishes substantially with investors' wealth or with investors sophistication and investors' characteristics may have an impact on trading and on the acquisition of information".

John, Elizabeth and Michael (2008) [96] the objective of the research was to explore whether a modified method of supplemental information disclosure impacts investors' fund evaluations and investment intentions. Results indicate that "while investors continue to place too much emphasis on prior performance, the provision of supplemental information, particularly in a graphical format, interacts with performance and investment knowledge to influence perceptions and evaluations of mutual funds".

Epstein and Schneider (2008)[97] suggested that "the quality of the information signals has an influence on investor trading behaviour. News from a trustworthy source should lead to more trades and portfolio rebalancing than news from a less reliable one".

Huang Hui (2009)[98] study examined, how financial news affected individual investors investment behaviour. It explores the financial news effect on investors,

based on communication and behavioural theories. Study suggests that using of financial news had a strong effect on people's attitude, intentions and behaviour.

Jayabal, Kasilingam (2011)[99] study attempts to find out the characteristics of people using different sources and to identify the impact of sources of information on the choice of securities and expected returns. It was found that the information sources used is having impact on range of awareness, choice criteria, expected return, and saving motive. Study states that the source of information used is having indirect effect on both size of savings and choice of securities.

Gupta and Chandra (2011)[100] study presents a comparative analysis of retail and non-retail mutual fund investors with respect to sources of information in the context of their selection of various mutual funds for their investments. Factor analysis was used to extract the components viz; data and information, advice and recommendations, and published returns.

Margarida and Victor (2011)[101] investigate how the strength of the positive association between frequency of trading and information acquisition is dependent on investors' self-confidence and on the sources of information used by investors. The results confirm that "the more frequently individual investors invest in information, the more they trade in financial products. It also validate that, overconfident investors who show a better than average bias, trade more frequently. The overconfident investors trade more frequently when they collect information directly using specialized sources and that non-overconfident investors trade less frequently when they use professional advice from the bank/account manager".

2.5 Investments Decision among Households and Individuals

Savings play an important role in economic development and the major objective of Government policy has been the promotion of savings and capital formation for economic growth. These include the capacity of the economy to maintain high rates of investment, ensuring productive use of capital. This in turn depends upon investor expectations and the ability to mobilise financing for investment.

A comparison of responses with regard to likely future investment avenue showed diverse but much higher preference for less risky, fixed-interest type

investment avenues. Gupta (1991)[102], Gupta (1993)[103], SEBI-NCAER (2000)[104], Gupta et al (2001)[105], Singh and Vanita (2002)[106], Gupta et al (2004)[107] and Gupta (2005)[108]

Educated investors in the age group of 45-55 years developed well planned out investment structures in terms of their future investment plans suggesting that such investors prefer to take moderate risk. (Rajarajan (2000)[109], Ranjith (2002)[110] and Singh (2003)[111]

Gupta (2005) [112] Gupta and Jain (2008) [113] revealed that "the past experience of an investor in a particular investment avenue to a very large extent influenced the future Investment Decision Making (IDM)". Correspondingly, it is predicted that "demographic factors certainly influence household investors' decision to invest in a particular investment avenue".

SEBI NCAER (2000)[114] study observed that "households hardly differed in their perception about equity shares and debentures as distinguishable 'risk classes' in earlier studies". Khanna (2004)[115] findings revealed that household investors have become more sophisticated and judicious. "The capital market's development depends on the willingness of the investing public to invest in capital market instruments. Such willingness of investors, in turn depends on their satisfactory past investment experience. There was relatively a high level of satisfaction with respect to investment in equity shares". The highest proportion of unsatisfactory investment experience was reported for private-sector bonds. SEBI NCAER (2000)[116], Gupta et al (2004)[117] and Gupta (2005)[118]. The satisfaction level was low with regards to investment in mutual funds. Singh and Vanita (2002)[119], Singh (2003)[120], Gupta et al (2004)[121] and Gupta (2005)[122]

Gupta and Choudhury (2005)[123] study shows that the safety considerations dominated the overall suitability criterion.

Significant insights about household investors' IDM have also been put forth by investigations on the impact of demographic factors such as age, education, occupation, and income. Generally "as age increases, the tendency to take risk declines". Ranjith (2002)[12], Gupta and Jain (2008)[125] and Verma (2008)[126]

According to Gupta et al (2001) [127] "bonds were regarded as an investment for the retired people and did not have much appeal for young people except in the case of Development Financial Institution (DFI) bonds. The market penetration achieved by mutual funds was found to be much lower than equity shares for all age-classes. Higher the education, higher was the level of understanding of investment complexities. Graduates and above in qualification preferred to invest in equity shares as well as mutual funds" Mittal and Vyas (2007)[128], (2008)[129] and Verma (2008)[130].

SEBl NCAER (2000)[131] reveals that education level is an influencing factor in inverstments and the incidence of investing in equity shares has been the highest amongst the service class .

"There was a marked preference for fixed-interest type of investments amongst all income groups while mutual funds have found favour only with middle and high income groups. Equity shares uniformly have been found to have a high degree of acceptability across all income classes; particularly the level of penetration was very high for the middle class investors". Gupta (1991)[132], Ranjith (2002)[133] Khanna (2004)[134], Gupta (2005)[135], Gupta and Jain (2008)[136] It is inferred that demographic factors certainly influence households' decision to invest in a particular investment avenue.

National Council of Applied Economic Research SEBI NCAER (1961)[137] found that, irrespective of various demographic factors investors preferred savingand provision for emergencies was the most important motive for savings. The preference for financial assets, especially bank accounts and small savings, were rising noticeably with education, but does not seem to increase with income, except at the lowest end of income distribution. Thus, it would appear that efforts must be taken to popularise financial forms of savings particularly among the less educated members of upper-income group. Profitability, safety and liquidity seem to be the most important motive for determining saving preference.

Tamilkodi (1983)[138] has stated that "small savings schemes have a psychological appeal and it provides an opportunity for ordinary to park their savings. It reaches a large number of people and covers a wide range of areas". The researcher suggested that efforts should be taken to simplify the procedure of small

savings schemes to suit the needs of illiterate and socially oppressed people. Further, she suggested an increase in the rate of interest of small savings schemes to meet the challenges of commercial banks.

Jayaraman (1987)[139] has stated that "instead of issuing special bonds for unearthing black money the Government of India can encourage investment of black money in various small savings schemes". Researcher further insisted the need to draft the assistance of voluntary agencies at the school and college level for further mobilization of savings.

Mukhi (1989)[140] has made known that NSC is the most popular tax saving instrument because of its simplicity and it is extremely used as a security instrument for pledging purpose.

Arangasami (1992)[141] has observed that "more and more dependence on mobilization of resources through small savings will ensure and promote self-reliance and concluded that the central government should give proper assistance and encouragement to the small savings agencies,which will be useful not only in mobilization of funds but also for the economic development".

Somasundaram (1998)[142] has found that "bank deposits and chit funds were the best known modes of savings among investors and the least known modes were Unit Trust of India (UTI) schemes and plantation schemes. Attitudes of investors were highly positive and showed their intention to save for better future. Nearly two-thirds of the investors were satisfied with their savings. The most common mode of investment was bank deposits. However, a shift was noticed from bank deposits to other forms of investment. Among several parameters in investing, safety of money was considered to be the most important element followed by regular return from their investments".

Gavini and Athma (1999)[143] found that "social considerations, tax benefits, and provision for old age were the reasons cited for saving in urban areas, whereas to provide for old age was the main reason in rural areas. Among the post office schemes, Indira Vikas Patra (IVP), KVP and Post Office Recurring Deposit Account were the most popular, in both urban and rural areas".

Securities and Exchange Board of India (SEBI) and NCAER (2000)[144] survey has reported that safety and liquidity were the primary considerations which determined the choice of an asset. Bank deposit was highly preferred among all incomne classes. Middle income and higher income group favoured tax saving schemes. There was a correlation between the income levels and investments of households in market-related securities.

Karthikeyan (2001)[145] has conducted research on small investors' perception on Post Office Saving Schemes and found that " there was significant difference among the four age groups, and the overall score confirmed that the level of awareness among investors in the old age group was higher than in those of the young age group. Life and tax benefits were the two major ones that influence the investors both in semi-urban and urban areas. 73.3 per cent of investors of both semi-urban and urban areas were very much willing to invest in small savings schemes in future provided they have more for savings".

According to SEBI-NCAER (2003)[146] a mere 7 percent of total Indian households have investments in capital market and concluded that, a low participation of households in the capital markets will not boost investments and economic growth of the country.

Qumar (2003)[147] conducted a survey among 300 average urban middle class households in Delhi to find out the investment preference of households that are able to save and to identify the factors influencing saving behaviour and investment preferences. Results show that there is high propensity to save moderate to high proportions of income. It was found that the level of literacy, education, occupation and income profile of the respondents were significant.

Khanna (2004)[148] Gupta (2005)[149] studies highlight a relationship between investors' awareness and investment behaviour and came out with the inference that ivestors in general, have good knowledge about simple forms of investments, like fixed deposits and government savings schemes.

According to the report of the working group on savings in the 11th Five-Year Plan, "the estimates of financial savings of the households have shown a

decline over recent years, whereas physical savings have increased". Patnaik and Narayan (2007)[150]

Mohan Rakesh (2008)[151] reviews the overall macroeconomic performance in India since independence and argues that India's growth has been largely enabled by the availability of domestic savings, which has increased steadily over the decades.

Verma (2008)[152] showed that "mutual funds were popular among professionals, students and the self employed and retired people displayed their risk aversion by not investing in mutual funds and/or in equity shares".

Sushant and Bodla (2009)[153] points out those financial planning needs of individuals are different. Demographics alone no longer suffice as the basis of segmentation of individual investors. Study attempts to bring out life characteristics of the respondents and their influence on investment preference and conclude that investor's lifestyle predominantly decides the risk taking capacity of investors.

Yesh Pal Davar and Suveera Gill (2010)[154] reported the underlying dimensions in the selection of different investment avenues for the households. The results of factor analysis revealed emphasis on familiarity, satisfaction, opinion and demographic dimensions for all investment avenues.

Vanjeko Rajarajen (2010)[155] collected data over thousand individual investors from eleven cities of India. Study suggests that characteristics of investors in terms of their investment, strategies, expectations etc. for the better understanding of individual investors and their financial product needs. It also studied investor's future investment preferences. The study reveals the increasing popularity of equity as an investment option among retail investors.

Brinda Jagirdar (2011)[156] lists out the factors influencing household financial savings viz: availability and ease of access to instruments, financial literacy and level of sophistication, interest rates on bank deposits etc. The study suggests that, with the economy and banking sector poised to grow, there is tremendous scope for mobilising household savings and channelling them into financial instruments. Efforts are required to channelise savings away from physical savings and into financial savings, which will expand financial intermediation and provide more funds for investment.

MoF, GoI (2010-11)[157], (2011-12)[158], (2012-13)[159] critically review the Indian economic developments, ratio of savings and investment to GDP and discuss the savings investment gap.

Rehha Metha (2013)[160] analysed the house hold saving pattern for the period 1950 to 2010 and determined different saving functions which explained the long term saving behaviour and potentials of house hold sector. The study analysed the pre- economic reform and post reform period.

2.6 Investor Behaviour

Investment behaviour is related to activities of individual investors regarding searching, evaluating, acquiring, reviewing the investment products and if necessary disposing such investment products. Investment behaviour reveals how the individual investor allocates the surplus financial resources to various instruments available. This process consists of why they invest, where and how they got information, what factors they use to evaluate, who influence them on choice of investment and how they act after investment.

Literature suggests that major research in the area of investors' behaviour has been done by behavioural scientists such as Glaser and Weber (2003)[161], Shiller (2000)[162] and Shefrin (2000)[163]. Individual investor behaviour is documented in Odean (1998)[164], (1999)[165], Barber and Odean (2000)[166], (2001)[167] among others. They attribute the high volume of trading to investors' overconfidence. Overconfidence can be termed as the tendency of investors to perceive them as skilful.

The Wharton survey, one of the more comprehensive studies of investor behaviour, examines how demographic variables influence the investment selection and portfolio composition process. Blume and Friend provide an excellent overview of the results and implications of the study. Cohn et al. (1975)[168] provide tentative evidence that, the risk-aversion decreases as investors wealth increases. Riley and Chow (1992)[169] finds that risk-aversion decreases as age, wealth, income and education increase. LeBaron, Farrelly and Gula[170] counter that individuals' risk-aversion is largely a function of intuitive rather than rational considerations.

Nagy and Obenberger (1994)[171] findings suggest that "classical wealth-maximization criteria are important to investors, even though investors employ diverse criteria when choosing stocks and contemporary concerns such as local or international operations, environmental track record and the firm's ethical posture appear to be given only superficial consideration".

Lewellen, Lease and Schlarbaum (1997)[172] determine that age, sex, income and education affect investor preferences for capital gains, dividend yield and overall return. They empirically tested the matter of the portfolio decision processes of the individual equity investor, using data obtained from a large-scale questionnaire survey of a representative cross-section of individuals, together with supplementary transactions information from the corresponding trading accounts. The objectives were to identify the systematic patterns of investment behaviour exhibited and to appraise the rationality of those patterns.

Goetzmann, Massimo and Rouwenhorst (1999)[173] identified a set of systematic factors that explain a significant amount of the variation in flows. They suggest the existence of a common component to mutual fund investors' behaviour and indicate which asset classes may be regarded as substitutes for mutual fund shares. They found that, flows into equity funds both domestic and international are negatively correlated to flows to money market funds and precious metals funds. The investor re-balancing between cash and equity explains a significant amount of trade in mutual fund shares. The negative correlation of equities to metals suggests that this timing is not simply due to liquidity concerns, but rather to sentiment about the equity premium.

Shiller (2000)[174] who strongly advocated that "stock market is governed by the market information which directly affects the behaviour of the investors. Several studies have brought out the relationship between the demographics such as gender, age and risk tolerance level of individuals".

Brad, Terrance and Lu Zheng (2000)[175] analysed the mutual fund purchase and sale decisions of households and documented three primary results. First, investors buy funds with strong past performance; over half of all fund purchases occur in funds ranked in the top quintile of past annual returns. Second, investors sell funds with strong past performance and are reluctant to sell their losing fund

investments; they are twice as likely to sell a winning mutual fund rather than a losing mutual fund and thus nearly 40 percent of fund sales occur in funds ranked in the top quintile of past annual returns. Third, investors are sensitive to the form in which fund expenses are charged; though investors are less likely to buy funds with high transaction fees (e.g., broker commissions or front-end load fees) their purchases are relatively insensitive to a fund's operating expense ratio.

Barber and Odean (2001)[176] argued that the relationship between gender and trading activity is due to the greater overconfidence of men. The evidence from their study suggests that single, young male investors tend to trade most frequently. They also found that the turnover of males exceeded that of females, which they attributed to the greater overconfidence of males.

Glaser and Weber (2003)[177] argued that there are three aspects of overconfidence, viz., mis-calibration, the 'better-than-average' effect (i.e. people tend to think that they have higher than average skills) and illusion-of-control (i.e. the tendency to believe that one's personal probability of success is higher than what objective probability would warrant). They establish that all but mis-calibration lead to higher trading activities

Malmendier and Shantikumar (2003)[178] in their study of small investors, found that, while large investors adjust their reaction to hold and buy recommendations downward, small investors take recommendations literally. Small investors also fail to account for the additional distortion due to underwriter affiliation. Potential reasons for their trading behaviour are: (i) higher costs of information; and (ii) naiveté about analysts' distortions. Small investors may be naive about the distortions and trust analysts too much.

Jackson A (2003)[179] examines the aggregation assumption using a unique database of individual investor trades. Firstly he examined the trading behaviour of a large group of individual investors to assess whether there are any systematic patterns in their trading that remain after aggregation. Secondly he examined whether the actions of unrelated subgroups of individual investors from a large number of independent brokerage firms are positively correlated and finally the relationship between aggregated trades and future returns. The analysis was performed at two levels, at the market level; examining flows into and out of the

equity market as a whole and at the cross-sectional level; examining flows into and out of individual stocks.

Graham J. R, Harvey C. R and Huang Hai (2004)[180] found that home bias, coupled with the competence effect play a major role in high trading frequency. They came up with the idea that investors who feel more competent tend to trade more frequently than those who feel less competent. The competent effect also contributes to home bias. When an investor feels more competent about investing in foreign assets, he is more willing to shift a portion of his assets overseas. Their study indicated that investors with higher competence are more likely to invest in international assets.

DaSilva A. and C. Giannikos (2004)[181] opines that investors' behaviour with regard to information depends on socio-economic and psychological characteristics and that investor behaviour may vary according to age, occupation or the environment in which they live. Goetzmann et al. (2004)[182]

Demier and Kutan (2005)[183] opined that individual investors rationally herd others as they believe others may be better informed and possess some information which is unavailable to the market. Therefore herding behaviour illustrate that investors do not base their decisions on their own analysis and information but just follow the market consensus.

Ranganathan Kavitha (2006)[184] attempt to examine the related aspects of the fund selection behaviour of individual investors towards mutual funds, in the city of Mumbai. The study suggests that, AMCs should continuously design suitable schemes to meet the triple needs of adequate returns, safety and liquidity in a balanced proportion and develop infrastructure to reach to the investor and they should also simplify the operational environment. In addition, mutual fund companies should segment their target customers and position their various products based on the target segment.

The role of two psychological attributes in the trading tendency of investors has been studied by Grinblatt and Keloharju (2006)[185]. They analyzed the role played by sensation seeking and overconfidence in the tendency of investors to trade stocks. They found those overconfident investors and those investors more prone to

sensation seeking, trade more frequently. Thus, for most investors, trading is driven by behavioural attributes.

Cohn-Urbach and Westerholm (2006)[186] attempted to determine whether the frequency of trading on the part of household and institutional investors had an effect on the returns they achieved. They found strong evidence that investors with high trading frequency earned substantially lower returns than those investors in the same demographic group who traded less frequently. It was shown that investors with larger portfolios tended to trade more frequently than those with smaller portfolios. Further, it was demonstrated that those investors with larger portfolios tended to trade actively for a longer period of time than those who held smaller portfolios.

Bollen Nicolas (2007)[187] studied the dynamics of investor cash flow in socially responsible funds. Consistent with the subjective evidence of loyalty, the monthly volatility of investor cash flow is lower in socially responsible funds than in conventional funds. Cash flows into socially responsible funds are more sensitive than cash flows into conventional funds.

Rita Martenson (2008)[188] reviews prior studies on gender differences for financial consumers. There are less significant differences between expert men and women. Most differences are between novice men and women. Men are both more profit-oriented and more motivated to make financial investments than women.

Bhagaban D., Sangeeta M., Nikhil C. S. (2008)[189] makes an earnest attempt to study the behaviour of the investors in the selection of these two investment vehicles mutual fund and insurance policy in an Indian perspective by making a comparative study. The research concludes with some important findings that,"the different investment pattern do not provide the same level of services with respect to age of the retail investors in India and there exist differences depending on the education level of the investors. It is observed that investors with the graduate and postgraduate level of academic qualification are investing more in life insurance and the professionals are investing more in mutual fund".

Chandra (2009)[190] measures the investor competence and its impact on investor trading behaviour by using survey method. The study finds that level of

education and income of individual investors are likely to have a significant impact on their competence, followed by factors, such as, age, investment and gender. Through this study, it was shown that investors who feel themselves more competent tend to trade more frequently than those with less perceived competence. This trading behaviour is attributed to the competence effect. Thus, it can be said that competence effect rules the trading behaviour of individual investors.

Chandra and Sharma (2010)[191] examine the Indian investors' behaviour. More importantly, this study tries to identify the psychological biases that may drive momentum effect in the stock market. Five main cognitive biases namely, overconfidence, conservatism, representativeness, under/over optimism and excess sensitivity to rumours are drawn from both theory of psychological experiments as well as from professionals associated with the stock market. The authors have tried to verify and make sure that these five psychological biases considered by the financial behavioural literature influence effectively the investors' behaviour especially in the Indian stock market.

Rajesh and Pankaj (2010)[192] obtained a general overview of the investment pattern of the Indian MFs. The investment trends over a period of time that was long enough to facilitate meaningful comparison and short enough to catch the short-term investment pattern were analysed. The study states that there is a need for shifting the focus of the industry to a long-term view, which would put the investors before incentive structures benefiting the mutual funds.

Syed Tabassum Sultana (2010)[193] the study tries to untie the influence of demographic factors like gender and age on risk tolerance level of the investor.The study reveals that there is relationship between gender and age, the risk tolerance level of individual investors. The study also observes that, Indian investors prefer safe investment options.

Kasilingam and Jayabal (2010)[194] Family income and family size have impact not only savings size but also investment choice. Increase in family size may have influence on family expenditure and time to spend on investment activities. There are lot of studies which have critically analysed effect of income on savings. Investment behaviour implies not only investment size and choice of investment but, it also includes information search, choice criteria and perception of investors. This

study attempts to analyse the impact of family size and family income on all investment behaviour variables.

Lakshmana Rao (2011)[195] present mutual fund investor's awareness and adoption of different mutual fund schemes with educational levels. Educational level is important factor that influence the behaviour of investment decisions. Increasing educational level attainment is associated with decreased levels of risk tolerance. An investor's level of formal education has found to influence risk tolerance.

2.7 Issues and Perception of Mutual Fund Investors

Mutual Funds are a retail product which is designed for those who do not directly invest in the share market because of its unpredictable and volatile nature. Mutual funds have come as a much needed help for retail investors. Mutual funds are financial intermediaries which is professionally manged and process information, identify investment opportunities, formulate investment strategies, invest funds and monitor progress at low cost. Individual investors are generally constrained by inadequate knowledge, non availability of information, lack of investment skill etc; that effect the formation of investment perception as well as the investment activities. The perception influences the investment process including the choice of avenues, planning of funds, holding and receiving of funds etc.

Chakarabarti and Rungta (2000)[196] examined the importance of brand effect in determining the competitive advantage of the AMCs. The study revealed that brand image influenced the investor's perception and ultimately the fund selection.

Rajeswari and Ramamoorthy (2001)[197] in their study attempted to measure the awareness of retail investors about the concept and functioning of mutual funds. The study was conducted among potential and present investors. The study revealed that investors had poor /inadequate awareness.

Singh and Vanita (2002)[198] conducted a study on mutual fund investor's perception and preference. The objectives were purpose and time horizon for investment, investors' investment objectives, and investors' perception with regard to risk, return, safety etc. The result showed that, as against UTI and other public sector mutual funds, the investors were increasingly moving towards private sector

mutual funds. Majority of the investors are not aware of the inherent risk in mutual fund investment.

Saraoglu and Detzler (2002)[199] presents a rigorous framework for asset allocation and selecting mutual funds that take into account the unique preferences and constraints of an individual investor. The frame work is based on the analytic hierarchy process (AHP) and the model generates reasonable asset allocation recommendations and identifies the most suitable funds within an asset class.

Gilkar (2002)[200] examined that empirical evidence with regard to the perceptions of mutual fund investors and revealed that, the growth products were rated highest by the respondents, where as income products had the least preference. Recommendations of friends and relatives played a major role in investment decisions. Lack of awareness and poor investor service were considered as the main obstacles hindering the growth of mutual fund industry in India.

Tapan and Tripathy (2002)[201] study has been undertaken with the object of finding out the perception of investors towards mutual funds through marketing variables and also analyse the investors preferences and importance assigned to different attributes. Secondly, to examine the satisfaction level of respondents regarding customer service offered by the company. Thirdly, analysis has been made to the problems faced by intermediary agents in selling the mutual fund. The general perception of investors is that mutual fund has not rewarded the common man. They are unsatisfied with the mutual fund schemes.

Mehru K D (2004)[202] study covers the problem and perspectives of mutual funds related to structure, investment, policies, performance and investors. It also discussed the problems and steps to improve organisational and operational effectiveness. Study also suggested for greater transparency, increased innovation, better service to investors, liquidity and higher return to make mutual fund scheme more popular and investor friendly.

Singh J (2004)[203] study was undertaken to know the perceptions of small investors, who are exploited in Indian capital market. Study analysed whether mutual fund is giving adequate return by measuring the performance of the funds. The major perception factors were; age of investors do not have impact on a

decision to invest in mutual funds; salaried and retired investors gave maximum weight-age to past performance of the organisation; professionals assigned maximum importance to availability of adequate information etc.

Singh J and Chander S (2004)[204] conducted research by administering a questionnaire having various parameters of perceptions of investors towards mutual fund. Factor analysis was used to find the significant factors affecting perception of investors. The research was done to find preferences and perception of mutual fund investors and the reasons for withdrawing investments from mutual funds. The professionals would like to disclose NAV on a daily basisand preferred tax savings funds. The small investors preferred public sector mutual fund as a better investment. The study further revealed that the investor did not have confidence on the management of funds and regulators of the market and cited these as reasons for withdrawing from the mutual fund investment.

Desigan G, Kalaiselvi .S and Anusuya L (2006)[205] conducted a study on women investors' perception towards investment in general and found that "women investor's generally hesitate in investing in mutual funds due to their lack of knowledge regarding investment protection, procedure of making investment, market fluctuations, risk associated with investment, valuation of investment and redressal of grievances regarding their investment related problems".

Martenson Rita (2007)[206] states that there are less significant differences between expert men and women. Most differences are between novice men and women. Men are more profit oriented and motivated to make financial investment than women.

Hsuan and Christine (2008)[207] examines the role of reputation stretching in the context of mutual funds. The reputation stretching strategy increases net fund inflows to new funds run by well-performing fund managers and yields a net increase of fund inflows to fund families. Reputable fund managers exhibit one year performance persistence for managing new funds, which can help investors assess managers when selecting funds. They also find that the decrease in information asymmetry associated with managerial reputation benefits investors by leading to an increase in new fund returns in the short run, compared to those of new funds run by managers without track records. Overall, the reputation stretching strategy benefits

both investors, by reducing information asymmetry and improving investment returns, and fund families, by increasing net fund inflows to new equity funds.

Shollapur and Kuchanur (2008)[208] attempts to measure the degree of investors agreeableness with the selected perceptions on liquidity, profitability, statutory protection etc. The perceptual gap analysis presents certain revelations. There is a need to help investors develop a right perspective of investment schemes and their attributes.

Mittal and Gupta (2008)[209] examined the awareness of mutual fund investors and various factors affecting the investment decision. The study revealed that 85% of the respondents were aware of the mutual fund products and the associated risks. Further most of the investors were satisfied with the services provided by the mutual funds.

Sudalaimuthu and Senthil Kumar (2008)[210] researched in this area about investors perception towards mutual fund investments taking into account the investors preference towards the mutual fund sector, scheme type, purchase of mutual fund units, level of risks undertaken by investors, source of information about the market value of the units, investors opinion on factors influenced to invest in mutual funds, the investors satisfaction level towards various motivating factors, source of awareness of mutual fund schemes, types of plan held by the investors, awareness of risk category by investors, problems faced by mutual fund investors etc.

Viramgami (2009)[211] in his study, in terms of resource mobilisation liquid /money market, growth, ELSS and income funds emerged as the most popular schemes among the investors and among the various sectors operating in the mutual fund industry, the private sector was the most prominent player in the industry.

Nidhi Walia and Ravi Kiran (2009)[212] identified critical gaps in existing framework for mutual fund and further extent it to redesign existing mutual fund services. Study analyse investors perception, expectations and unveils some extremely valuable information to support financial decision making of mutual funds. 66.7% investors with working knowledge agree that actual returns from mutual fund are not found to be satisfied.

Simran, Bimal and Ramandeep (2011)[213] analysis that the mutual fund investment in relation to investor's behaviour. Investor's opinion and perception has been studied relating to various issues like type of mutual funds scheme, objective behind investing in mutual fund, role of financial advisers and brokers, sources of information, deficiencies in the services etc. The study outlined that" the investors have positive approach towards investing in mutual funds. In order to maintain confidence in mutual funds they should be provided with appropriate information relating to different trends in the industry".

Vennila and Nandhagopal R (2012)[214] aims at finding out the attitude of the investors towards investment in mutual fund. The study opined that "most of the investors rely on investment consultants to choose the right fund for them and there is a significant relationship between the satisfaction level of male and female respondents with the investment in mutual funds".

Vyas and Moonat (2012)[215] studied the perception of mutual fund investors and revealed that most of the respondents invested in equity options and they were aware of the risk associated with mutual funds. Lump sum investment was the most preferred mode followed by SIP. Further, mutual funds got an average score on all parameters like safety, liquidity, reliability, tax benefits etc.

Sanjay Das (2012)[216] analysed the factors affecting small investors' perception towards mutual fund and fond that small investors are now turning more towards mutual fund because of its advantages.

. Rajesh Kumar and Arora R.S (2013)[217] attempt to study the perception of mutual fund investors regarding respondent's knowhow, advertisement media, attributes of successful fund manager, risk tolerance, etc. Majority of respondents expressed their agreement with regard to mutual fund as an investor friendly vehicle for small investors.

2.8 Risk Tolerance

One of the pillars concepts for investments and decision making is the concept of risk. In the traditional theories risk is determined using both the deviations from the average return and the probability of those deviations. An investor attitude toward risk could be characterized as risk-aversion, risk seeking

(risk-tolerance, risk-taking, risk loving) or risk neutrality. This attitude is influenced by several factors: the competition and collaboration between the cognitive and affective system. Lowenstein et al. (2001)[218], demographic factors as age. Byrnes et al. (1999)[219] and the temporal perspective . Jaggia and Thosar (2000)[220].

Wallach and Kogan (1961)[221] are the pioneers to study the relationship between risk tolerance and age. The early studies indicated that older individuals were less risk tolerant than younger individuals.

Slovic (1966)[222] states that "belief prevails in our culture that men do take greater risks than women" which has generated a consensus among investment managers that gender is an effective differentiating and classifying factor.

According to Baker and Haslem (1974)[223] "the balancing of risk and return represents the classic dilemma faced by investors".

Cohn, Lewellen et.al (1975)[224] found "risky asset fraction of the portfolio to be positively correlated with income and age and negatively correlated with marital status".

Friend and Blume (1975)[225] observe that " an individual's risk tolerance can be inferred from the asset allocation decision by calculating the percentage of a person's assets invested in risky securities and the extent to which an investor's can tolerate these uncertainties of return is referred as risk tolerance level of an investor".

Morin and Suarez (1983)[226] found evidence of "increasing risk aversion with age although the households appear to become less risk averse as their wealth increases".

Risk tolerance tends to be subjective rather than objective. This approach was extended by Bellante and Saba (1986)[227] Siegel and Hoban (1991)[228] Riley and Chow (1992)[229].

Mac Crimmon & Wehrung (1986)[230] found that empirical findings relating to risk tolerance and age, nationality, number of dependents, gender, race, wealth, income, and occupation were contradictory over the period of review. "One can expect individuals with low risk tolerance to act differently with regard to risk than individuals with a high risk tolerance. Individuals with low levels of risk tolerance

generally (a) require lower chances of a loss (b) choose not to operate in unfamiliar situations (c) tolerate less uncertainty and (d) require more information about the performance of an investment. In summary, high risk-tolerance individuals accept volatile events, while low risk-tolerance individuals require certainty".

A few empirical studies have uncovered more direct information. LeBaron, Farrelly and Guha (1989)[231] and Schooley and Worden (1996)[232] obtain a measure of risk tolerance by survey. The 1989 Survey of Consumer Finance (SCF) used by Schooley and Worden regress the share of risky assets on dummy variables for the answers to this SCF question. As the CAPM predicts, risk tolerant investors hold a smaller proportion of risk-free assets and more of the risky portfolio.

Risk is a factor that shapes individuals' decisions, including financial and investment decisionsand it determines the rate of return that the investors are likely to receive. Lipe (1998)[233], Yang and Qiu (2005)[234]

Viscusi (1992)[235] infers risk tolerance from a willingness to undertake risky endeavours in other areas of life. Many things other than financial risk tolerance affect willingness to engage in other sorts of risky behaviour.

Horvath and Zuckerman (1993)[236] suggested that "one's biological, demographic and socioeconomic characteristics together with his/her psychological makeup affects one's risk tolerance level".

Roszkowski Snelbecker, and Leimberg (1993)[237]considered gender an important investor risk-tolerance classification factor because more men than women tend to fit the personality trait called "thrill seeker" or "sensation seeker". The study reveals that, single individuals take more risk, married individuals are prone to social risk. According to Roszkowski et al. other things being equal, different occupations can be used to differentiate between levels of investor risk tolerances.

Yoo (1994)[238] found "that the change in the risky asset holdings were not uniform and found that individuals tend to increase their investments in risky assets throughout their working life time, and decrease their risk exposure once they retire".

Mittra (1995)[239] discussed factors that were related to individuals risk tolerance, which included “years until retirement, knowledge sophistication, income and net worth”.

Haliassos and Bertaut (1995)[240] determined that “education was an important factor in overcoming the barriers to stockholding, which included an initial risk of loss associated with equities”.

Sung and Hanna (1996)[241], (1996)[242] studied the effects of financial and demographics variables on risk tolerance were estimated for households with an employed respondents. Logistic regression analysis showed that female headed households were less likely to be risk tolerant than other wise similar households with a male head or a married couple. Differences in risk tolerance by gender, marital status, ethnic group, education could be due to differences in understanding of the nature of risk and concluded that single females were less likely to take financial risks than single males and married individuals.

Malkiel (1996)[243] suggestedtaht “an individual’s risk tolerance is related to his/her household situation, lifecycle stage and subjective factors”.

Canner, Mankiw and Weil (1997)[244] suggest that Wall Street financial planners often recommend a different mix of financial assets for highly risk tolerant clients than for more risk adverse individuals.

John E. Grable (1997)[245] study was designed to determine whether the variables gender, age, marital status, occupation, self-employment, income, race, and education could be used individually or in combination to both differentiate among levels of investor risk tolerance and classify individuals into risk-tolerance categories. Risk tolerance level differed on education and gender and concluded that demographic characteristics provide only a starting point in assessing investor risk tolerance.

According to Olsen 1998)[246] most people consider themselves to be risk-avoiders rather than risk-takers and the attitude towards risk changes with age to their family or work lives, and changes in the performance of markets.

Demographic factors as gender or age induce important shifting in risk attitude. Byrnes et al. (1999)[247] validates the assumption of a higher propensity for

taking risk in male investors and found that this tendency of the gender gap to decrease with age. Other important factor is represented by the temporal perspective. The investors' confidence in their prospect for success decreases as they come closer to the investment liquidation date so usually the risk assessment is more conservative with shorter temporal distance that in longer term investments.

Bajtelsmit, Bernasek and Jianakoplos (1999)[248] presents a version of the Capital Asset Pricing Model that allows individuals to allocate their funds between risky assets, a risk-free asset. Consequently investors with high human capital investments hold larger fractions of their wealth in risky assets.

Govind Hariharan, Kenneth S. Chapman, and Dale L. Domian (2000)[249] uses a large individual level data set to isolate the effects of risk tolerance on portfolio composition. They tested and confirm two predictions of the Capital Asset Pricing Model- (i) increased risk tolerance reduces an individual's propensity to purchase risk-free assets and (ii) higher risk tolerance does not affect the composition of an individual's portfolio of risky assets. The risk tolerant investors nearing retirement do not reduce their bond allocations in order to buy more stock.

Jaggia and Thosar (2000)[250] argues that "risk perception is not only a function of age but also of temporal distance between the initial investment point and the cash-out point typically represented by the individuals retirement".

Barber and Odean (2001)[251] have shown that overconfidence may result in more trading, but no better returns. Lack of confidence may however influence motivation to learn more about the stock market and in that way be negative for many women. Barber and Odean claim that gender is a good proxy for overconfidence (overconfidence among men is higher than among women) and find that men trade more than women.

Dwyer, Gilkeson and List (2002)[252] using data from a national survey of nearly 2000 mutual fund investors examined, whether the risk taking behaviour of mutual fund investors is correlated to gender. The findings revealed that women exhibit less risk taking than men and the impact of risk taking is significantly weakened when investor's knowledge is controlled in regression equation.

Dulebohn, James H (2002)[253] presents the result of an investigation of the determinants of investment behaviour in employee sponsored retirement plans. He examined the significance of demographic and attitudinal variables on employees risk behaviour in selecting among investment allocation options. The results identified primary causes of risky investment behaviour including income, age, other retirement plan participation, self- efficacy, knowledge of investment and general risk propensity.

Kenneth A. Froot, Paul G. J. and O'Connell (2003)[254] proposed a methodology for measuring investor confidence by decomposing investor demand for international assets. This was based on an examination of the cross section of international portfolio holdings and flows of international institutional investors over time. The risk tolerance component turns out to account for a substantial portion of variation in portfolio holdings and a smaller but meaningful amount of variation in equity returns. In addition, it appears to be informative about future returns.

Rajarajan V (1997)[255], (1998)[256,] (2000)[257] and (2003)[258] classified investors on the basis of their demographics and bought out the investors characteristics. He found that "the percentage of risky assets to total financial investments had declined as the investor moves up through various stages in life cycle. The role of uncertainty and the lack of knowledge about the return on investment avenue are important components of any investment".

According to Frieder (2004)[259] illustrate that "for many investors, investing constitutes more than simply weighting the risk and returns of various investment assets".

Statman ,Thorley and Vorkink (2006)[260] present empirical evidence for the US market and argue that trading volume is higher after high returns, as investment success increases the degree of overconfidence. This finding is that "a higher degree of overconfidence leads to higher trading volume as long as we accept that high past returns are positively correlated with overconfidence".

Glaser and Weber (2007)[261] confirm higher trading propensity for overconfident investors when they identify overconfident investors as those who think they are above average in terms of investment skills or past performance. The

same conclusion doesn't hold when the authors use measures of miscalibration as proxies for overconfidence.

Jasim Y. Al-Ajmi (2008)[262] study presents new evidence on the determinants of risk tolerance of individual investors in Bahrain. The findings indicate that "men have high propensity towards risk tolerance than women. Investors with better level of education and wealth are more likely to seek risk than less educated and less wealthy ones. The study finds that, investors' risk tolerance declines when they have more financial commitments as well as when they are approaching towards their retirement age or are retired".

Prabakaran and Jayabal (2009)[263] quantified the risk tolerance of mutual fund investors. Study identifies the socio economic variables and correlates the same with risk tolerance. Empirically it has been proved mutual fund investors are from low and moderate risk tolerant groups.

Syed Tabassum Sultana (2010)[264] study infers that "individual investor still prefers to invest in financial products which give risk free returns. This confirms that Indian investors even if they are of high income, well educated, salaried, independent are conservative investors prefer to play safe. The investment product designers can design products which can cater to the investors who are low risk tolerant and use TV as a marketing media as they seem to spend long time watching TVs".

Rui Yaoa, Deanna L. Sharpe, Feifei Wangc (2011)[265] study used an analytical method to separate effects on financial risk tolerance. Results supported the hypothesis that, age has a negative effect on the willingness to take financial risks. As people age they are likely to accumulate investment experience which would positively influence the willingness to accept risk. Knowledge of and experience with investments may also influence difference in the perception of financial risks.

Ebrahim Kunju Sulaiman (2012)[266] the study was designed to examine the association between the risk tolerance of individual investors and their demographic features. Most of the anticipated relationship between financial risk tolerance and each of the demographic features from the literature were found to be relevant.

Conclusion

From the literature review presented above, it is evident that there is a literature gap in relation to the behavioural aspects of mutual fund investors and leaves scope for a lot of further research. Most of the studies are either theoretical in nature or analysis of the fund performance. There is no much research examining the impact of mutual fund as an investment option among the retail investors. This attempt in this direction is expected to contribute towards filling that gap in the literature.

Mutual funds have already attracted the attention of global practitioners and academicians. Few studies are available that focus on investor's objective and considering issues and perceptions of investors especially in Indian context. The dramatic growth in the mutual fund industry has heightened policymakers' concern with the level of investor knowledge and perceptual factors associated with mutual funds. The literature reviews has identified critical gaps in the behavioural aspects of mutual fund investors and further extend it to understand and realize the need of existing mutual fund investors.Thus, it has become imperative to study mutual funds from the investor's angle and uncover the unidentified expectations and parameters that account for their dissatisfaction.

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Chapter 3

THEORETICAL AND CONCEPTUAL FRAMEWORK

The concept developed by researchers and practitioners regarding mutual funds and savings are discussed in this chapter. A detailed analysis based on the secondary data on mutual funds since its inception in1964 to March 2013 is done to know the penetration and mobilization of mutual funds. As savings and investment are important drivers in taking the mutual fund industry forward a detailed analysis was also done in this area since 2000 to 2013, to get a clear picture of house hold investors savings and investment pattern.

3.1 Mutual Funds –Growth, Performance and Prospects

3.1.1 Introduction

The mutual fund sector is one of the growing sectors in Indian economy and has great potential for sustained future growth. The Mutual Funds originated in UK and thereafter it crossed the border to reach other destinations. The Mutual Fund industry in India has its origins in the Parliament Act (52 of 1963). The Act proposed setting up of an Asset Management Company (AMC) in order to create an instrument for channeling investments. The Unit Trust of India (UTI) was incorporated in February 1964 and the first fund was called Unit Scheme 1964, popularly known as US 64.

Though initially growth was slow, it pick up pace from the year 1987 when the nin-UTI players entered the market. The first phase of expansion of the industry was witnessed in the year with the advent of public companies that entered the market. Two banks (SBI and Canara) and two insurance companies (LIC and GIC) joined the tussle thus bringing to an end the monopoly that UTI enjoyed in the market. With the new economic policy in 1991 and subsequent changes in the capital market, the performance was encouraging as the retail investors have been affirmed in India as aganist the institutional investors in contrast to developed countries.Later with the entry of private sector funds in 1993, a new era started in the Indian mutual fund industry, giving wider option of funds to the investors.

Mutual funds make saving and investing simple, accessible, and affordable. The industry now functions under the SEBI (Mutual Fund) Regulations 1996.

Since its inception in 1964, there were only 25crore assets under management but it has grown to AUM of INR 7,01,443 crore at the end of fiscal year March 31, 2013 with 1,294 mutual fund schemes and 44 fund houses. The Indian mutual fund industry has evolved into a high-growth and competitive market on the back of favourable economic and demographic factors.

3.1.2 Penetration of Mutual Funds in India (as measured by the AUM/GDP ratio)

Asset under management (AUM) is looked at as a measure of success against the competition and consists of growth/decline due to both capital appreciation/losses and new money inflow/outflow. In relation to GDP the total AUM (table 3.1) has fallen from 11.7 percent during the financial year end 2008 to 6.6 percentage during the year 2012.

Table 3.1

Share of AUM of Mutual Fundas a percentage to GDP*

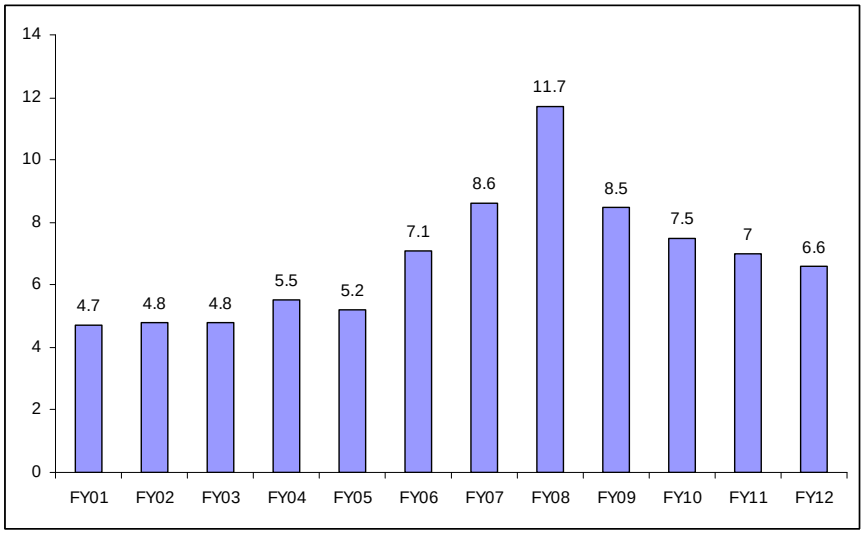
Year	Percentage
FY01	4.7
FY02	4.8
FY03	4.8
FY04	5.5
FY05	5.2
FY06	7.1
FY07	8.6
FY08	11.7
FY09	8.5
FY10	7.5
FY11	7.0
FY12	6.6

Source: RBI, AMFI & CSO

**GDP at factor cost current prices*

Fig. 3.1

Share of AUM of Mutual Fund as a percentage to GDP*



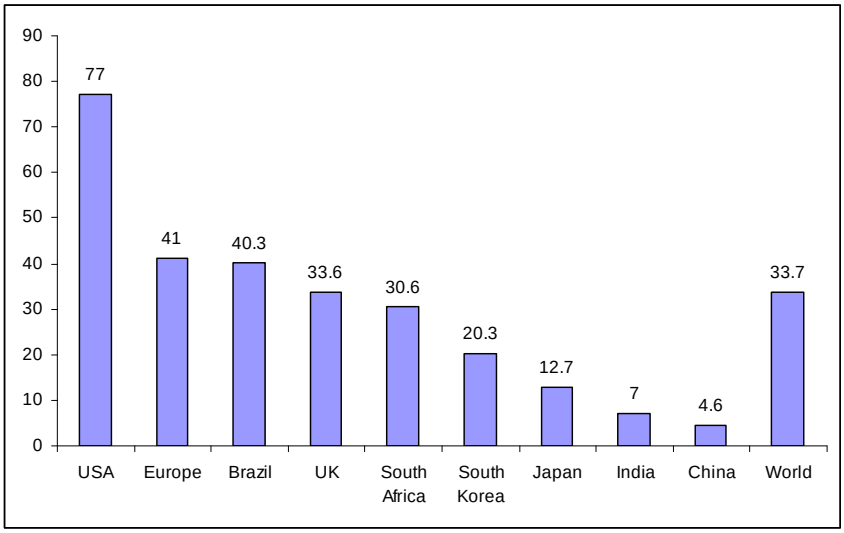
Source: RBI, AMFI & CSO
**GDP at factor cost current prices*

Further, the penetration of mutual funds in India (as measured by the AUM/GDP ratio) remains low at 7 percent compared to 77.0 percent in the US, 41 percent in Europe and 40.3 percent in the Brazil. (*Investment Company Institute, USA, 2012).* There is a significant scope for further expansion of the industry as shown (Chart 3.2) by the cross country comparison of AUM-GDP ratio. "The mutual fund industry has registered a Compound Annual Growth Rate (CAGR) of 18 percent from 2009 - 2013, but the national population is still largely under banked with a very low level of financial inclusion. The business of Indian Mutual Funds (MFs) industry is largely confined within the Tier 1 cities the industry is focussed on developing the penetration ratio and increasing its presence in other cities. Currently, the top five cities of India contribute to 74 percent of the entire pie, with the remaining 26 percent distributed among other cities". *(CII - PwC Report, 2013)*

The investor perceives investments in the capital market to be risky and unsafe and hesitates to channelise their savings into mutual funds when the stock market is volatile. Mutual funds need to position as along term investment media, especially in these challenging times.

Fig. 3.2

AUM-GDP Ratio (Percentage) in 2012



Source: Investment Company Institute, USA

3.1.3 Concept of Mutual Fund

For retail investors, who do not have the time and expertise to analyze and invest in stock, mutual funds is a viable investment alternative, because it provide the benefit of cheap access to expensive stocks.

A Mutual Fund is definied as "a collective investment vehicle formed with the specific objective of raising money from a large number of individuals and investing it according to a pre-specified objective, with the benefits accrued to be shared among the investors on a pro-rata basis in proportion to their investments".

Mutual fund "is a pool of money, based on the trust who invests the savings of a number of investors who shares a common financial goal, like the capital appreciation and dividend earning". The money thus collected is invested in capital market and investors get the units as per the unit value which is called as Net Assets Value (NAV). Mutual fund is the most suitable investment for the common man as it offers an opportunity to invest in diversified portfolio management, good research team, and professional management.

The main aim of the fund manager is to select the scrip's that are undervalued and to sell out the stock when it rises. Fund manager concentration

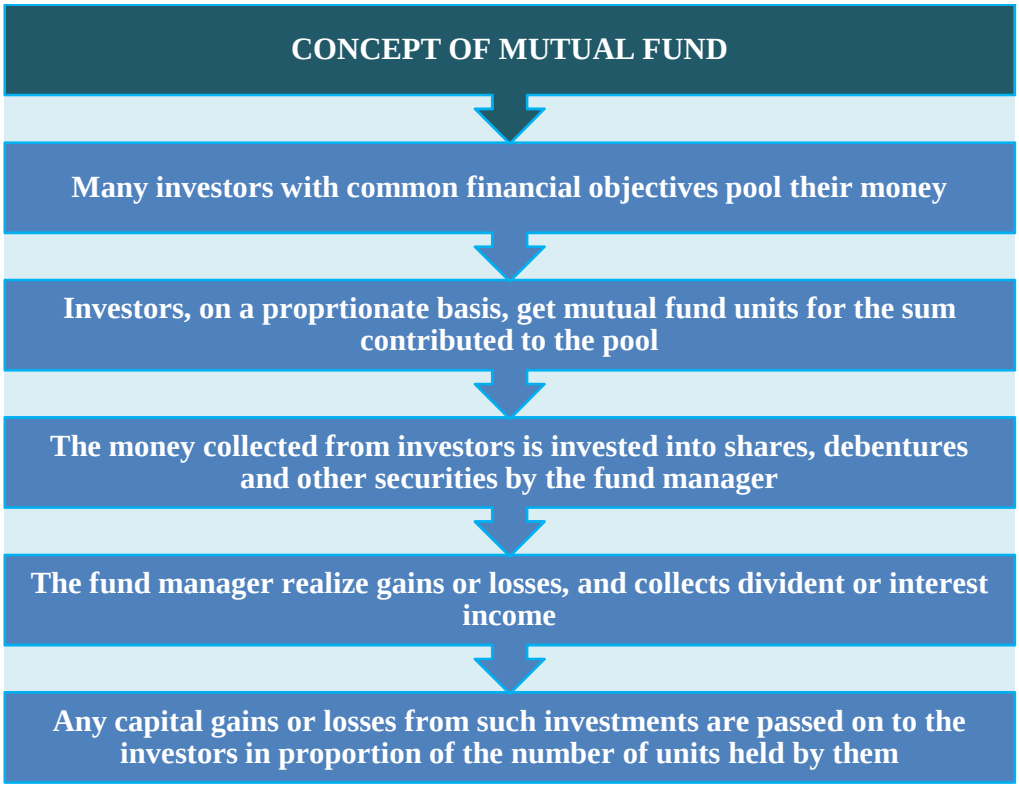
is on risk-return trade off, where to minimize the risk and maximize the return through diversification of the portfolio. Investments in securities are spread across a wide cross-section of industries and sectors and thus the risk is reduced. Diversification reduces the risk because all stocks may not move in the same direction in the same proportion at the same time.

According to Encyclopedia Americana, "Mutual funds are open end investment companies that invest shareholders' money in portfolio or securities. They are open ended in that they normally offer new shares to the public on a continuing basis and promise to redeem outstanding shares on any business day".

According to Securities and Exchange Board of India Regulations, 1996 a mutual fund means "a fund established in the form of trust to raise money through the sale of units to the public or a section of the public under one or more schemes for investing in securities, including money market instruments". MFs come under the purview of the Indian Trusts Act, 1882.

Fig. 3.3

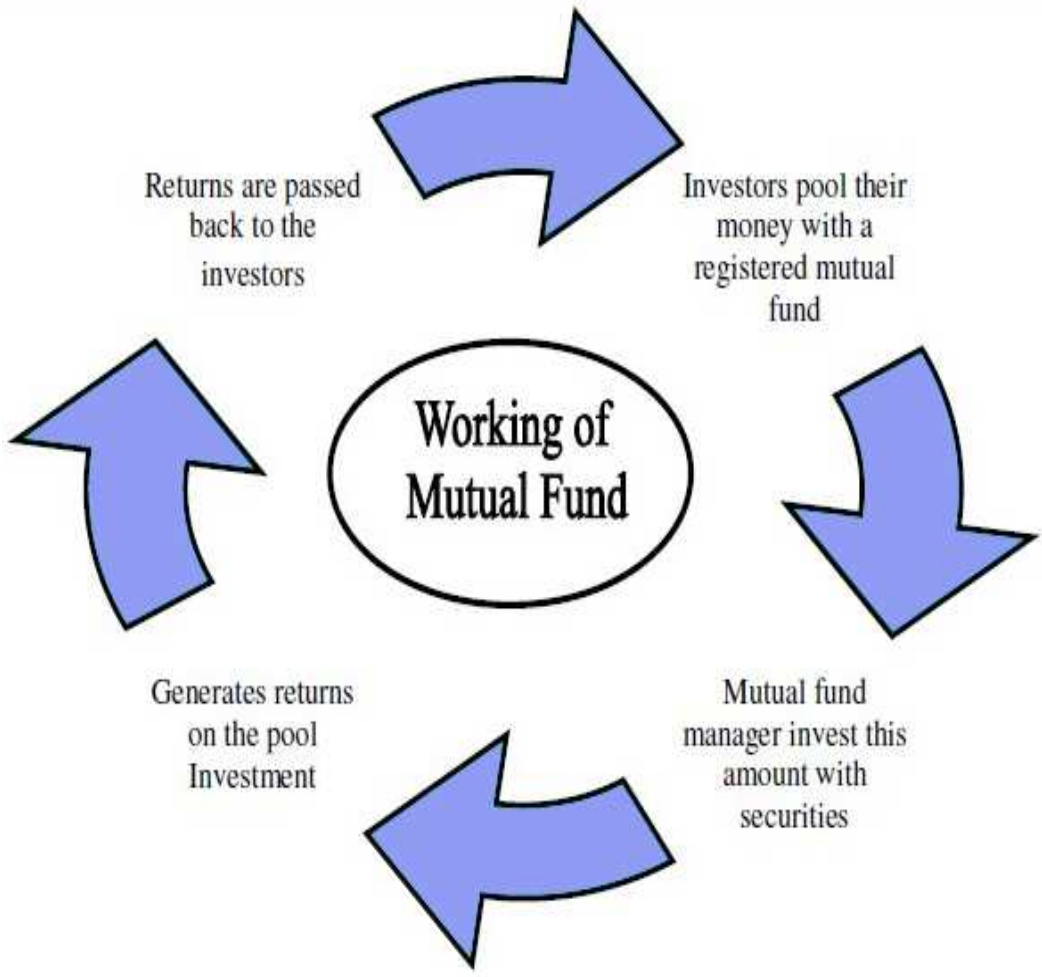
Concept of Mutual Fund



A Mutual Fund is a trust registered with the Securities and Exchange Board of India (SEBI) "which pools up the money from individual/corporate investors and invests the same on behalf of the investors/units holders, in equity shares, government securities, bonds, call money market etc. The income earned through these investments and the capital appreciations realized are shared by its unit holders in proportion to the number of units owned by them. This pooled income is professionally managed on behalf of the unit-holders, and each investor holds a proportion of the portfolio".

Fig. 3.4

Operational Flow of Mutual Funds

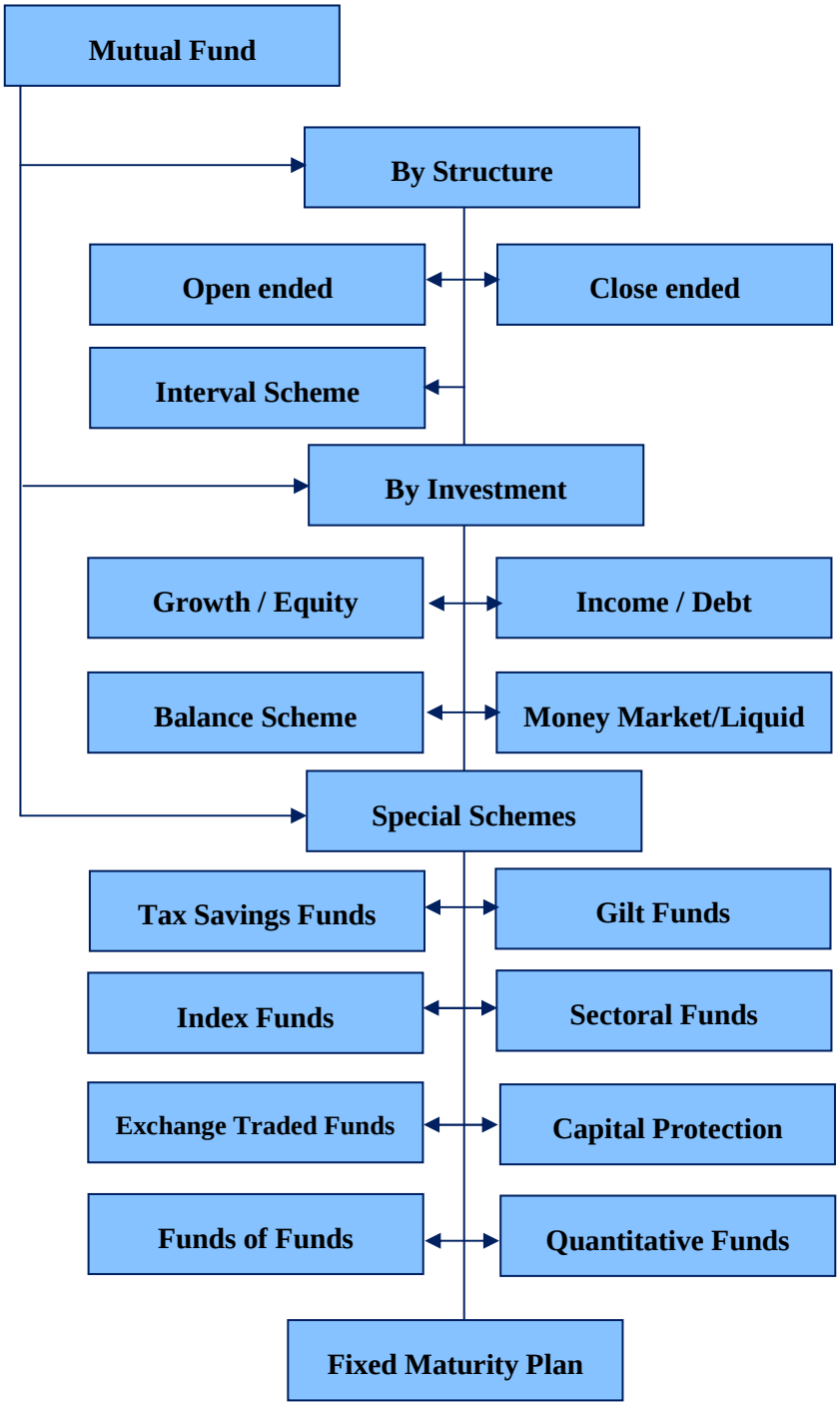


3.1.4 Types of Mutual Fund Schemes

Mutual Fund schemes may be classified on the basis of its structure and investment objective.

Fig. 3.5

Types of Mutual Fund Schemes



Based on Structure

(i) Open-ended Funds

An open-ended fund is one that is available for subscription all through the year. These do not have a fixed maturity and investors can conveniently buy and sell units at Net Asset Value (NAV) related prices. The key feature of open-end schemes is liquidity.

(ii) Closed-ended Funds

A closed-ended fund has a stipulated maturity period which generally ranges from three to fifteen years. The fund is open for subscription only during a specified period. The investors can invest in the scheme at the time of the initial public issue and thereafter they can buy or sell the units of the scheme on the stock exchanges where they are listed. In order to provide an exit route to the investors, some close-ended funds give an option of selling back the units to the mutual fund through periodic repurchase at NAV related prices.

(iii) Interval Funds

Interval funds combine the features of open-ended and close-ended schemes. They are open for sale or redemption during pre-determined intervals at NAV related prices.

Based on Investment Objective

(i) Growth / Equity Funds

The aim of growth funds is to provide capital appreciation over medium to long- term. Such schemes normally invest a majority of their corpus in equities. Growth schemes are ideal for investors having a long-term outlook seeking growth over a period of time.

(ii) Income/ Debt Funds

The income funds are generally invested in fixed income securities such as bonds, corporate debentures and Government securities and are ideal for capital stability and regular income.

(iii) Balanced Funds

Balanced funds are a combination of income and growth funds and is aimed to provide both growth and regular income. Such schemes periodically distribute a part of their earning and invest both in equities and fixed asset income securities in the proportion indicated in their offer documents. In a rising stock market, the NAV of these schemes may not normally keep pace, or fall equally when the market falls.

(iv) Money Market Funds

Money market schemes generally invest in safer short-term instruments such as treasury bills, certificates of deposit, commercial paper and inter-bank call money. The aim of money market funds is to provide easy liquidity, preservation of capital and moderate income. Returns on these schemes may fluctuate depending upon the interest rates prevailing in the market. These are ideal for corporate and individual investors as a means to park their surplus funds for short periods.

Special Schemes

(i) Tax Saving Funds

Tax savings schemes offer tax rebates to the investors under specific provisions of the Indian income tax laws as the Government offers tax incentives for investment in specified avenues. Investments made in Equity Linked Savings Schemes (ELSS) and Pension Schemes are allowed as deduction u/s 88 of the Income Tax Act, 1961. The act also provides opportunities to investors to save capital gains u/s 54EA and 54EB by investing in mutual funds.

(ii) Gilt Edged Funds

Gilt funds are mutual funds that are predominantly invested in government securities (G-Secs). These securities are issued by the Reserve Bank of India (RBI) on behalf of the Government of India. Being sovereign paper, they do not expose investors to much credit risk. Since the market for government securities (as is the case with most debt instruments) is largely dominated by institutional investors, gilt funds offer retail investors a convenient means to invest in government securities. The first gilt fund in India was set up in

December 1998. Gilt funds can be both short term and long term, depending on their investment horizon, investors can choose between short-term and long-term gilt funds. These are ideal for those who want more safety for their investments or are risk-averse and at the same time, are looking for reasonable returns on their money. Gilt funds are a good option when interest rates are not expected to go up .The funds are not risk free because there is an inverse relationship between bond prices and interest rates, when interest rate rise, prices of government securities fall, adversely impacting the performance of gilt funds.

(iii) Index Funds

Index schemes attempt to replicate the performance of a particular index such as the BSE Sensex or NSE Nifty. The portfolio of these schemes will consist of only those stocks that constitute the index. The percentage of each stock to the total holdings will be identical to stocks index weightage and hence, the returns from such schemes would be more or less equivalent to those of the index.

(iv) Industry / Sector Specific Funds

Industry Specific Schemes invest only in the industries specified in the offer document. The investment of these funds is limited to specific industries like Infotech, Fast Moving Consumer Gods (FMCG) and Pharmaceuticals etc. Sector specific schemes invest in specific sectors such as technology, infrastructure, banking, etc. Besides, there are also schemes which invest exclusively in certain segments of the capital market, such as large caps, mid caps, small caps, micro caps, 'A' group shares, shares issued through Initial Public Offerings (IPOs), etc. Sectoral fund schemes are ideal for investors who have already decided to invest in a particular sector or segment.

(v) Exchange Traded Funds

Exchange Traded Funds, (ETF) just like their index fund counterparts, also track indexes. The difference is that the stocks of individual companies that comprise a given index are bundled into an equity-like investment vehicle that is traded on an exchange, exactly like a stock. Those purchasing ETF shares can place orders for them throughout the day, and even use limit orders to make trades. They are traded on an exchange and share many of the attributes of

individual equities. ETFs enable investors to gain broad exposure to entire stock markets as well as in specific sectors with relative ease, on a real-time basis and at a lower cost than many other forms of investing. An ETF "is a basket of stocks that reflects the composition of an index, like S&P CNX Nifty, BSE Sensex, CNX Bank Index, CNX PSU Bank Index, etc. The ETF's trading value is based on the net asset value of the underlying stocks that it represents. It can be compared to a stock that can be bought or sold on real time basis during them market hours". The first ETF in India, Benchmark Nifty Bees, opened for subscription on December 12, 2001 and listed on the NSE on January 8, 2002.

Gold Exchange Traded Funds offer investors an innovative, cost-efficient and secure way to access the gold market. Gold ETFs are intended to offer investors a means of participating in the gold bullion market by buying and selling units on the Stock Exchanges, without taking physical delivery of gold. The first Gold ETF in India, Benchmark GETF, opened for subscription on February 15, 2007 and listed on the NSE on April 17, 2007.

(vi) Capital Protection Oriented Funds

Capital protection oriented schemes are schemes that "endeavour to protect the capital as the primary objective by investing in high quality fixed income securities and generate capital appreciation by investing in equity / equity related instruments as a secondary objective". The first capital protection oriented fund in India, Franklin Templeton opened for subscription on October 31, 2000.

(vii) Fund of Funds (FOFs) - Domestic and Abroad

Fund of Funds are schemes that "invest in other mutual fund schemes. The portfolio of these schemes comprise only of units of other mutual fund schemes and cash / money market securities/ short term deposits pending deployment". The first FOF was launched by Franklin Templeton Mutual Fund on October 17, 2003. Fund of Funds can be sector specific e.g. real estate, theme specific etc.

With the opening up of the Indian economy, mutual funds have been permitted to invest in foreign securities/ American Depository Receipts (ADRs) / Global Depository Receipts (GDRs). Some of such schemes are dedicated funds

for investment abroad while others invest partly in foreign securities and partly in domestic securities. While most such schemes invest in securities across the world, there are also schemes which are country specific in their investment approach.

(viii) Quantitative Funds

A quantitative fund is an investment fund that "selects securities based on quantitative analysis. The managers of such funds build computer based models to determine whether or not an investment is attractive. In a pure "quant shop" the final decision to buy or sell is made by the model. However, there is a middle ground where the fund manager will use human judgment in addition to a quantitative model". The first Quant based mutual fund scheme in India, Lotus Agile fund opened for subscription on October 25, 2007.

(ix) Fixed Maturity Plans (FMPs)

Fixed Maturity Plans (FMPs) are "investment schemes floated by mutual funds and are close ended with a fixed tenure, the maturity period ranging from one month to three/five years. These plans are predominantly debt-oriented, while some of them may have a small equity component. The objective of such a scheme is to generate steady returns over a fixed-maturity period and protect the investor against market fluctuations. FMPs are typically passively managed fixed income schemes with the fund manager locking into investments with maturities corresponding with the maturity of the plan. FMPs are not guaranteed products".

3.1.5 Advantages and Limitations of Mutual Funds

Advantages of MF

(i) Professional Management

Mutual Funds provide the services of experienced and skilled professionals, backed by a dedicated investment research team that analyses the performance and prospects of companies and selects suitable investments to achieve the objectives of the scheme. It is the fund manager's job to find the best securities for the fund, given the fund's stated investment objectives and to keep track of investments and changes in market conditions and adjust the mix of the portfolio as and when required.

(ii) Diversification

Portfolio diversification is the major advantage stressed by mutual funds, especially for retail investors. Risk gets diversified by spreading the investment across different securities and sectors in order to add stability of returns. Retail investors with limited money to invest are likely to incur huge transaction costs to hold a well-diversified portfolio, due to the small quantity purchase of each security. By purchasing units of mutual funds, investor holds a proportional claim on a portfolio comprising large number of securities in adequate quantity. Diversification reduces the risk because seldom do all stocks decline at the same time and in the same proportion.

(iii) Convenient Administration

Investing in a mutual fund reduces paperwork and helps to avoid many problems such as bad deliveries, delayed payments and follow up with brokers and companies. Mutual funds save time and makes investing easy and convenient.

(iv) Return Potential

Mutual funds have the potential to provide a higher return as they invest in a diversified basket of selected securities over medium to long term period.

(v) Low Costs

Mutual Funds are a relatively less expensive way to invest compared to directly investing in the capital markets because of the benefits of scale in brokerage, custodial and other fees which translate into lower costs for investors.

(vi) Liquidity

In open-end schemes, an investor can get his money back quickly at net asset value and with closed-ended schemes; the investor can sell his units on a stock exchange at the prevailing market price or avail of the facility of direct repurchase at NAV related prices.

(vii) Flexibility

Through features such as regular investment plans, regular withdrawal plans and dividend re -investment plans, an investor can systematically invest or withdraw funds according to his needs and convenience.

(viii) Choice of Schemes / Variety

Mutual Funds offer a family of schemes to suit an investor's varying needs over a lifetime. For e.g. Growth schemes are ideal for investors having a long-term outlook seeking growth over a period of time. Income funds are ideal for capital stability and regular income. Balanced funds are ideal for investors looking for a combination of income and moderate growth. Money market funds are ideal for corporate and individual investors as a means to park their surplus funds for short periods.

(ix) Well Regulated

All mutual funds are registered with Securities Exchange Board of India (SEBI) and they function within the provisions of strict regulations designed to protect the interests of investors. These rules relate to the formation, administration and management of mutual funds and prescribe disclosure and accounting requirements. Such a high level of regulation seeks to protect the interest of investors.

(x) Affordability

Mutual funds allow even small investors to indirectly reap the benefit of investment in shares of a big company because of its large corpus, which an individual investor may not be able to do so because of insufficient funds.

(xi) Tax Benefits

Subject to certain conditions, long term capital gains, tax concessions and tax rebates are offered to mutual fund investors.

3.5.2 Limitations of Mutual Funds

The mutual funds not only offer advantages but also have disadvantages for the investors. The fund managers not always make profits but might creates loss for not properly managed. The fund have own strategy for investment to hold, to sell, to purchase unit at particular time period.

(i) No Guarantee

Investment is not risk free. If the entire stock market declines in value, the value of mutual fund shares will also go down no matter how balanced the

portfolio. Investors encounter fewer risks when they invest in mutual funds than when they buy and sell stocks on their own.

(ii) Fees and Commissions

All funds charge administrative fees to cover their day-to-day expenses. Some funds also charge sales commissions or loads to compensate brokers, financial consultants, or financial planners. Costs control is not in the hands of an investor and they has to pay investment management fees and fund distribution costs as a percentage of the value of his investments (as long as he holds the units), irrespective of the performance of the fund.

(iii) No Customized Portfolios

The portfolio of securities in which a fund invests is a decision taken by the fund manager. Investors have no right to interfere in the decision making process of a fund manager, which some investors find as a constraint in achieving their financial objectives.

(iv) Management Risk

The investor depends on the fund's manager to make the right decisions regarding the fund's portfolio. If the manager does not perform the investor may not make as much money as expected.

(v) Dilution

It is possible that, too much of diversification occur as the fund are invested in different companies expecting high return at lower risk. Dilution also occurs on account of large amount of money getting invested into performing funds.

(iv) Difficulty in selecting a suitable fund scheme

Many investors find it difficult to select one option from the plethora of funds/schemes/plans available. The investors may have to take advice from financial planners in order to invest in the right fund to achieve their objectives.

3.1.6 Parties to Mutual Fund

The following diagram illustrates various entities involve in organizational structure of mutual fund:

Fig. 3.6

Parties to Mutual Fund

Investors

Every investor, given his/her financial position and personal disposition, has a certain inclination to take risk. By taking an incremental risk, it would be possible for the investor to earn an incremental return. Mutual fund is a solution for investors who lack the time, the inclination or the skills to actively manage their investment risk in individual securities. They delegate this role to the mutual fund, while retaining the right and the obligation to monitor their investments in the scheme. In the absence of a mutual fund option, the money of such passive investors would lie either in bank deposits or other 'safe' investment options, thus depriving them of the possibility of earning a better return. Investing through a mutual fund would make economic sense for an investor if his/her investment, over medium to long term, fetches a return that is higher than what would otherwise have earned by investing directly.

Sponsors

Sponsor is the company, which sets up the mutual fund as per the provisions laid down by the Securities and Exchange Board of India (SEBI). SEBI mainly fixes the criteria of sponsors based on sufficient experience, net worth, and past track record. Sponsor is the person who acts alone or in combination with another body corporate establishes a mutual fund. Sponsor must contribute at least 40% of the net worth of the investment managed and meet the eligibility criteria prescribed under the Securities and Exchange Board of India (Mutual Funds) Regulations, 1996. The Sponsor is not responsible or liable for any loss or shortfall resulting from the operation of the schemes beyond the initial contribution made by it towards setting up of the mutual fund.

Asset Management Company (AMC)

The AMC manages the funds of the various schemes and employs a large number of professionals for investment, research and agent servicing. The AMC also comes out with new schemes periodically. It plays a key role in the running of mutual fund and operates under the supervision and guidance of the trustees. An AMC's income comes from the management fees, it charges for the schemes it manages. The management fees, is calculated as a percentage of net assets managed. An AMC has to employ people and bear all the establishment costs that are related to its activity, such as the premises, furniture, computers and other assets, etc. So long as the income through management fees covers its expenses, an AMC is economically viable.

The AMC is appointed by the trustee as the investment manager of the mutual fund. The AMC is required to be approved by the Securities and Exchange Board of India (SEBI) to act as an asset management company of the mutual fund. At least 50% of the directors of the AMC are independent directors who are not associated with the Sponsor in any manner. The AMC must have a net worth of at least 10 cores at all times.

Trustees

"The Mutual Fund is constituted as a trust in accordance with the provisions of the Indian Trusts Act, 1882 by the Sponsor. The trust deed is registered under the Indian Registration Act, 1908".

Trustees are an important link in the working of any mutual fund. They are responsible for ensuring the investors' interests in a scheme properly. They do this by a

constant monitoring of the operations of the various schemes. In return for their services, they are paid trustee fees, which are normally charged to the scheme.

Trustee is usually a company (corporate body) or a Board of Trustees (body of individuals). The main responsibility of the trustee is to safeguard the interest of the unit holders and to ensure that the AMC functions in the interest of investors and in accordance with the Securities and Exchange Board of India (Mutual Funds) Regulations, 1996, the provisions of the trust deed and the offer documents of the respective schemes. At least 2/3rd directors of the trustee are independent directors who are not associated with the sponsor in any manner.

Distributors

Distributors earn a commission for bringing investors into the schemes of a mutual fund. This commission is an expense for the scheme. Depending on the financial and physical resources at their disposal, the distributors could be:

a) Tier 1 distributors who have their own or franchised network reaching out to investors all across the country; or
b) Tier 2 distributors who are generally regional players with some reach within their region; or
c) Tier 3 distributors who are small and marginal players with limited reach and the distributors earn a commission from the AMC.

Registrars and Transfer Agent

The AMC if so authorised by the trust deed to appoint the Registrar and Transfer Agent (R & T) to the mutual fund. "The Registrar processes the application form, redemption requests and dispatches account statements to the unit holders. The Registrar and Transfer agent also handles communications with investors and updates investor records".

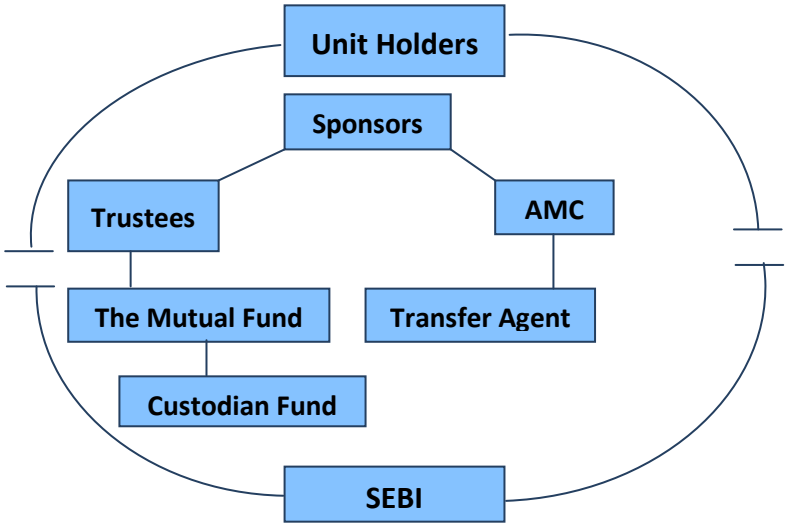
An investor's holding in mutual fund schemes is typically tracked by Registrar and Transfer Agent. Some AMCs prefer to handle this role on their own instead of appointing R & T. The Registrar or the AMC as the case may be maintains an account of the investors' investments and disinvestments from the schemes. Requests to invest more money into a scheme or to redeem money against existing investments in a scheme are processed by the R & T.

Custodian/Depository

The custodian maintains custody of the securities in which the scheme invests and. ensures an ongoing independent record of the investments of the scheme. The custodian also follows up on various corporate actions, such as rights, bonus and dividends declared by investment companies. At present, when the securities are being dematerialised, the role of the depository for such independent record of investments is growing.

Fig. 3.7

Interdependence of Parties to Mutual Fund



3.1.7 History and Growth of Mutual Fund Industry in India

The history of mutual funds runs back to 19 th century when it was introduced in Europe, in particular, Great Britain. Robert Fleming set up in 1868 the first investment trust called Foreign and Colonial Investment Trust which promised to manage the finances of the rich classes of Scotland by spreading the investment over a number of different stocks. This investment trust and other investments trusts which were subsequently set up in Britain and the US, resembled today's close-ended mutual funds. The first mutual in the U.S., Massachustsettes investor's Trust, was set up in March 1924. This was the open – ended mutual fund.

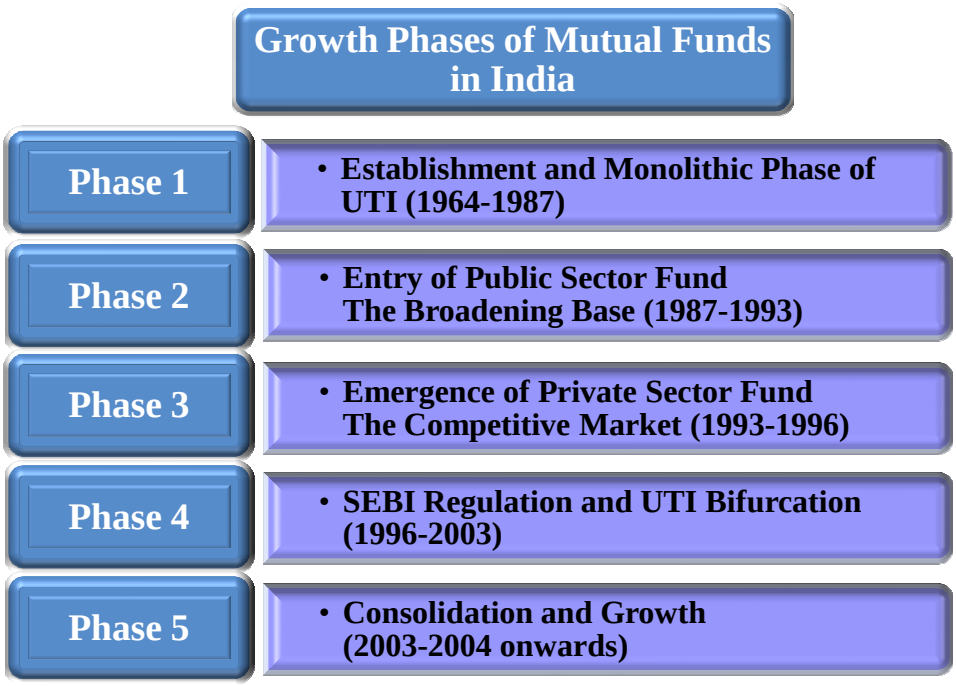
The stock market crash in 1929, the Great Depression, and the outbreak of the Second World War slackened the pace of mutual fund industry. Innovations in

products and services increased the popularity of mutual funds in the 1960s and 1990s. The first international stock mutual fund was introduced in the U.S. in 1940.

The Mutual Fund industry in India started in 1963 with the formation of Unit Trust of India at the initiative of the Government of India and Reserve Bank. "The primary objective at that time was to attract small investors and it was made possible through the collective efforts of the Government of India and Reserve Bank of India". The history of Mutual Fund in India can be divided into five Phases.

Fig. 3.8

Growth Phases of Mutual Funds in India



Growth Phases of Mutual Funds in India

Phase I: Establishment and Monolithic Phase of Unit Trust of India (1964-1987)

Unit Trust of India (UTI) was established in 1963 by an Act of Parliament. It was set up by the Reserve Bank of India and it continued to operate under the regulatory control of the RBI until the two were delinked in 1978 and the entire control was transferred to the hands of Industrial Development Bank of India (IDBI). UTI launched its first scheme in 1964 named as Unit Scheme 1964 (US-64) which attracted the largest number of investors in any single investment scheme

over the years. UTI launched more innovative schemes in 1970's and 80's to suit the need of different investors. It launched ULIP (Unit Linked Investment plan) scheme in 1971 and six more schemes between 1981-84; children's gift growth fund and India fund in 1986 (India's first off scheme fund) master share (India's first equity dividend scheme) (1987) and monthly income schemes during 1990's. By the end of 1987, UTI had launched 20 schemes mobilizing net resources amounting to Rs.4564.0 crore. For these 23 long years up to 1964-87, UTI enjoyed complete monopoly.

Table 3.2

Net Resources Mobilised by Mutual Funds (1970-'87) (Rupees Billion)

Year	Unit Trust of India	Bank-sponsored Mutual Funds	Financial Institution-sponsored Mutual Funds	Private Sector Mutual Funds	Total
1970-71	0.18	-	-	-	0.18
1971-72	0.15	-	-	-	0.15
1972-73	0.23	-	-	-	0.23
1973-74	0.31	-	-	-	0.31
1974-75	0.17	-	-	-	0.17
1975-76	0.29	-	-	-	0.29
1976-77	0.35	-	-	-	0.35
1977-78	0.73	-	-	-	0.73
1978-79	1.02	-	-	-	1.02
1979-80	0.58	-	-	-	0.58
1980-81	0.52	-	-	-	0.52
1981-82	1.57	-	-	-	1.57
1982-83	1.67	-	-	-	1.67
1983-84	3.30	-	-	-	3.3
1984-85	7.56	-	-	-	7.56
1985-86	8.92	-	-	-	8.92
1986-87	12.61	-	-	-	12.61

Source: RBI Hand Book 2012-13

Phase II: Entry of Public Sector Funds (1987-1993)

It was in 1986 that the Government of India amended banking regulations and allowed commercial banks in the public sector to set up Mutual Funds. This led to promotion of "SBI Mutual Fund" by State Bank of India in July 1987 followed by Canara Bank, Indian Bank, Bank of Baroda, Bank of India, Punjab

National Bank, and GIC Mutual Fund. The Indian Mutual Fund industry witnessed a number of public sector players entering the market in the year 1987. The Government of India further granted permission to Insurance corporations in the public sector to float mutual funds. The year 1987 marked the entry of non - UTI, public sector mutual fund by public sector bank, Life Insurance Corporation of India (LIC) and General Insurance Corporation of India (GIC). The assets under management of the industry increased seven times to Rs.47004 cores. However UTI remained the leader with about 60 percent market share. The period of 1987 – 1993 can be termed as the period of public sector Mutual Funds. From a single player in 1985, the number increased to 8 players in 1993.

Table 3.3

Net Resources Mobilised by Mutual Funds (1987-93) (Rupees Billion)

Year	Unit Trust of India	Bank-sponsored Mutual Funds	Financial Institution-sponsored Mutual Funds	Private Sector Mutual Funds	Total
1987-88	20.59	2.50	-	-	23.09
1988-89	38.55	3.20		-	41.75
1989-90	55.84	8.89	3.15	-	67.88
1990-91	45.53	23.52	6.04	-	75.09
1991-92	86.85	21.40	4.28	-	112.53
1992-93	110.57	12.04	7.60	-	130.21

Source: RBI Hand Book 2012-13

Phase III: Emergence of Private Sector Funds (1993 – 1996)

To ensure smooth and efficient working of mutual fund industry, Reserve Bank of India in 1937 and Ministry of Finance, Government of India in 1990 issued certain guidelines within the framework of which these funds were required to operate. In March 1991 the Government handed over the function of regulating mutual funds to Securities and Exchange Board of India (SEBI) that issued guidelines in October 1991 for investors' protection and regulating the Indian capital market. Ultimately, on January 31, 1992 government accorded a status of autonomous body to SEBI to watch and control the working and implementation of of mutual funds.

The permission was given to the private sector funds including foreign funds management companies (most of them entering through joint venture with Indian promoter) to enter the Mutual Fund industry in 1993. With the entry of private sector funds in 1993, a new era started in Indian Mutual Fund industry, giving the Indian investors a wider choice of fund and therefore giving rise to more competition in the industry. Private funds introduced innovative products, investment techniques and investors servicing technology during 1994. "In 1993 the first Mutual Fund regulation came into being under which all mutual funds, except UTI was to be registered. The Kothari Pioneer (merged with Franklin Templeton) was the first private sector mutual fund registered in July 1993. The number of mutual fund houses went on increasing with many foreign mutual funds setting up funds in India and also the industry witnessed several new initiatives".

Table 3.4

Net Resources Mobilised by Mutual Funds (1993-96) (Rupees Billion)

Year	Unit Trust of India	Bank-sponsored Mutual Funds	Financial Institution-sponsored Mutual Funds	Private Sector Mutual Funds	Total
1993-94	92.97	1.48	2.38	15.60	112.43
1994-95	86.11	7.66	5.76	13.22	112.75
1995-96	-63.14	1.13	2.35	1.33	-58.33

Source: RBI Hand Book 2012-13

Phase IV: SEBI Regulation and UTI Bifurcation (1996 – 2003)

The mutual fund industry witnessed robust growth and strict regulations from SEBI after 1996. The mobilization of funds and the number of players operating in the industry reached new heights as investors started showing more interest in Mutual Funds. Investors' interests were safe guarded by SEBI and the government offered tax benefit to the investors. In order to encourage them, SEBI (Mutual Funds) Regulations 1996 was introduced by SEBI that set uniform standards. The union budget in 1999 exempted all dividend incomes in the hands of investors from income tax. Various investor awareness programmers were launched during this phase both by SEBI and AMFI.

In February 2003, following the repeal of the Unit Trust of India Act 1963 UTI was bifurcated into two separate entities. One is the specified undertaking of the Unit Trust of India with assets under management of Rs. 29,835 crore as at the end of January 2003, representing broadly, the assets of US 64 scheme, assured return and certain other schemes. The Specified Undertaking of Unit Trust of India, functioning under an administrator and under the rules framed by Government of India and does not come under the purview of the Mutual Fund Regulations.

The second is the UTI Mutual Fund, sponsored by SBI, PNB, BOB and LIC. It is registered with SEBI and functions under the Mutual Fund Regulations. With the bifurcation of the erstwhile UTI which had in March 2000 more than Rs. 76,000 crores of assets under management and with the setting up of a UTI Mutual Fund, conforming to the SEBI Mutual Fund Regulations, and with mergers taking place among different private sector funds, the mutual fund industry has entered its current phase of consolidation and growth.

Table 3.5

Net Resources Mobilised by Mutual Funds (1996-'03) (Rupees Billion)

Year	Unit Trust of India	Bank-sponsored Mutual Funds	Financial Institution-sponsored Mutual Funds	Private Sector Mutual Funds	Total
1996-97	-30.43	0.07	1.37	8.64	-20.35
1997-98	28.75	2.37	2.04	7.49	40.65
1998-99	1.70	-0.89	5.47	20.67	26.95
1999-00	45.48	3.36	2.96	169.38	221.18
2000-01	3.22	2.49	12.73	92.92	111.36
2001-02	-72.84	8.63	4.06	161.34	101.19
2002-03	-94.34	10.33	8.61	121.22	45.82
2003-04	10.50	45.26	7.87	415.10	478.73

Source: RBI Hand Book 2012-13

Phase V: Consolidation and Growth (2003-04 onwards)

The industry witnessed several mergers and acquisition and also more international Mutual Fund players entered India like Fidelity, Franklin Templeton Mutual Fund etc.

The Indian mutual fund industry has grown at a breathtaking pace from 2003-04 to 2007-08. The AUM grew from Rs 1, 39,616 crore in March 2004 to Rs 5,05,152 lakh crore in March 2008. Further, investors have got access to new products such as Exchange-Traded Funds (ETFs), Fund of Funds and international funds. The assets under management of mutual funds increased by 47.13 per cent to Rs. 6, 13,979 crore at the end of March 2010. From Rs. 4,17,300 crore over the previous year, the AUM further decreased by 0.8 percent to Rs. 5,87,216 crore at the end of March 2012 from Rs. 5,92,250 crore at the end of March 2011. The AUM increased by 19.5 percent to Rs. 7, 01,443 crore at the end of March 2013 from Rs. 5,87,217 crore a year ago.

Table 3.6

AUM at the end of the period for Five Phases (Rs in crore)

Year	**Asset at the end of the period (Rs in crore)**
1964-65	25
1986-87	4564
1992-93	46988
1995-96	80590
2002-03	109299
2012-13	701443

Fig. 3.9

AUM at the end of the period for Five Phases (Rs in crores)

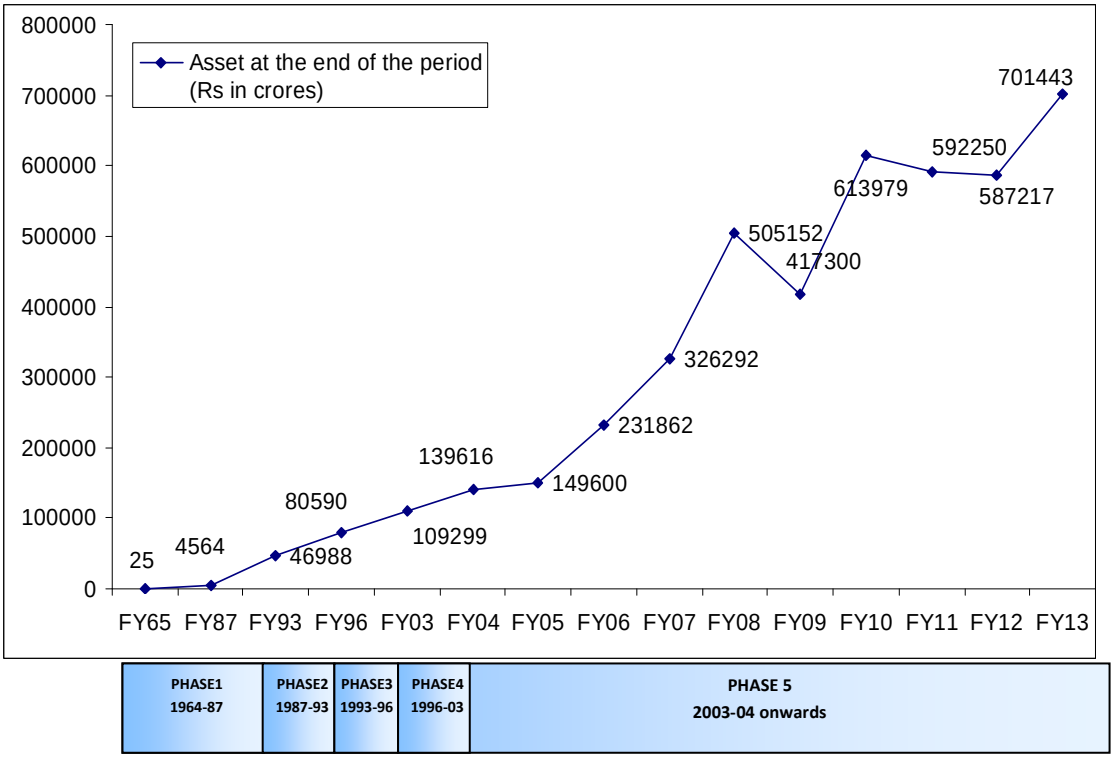


Table 3.7

Net Inflow & Asset under Management 2000-2013

(₹ crore)

Period	Gross Mobilisation	Redemption	Net Inflow	Assets at the end of period
1999-00	61,241	42,271	18,970	1,07,946
2000-01	92,957	83,829	9,128	90,587
2001-02	1,64,523	1,57,348	7,175	1,00,594
2002-03	3,14,706	3,10310	4,196	1,09,299
2003-04	5,90,190	5,43,381	46,808	1,39,616
2004-05	8,39,708	8,37,508	2,200	1,49,600
2005-06	10,98,149	10,45,370	52,779	2,31.862
2006-07	19,38,493	18,44,308	93,985	3,26,292
2007-08	44,64,376	43,10,375	1,53,802	5,05,152
2008-09	54,26353	54,54,650	-28,296	4,17,300
2009-10	1,00.19,022	99,35,942	83,080	6,13,979
2010-11	88,59,515	89,08,921	-49,406	5,92,250
2011-12	68,19,678	68,41,702	-22,024	5,87,217
2012-13	72,67,885	71,91,346	76539	7,01,443

Source: SEBI Annual Report 2012-13

The gross mobilisation of resources by all mutual funds during 2012-13 was at Rs. 72,67,885 crore compared to Rs. 68,19,678 crore during the previous year

indicating an increase of 6.6 percent over the previous year. Correspondingly, redemption also increased by 5.1 percent to Rs.71, 91,346 crore in 2012-13 from Rs.68, 41,702 crore in 2011-12. The net resources mobilised by all the mutual funds aggregated to Rs. 76,539 crore in 2012-13 compared to net outflow of Rs. 22,024 crore in 2011-12.

In the fifth phase, 2004-05 there was only marginal increase of 7.15 percent growth when compared to the previous year. However, after several years of persistent growth, the industry witnessed consistent declines of 6.29 percent and 8.50 percent in its AUM during FY11 and FY12, respectively. One of the reasons could be the changes in regulatory guidelines, ban on entry load, stringent KYC norms, guidelines on transaction charges, tightening valuation and advertisement norms - which were introduced in a short span of time thus giving less time to the industry to adjust in the new environment.

Sector-wise Resource Mobilisation

The private sector mutual funds retained the dominant place in the mutual fund industry with 81.6 percent share in the gross resource mobilisation and 85.1 percent in the net resource mobilisation. The corresponding shares of UTI mutual fund and other public sector mutual funds was 8.7 percent and 9.7 percent in the gross resource mobilisation and 6 percent and 8.9 percent in the net resource mobilisation. In absolute terms, the gross resource mobilisation by private sector mutual funds rose by 4.3 percent to Rs. 59,27,947 crore in 2012-13 from Rs. 56,83,744 crore in 2011-12. (Table 3.8) The net resource mobilisation by private sector mutual funds increased by 521.5 percent to Rs.65,102 crore in 2012-13 as against a net outflow of Rs.15,446 crore recorded in 2011-12. The net resources raised by UTI mutual fund and other public sector mutual funds was much lesser at Rs. 4,629 crore and Rs 6,808 crore in 2012-13, even though it represented a rise of 245.4 per cent and 300.6 percent respectively over the previous year.

The close-ended schemes of private and public sector mutual funds witnessed net outflows during the year. Nevertheless, the close-ended schemes held a miniscule share in the gross resource mobilised by private and public sector mutual funds at 0.99 percent and 1.2 percent respectively.

Table 3.8

Sector-wise Resource Mobilisation by Mutual Funds during 2012-13

(₹Crore)

Particulars	Private Sector MFs				Public Sector MFs				UTIMF				Grand Total
	Open-ended	Close-ended	Interval	Total	Open-ended	Close-ended	Interval	Total	Open-ended	Close-ended	Interval	Total	
Mobilisation of Funds	58,62,749 (55,59,558)	58,175 (1,15,116)	7,022 (9,069)	59,27,947 (56,83,744)	6,98,358 (5,96,696)	8,230 (15,695)	0 (1,091)	7,06,589 (6,13,482)	6,26,821 (5.14,272)	5,641 (4,702)	888 (3,479)	6,33,350 (577,453)	72,67,885 (68,19,679)
Repurchases/ Redemption	57,76,161 (55,67,914)	80,387 (1,13,318)	6,297 (17,957)	58,62,845 (56,99,189)	6,866,483 (6.01.662)	13,131 (13,926)	166 (1,289)	6,99,781 (6,16,877)	6,21,562 (5,15,947)	5,067 (4,829)	2,092 (4861)	678,720 (5,25,637)	71,91,346 (68,41,702)
Net Inflow/ Outflow of Funds	86,588 (-8356)	-22,212 (1,799)	725 (-8,888)	65,102 (-15,446)	11,875 (-4.,965)	-4,901 (1,769)	-166 (-198)	6,808 (-3,394)	5,259 (-1,675)	574 (-126)	-1,204 (-1382)	4,629 (-3,184)	76,539 (-22,024)

Note: Figures in parentheses indicate corresponding figures for 2011-12

Sourc: SEBI Annual Report 2012-13

Scheme-wise Resource Mobilisation

Scheme-wise pattern reveals that net inflows were positive for all the scheme categories except growth/equity oriented schemes, plain ETFs and FoF schemes. The huge redemption pressure in growth schemes had resulted in largest net outflows amounting to Rs. 14,587 crore during the year (Table 3.9). Fixed income schemes registered the highest net inflows amounting to Rs.90,183 crore indicating increase of 451.5 percent over the previous year. The highest percentage rise in the net resource mobilisation was in gilt schemes which witnessed a net inflow of Rs.3, 975 crore in 2012-13 compared to net outflow of Rs.20 crore in the previous year. The net inflows into debt schemes constituted the lions' share of 92.0 percent in the inflows into fixed income schemes. Even though gold has emerged as one of the most appreciating asset since 2008, GETF schemes experiences a decline in the net inflows to the tune of 61.2 percent compared to the previous year. This is notwithstanding the rise in AUM of GETFs to the extent of 17.8 percent in 2012-13 over the previous financial year.

The AUM was the highest for income/debt oriented schemes at Rs.4,97,451crore while the AUM under growth/equity oriented scheme was Rs. 1,72,508 crore. In terms of growth in AUM, Gilt schemes (120.7 percent) achieved the highest increase followed by debt schemes (36.2 percent) and

GETF schemes (17.8 percent) during the year. In consonance with net outflows, growth in AUM was also negative for growth schemes, Plain ETFs and FoF schemes. The highest decline in AUM was registered for the FoF schemes investing overseas at 18.9 percent.

Table 3.9

Scheme-wise Resource Mobilisation and AUM by Mutual Funds as on March 2013

Schemes	No. of Schemes	Gross Funds Mobilised (crore)	Repurchase/ Redemption (crore)	Net Inflow/ Outflow of Funds (crore)	Assets Under Management as on March 31, 2013 crore)	Percentage Variation over March 30,2012
A. Income/ Debt Oriented Schemes						
i) Liquid/Money Market	55	63,65,420	63,62,194	3,226	93,392	16.2
ii) Gilt	42	12,886	8,910	3,975	8,074	120.7
iii) (other than assured returns)	760	8,35,273	7,52,292	82,981	3,95,985	36.2
Subtotal (i+ii+iii)	857	72,13,578	71,23,396	90,183	4,97,451	32.7
B. Growth/ Equity Oriented Schemes						
i) ELSS	50	2,641	4,282	-1,641	22,746	-3.8
ii) Others	297	40,723	53,669	-12,946	1,49,762	-5.5
Subtotal (i+ii)	347	43,364	57,951	-14,587	1,72,508	-5.3
C. Balanced Schemes						
Balanced schemes	32	5,705	4,989	216	16,307	0.3
D. Exchange Traded Fund						
i) Gold ETF	14	2,767	1,353	1,414	11,648	17.8
ii) Other ETFs	23	2,285	2,497	-212	1,477	-8.1
Subtotal (i+ii)	37	5,052	3,850	1,202	13,124	14.2
E. Fund of Funds Investing Overseas						
Fund of Funds investing overseas	21	686	1,160	-474	2.053	-18.9
TOTAL (A+B+C+D+E)	1,294	72,67,885	71,91,346	76,539	7,01,443	19.45

Note: Net Assets of ₹ 6332.69 *crore pertaining to Fund of Funds (domestic) as on March* 29, 2023 *is not included in the data.*

Source : SEBI Annual Report 2012-13

As on March 2013, there were 1,294 mutual fund schemes of which, 857 were income/debt oriented schemes, 347 were growth/equity oriented schemes and 32 were balanced schemes (Table 3.10). In addition, there were 37 Exchange Traded Funds, of which 14 were Gold ETFs and 23 other ETFs. Also, there were 21 schemes operating as Fund of Funds which invested in overseas securities. Maturity-wise there were 751 open-ended schemes and 501 close-ended schemes as on March 29, 2013. For the income/debt oriented schemes category, the number of close-ended schemes exceeded open-ended schemes.

Historically, mutual funds have been dominant investors in the debt market than equity markets. During 2012-13, the combined net investments by the mutual funds in debt and equity was Rs 4,50,711 crore compared to Rs 3,33,463 crore in 2011-12, accounting an increase of 35.2 percent (Table 3.11). "Mutual Funds were net sellers in equity segment to the tune of Rs 22,749 crore, whereas, their net investments in the debt segment rose to Rs 4,73,460crore during the same period. Since 2009 -10, on a yearly basis there has been offloading of investments by mutual funds from the equity market. Investments in the debt segment was the highest in June 2012 (Rs78, 465 crore) followed by March 2013 (Rs 68,114 crore)". While their net investments in the debt segment were positive for all the months during the year, that in the equity segment was negative for all months except June 2012.

Table 3.10

Number of Schemes by Investment Objective as on March 2013

Schemes	Open-ended	Close-ended	Interval	Total
A. Income/ Debt Oriented Schemes				
i) Liquid/ Money Market	55 (55)	0 (0)	0 (0)	55 (55)
ii) Gilt	42 (42)	0 (0)	0 (0)	42 (42)
iii) Debt (other than assured returns)	237 (229)	481 (512)	42 (34)	760 (775)
iv) Debt (assured returns)	0	0	0	0
Subtotal (i+ii+iii)	334 (326)	481 (512)	42 (34)	857 (872)
B. Growth/ Equity Oriented Schemes				
i) ELSS	36 (36)	14 (13)	0 (0)	50 (49)
ii) Others	292 (299)	5 (4)	0 (0)	297 (303)
Subtotal (i+ii)	328 (335)	19 (17)	0 (0)	347 (352)
C. Balanced Schemes				
Balanced schemes	31 (29)	1 (1)	0 (0)	32 (30)
D. Exchange Traded Fund				
i) Gold ETF	14 (14)	0 (0)	0 (0)	14 (14)
ii) Other ETFs	23 (21)	0 (0)	0 (0)	23 (21)
Subtotal (i+ii)	37 (35)	0 (0)	0 (0)	37 (35)
E. Fund of Funds Investing Overseas				
Fund of Funds investing overseas	21 (20)	0 (0)	0	21 (20)
TOTAL (A+B+C+D+E)	751 (745)	0 (0)	0 (0)	1294 (1309)

Figures in parentheses indicate corresponding figures for 2011-12

Source: SEBI Annual Report 2012-13

Table 3.11

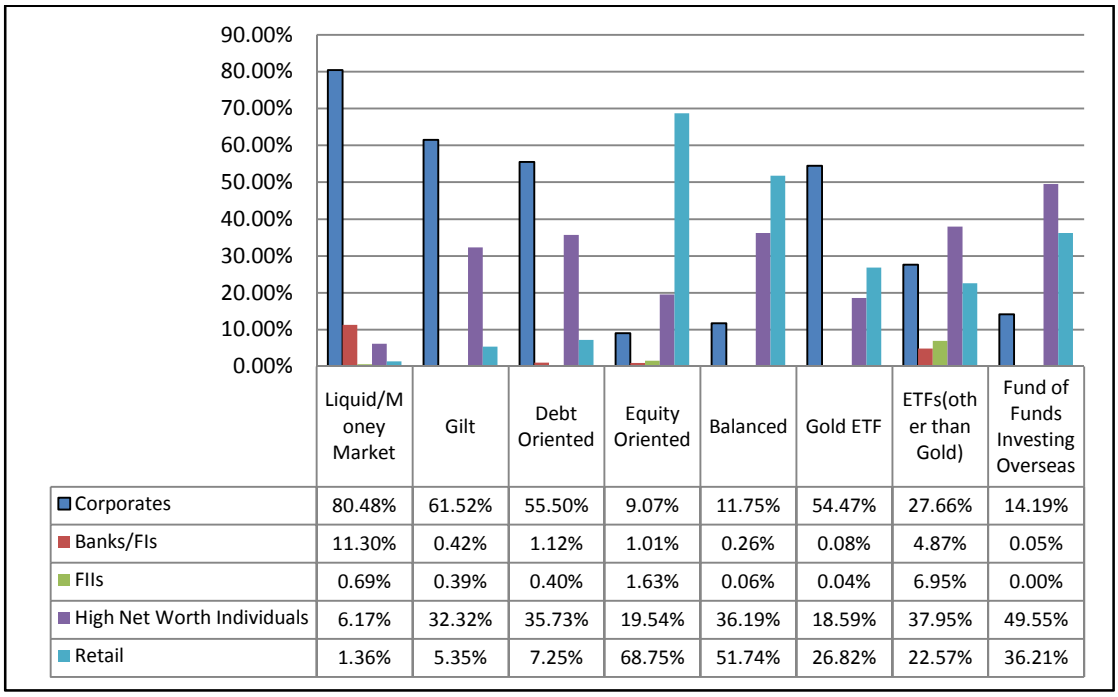
Asset Under Management and Folios - Category Wise - Aggregate - as on March 31, 2013

Types of Schemes	Investor Classification	AUM (Rs. Cr)	% to Total	No of Folios	% to Total
Liquid/Money Market	Corporates	74986.67	80.48	24054	11.49
	Banks/FIs	10525.62	11.3	279	0.13
	FIIs	640.69	0.69	40	0.02
	HNI	5752.15	6.17	22609	10.8
	Retail	1267.97	1.36	162290	77.55
	Total	**93173.09**	**100**	**209272**	**100**
Gilt	Corporates	4967.48	61.52	3992	6.33
	Banks/FIs	33.75	0.42	35	0.06
	FIIs	31.23	0.39	6	0.01
	HNI	2609.34	32.32	7231	11.47
	Retail	432.39	5.36	51763	82.13
	Total	**8074.19**	**100**	**63027**	**100**
	Grand Total	**101247.29**		**272299**	
Debt Oriented	Corporates	220228	55.5	218158	3.72
	Banks/FIs	4445.69	1.12	869	0.01
	FIIs	1579.09	0.4	38	0
	HNI	141753.96	35.73	495375	8.44
	Retail	28781.09	7.25	5152042	87.82
	Total	**396787.82**	**100**	**5866482**	**100**
Equity Oriented	Corporates	15664.11	9.07	193631	0.58
	Banks/FIs	1744.33	1.01	1296	0
	FIIs	2811.25	1.63	109	0
	HNI	33736.57	19.54	337630	1.02
	Retail	118695.5	68.75	32634506	98.39
	Total	**172651.76**	**100**	**33167172**	**100**
Balanced	Corporates	1954.11	11.75	15350	0.59
	Banks/FIs	43.52	0.26	71	0
	FIIs	10.14	0.06	2	0
	HNI	6018.63	36.19	51749	1.98
	Retail	8602.89	51.73	2542308	97.43
	Total	**16629.28**	**100**	**2609480**	**100**
Gold ETF	Corporates	6344.74	54.47	5021	0.88
	Banks/FIs	9.44	0.08	16	0
	FIIs	4.49	0.04	5	0
	HNI	2164.85	18.59	11664	2.05
	Retail	3124.3	26.82	552463	97.06
	Total	**11647.82**	**100**	**569169**	**100**
ETFs(other than Gold)	Corporates	408.48	27.66	22917	13.45
	Banks/FIs	71.93	4.87	24	0.01
	FIIs	102.66	6.95	19	0.01
	HNI	560.41	37.95	2864	1.68
	Retail	333.19	22.56	144621	84.85
	Total	**1476.67**	**100**	**170445**	**100**
Fund of Funds Investing Overseas	Corporates	291.34	14.19	2141	1.24
	Banks/FIs	1.03	0.05	4	0
	FIIs	0	0	0	0
	HNI	1017.42	49.55	7287	4.21
	Retail	743.42	36.21	163836	94.56
	Total	**2053.21**	**100**	**173268**	**100**

Source: AMFI Database

Fig. 3.10

Asset under Management and Folios - Category Wise - Aggregate - as on March 31, 2013

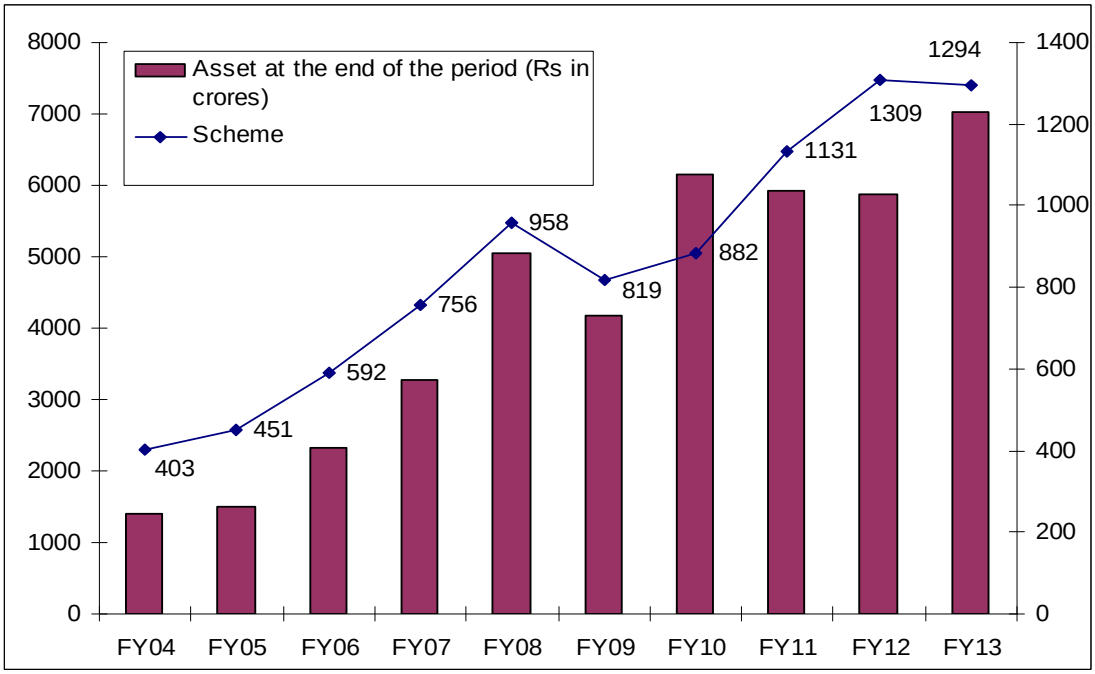


	Liquid/Money Market	Gilt	Debt Oriented	Equity Oriented	Balanced	Gold ETF	ETFs(other than Gold)	Fund of Funds Investing Overseas
Corporates	80.48%	61.52%	55.50%	9.07%	11.75%	54.47%	27.66%	14.19%
Banks/FIs	11.30%	0.42%	1.12%	1.01%	0.26%	0.08%	4.87%	0.05%
FIIs	0.69%	0.39%	0.40%	1.63%	0.06%	0.04%	6.95%	0.00%
High Net Worth Individuals	6.17%	32.32%	35.73%	19.54%	36.19%	18.59%	37.95%	49.55%
Retail	1.36%	5.35%	7.25%	68.75%	51.74%	26.82%	22.57%	36.21%

Source: AMFI Database

Fig. 3.11

Asset at the end of the period (Rs in crores) and No. of Schemes



Compiled from SEBI and RBI Sources

Table 3.12

Trends in Transactions on Stock Exchanges by Mutual Funds

(₹crore)

Period	Equity			Debt			Total		
	Gross Purchase	Gross Sales	Net Purchase/ Sales	Gross Purchase	Gross Sales	Net Purchase/ Sales	Gross Purchase	Gross Sales	Net Purchase/ Sales
2008-09	1,44,069	1,37,085	6,985	3,27,744	2,45,942	81,803	4,71314	3,83,026	88,787
2009-10	1,95362	2,06,173	-10,512	6,24,314	4,43,728	1,80,588	8,19,976	6,49,901	1,70,076
2010-11	1,54,317	1,74,018	-19,802	7,62,644	5,13,493	2,49,153	9,16,861	6,87,511	2,29,352
2011-12	132,137	1,33,494	-1,358	11,16,760	7,81,940	3,34,820	12,48,897	9,15,434	3,33,463
2012-13	1,13,758	1,36,507	-22,749	15,23,393	10,49,934	4,73,460	16,37,150	11,86,440	4,50,711

Source : *SEBI Annual Report 2012-13*

Unit holding pattern

India has a high household saving ratio, but the mutual funds have not been able to make a profound impact in channelizing these savings from the households to the securities market.

As on March 31, 2013, while individuals subscribed 96.9 percent of the total folios, their share in the total net assets was 45.7 percent" (Table 3.12). "On the other hand, corporate/ institutions had a miniscule share of 1.22 percent in the total number of folios, their share in the total net assets was a sizeable 48.61 percent. In comparison to 2011-12 the share of corporate in the total net assets increased while their share in folios had declined. NRIs/ OCBs with 1.84 percent share in folios had 4.7 percent share in total net assets and FIIs percentage to total asset was 0.9.

Table 3.13

Unit holding pattern of Individuals and others as on March 2013

Category	Percentage to Total Folios	Percentage to Total Net Assets
Individuals	96.94 (94.5)	45.73 (48.2)
NRIs/OCBs	1.84 (1.9)	4.70 (6)
FIIs	0.00 (0.0)	0.96 (0.9)
Corporate/Institutions/ Others	1.22 (3.6)	48.61 (44.9)
Total	100.00	100.00

Source: SEBI Annual Report 2012-13

A sectoral breakup of the private sector and public sector mutual funds indicates the domination of private sector mutual funds in terms of share in total folios and total net assets. While the private sector mutual funds had 65.2 percent share in total folios, the corresponding share of public sector mutual funds was 34.8 percent as at the end of March 2013 (Table 3.13). The share of private sector mutual funds in total net assets was 82.6 percent for the private sector mutual funds compared to 17.4 percent for public sector mutual funds.

Table 3.14

Unit holding pattern of Private and Public sector mutual funds as on March 2013

Category	Percentage to Total Folios	Percentage to Total Net Assets
1 Private Sectoral Mutual Fund	**65.21**	**82.60**
Individuals	65.59	37.20
NRIs/OCBs	1.53	4.15
FIIs	0.00	0.96
Corporate/Institutions/Others	1.09	40.29
2 Public Sector Mutual Funds (including UTI Mutual Fund)	**34.79**	**17.40**
Individuals	34.36	8.53
NRIs/OCBs	0.30	0.54
FIIs	0.00	0.00
Corporate/Institutions/Others	0.13	8.32
Total (1+2)	**100**	**100**

Source : *SEBI Annual Report 2012-13*

3.1.8 Tax Rates and Mutual Funds (Applicable for the Financial Year 2013-14)

Mutual funds are ideal as long term investment avenues for retail investors. To encourage investments in this avenue, the Government of India offers investors a spate of tax benefits thus ensuring maximum benefit from mutual funds held beyond a year. The key benefits are:

- "Avail deductions under Sec 80C of the Income Tax Act by investing up to a maximum of Rs. 1 lakh in designated Equity Linked Savings Schemes (ELSS). Such investments have a compulsory lock in period of 3 years.

- First time retail investors in equity with a gross total income of up to Rs. 12 lakh can invest up to Rs. 50,000 in specific MF schemes under Rajiv Gandhi Equity Savings Scheme (RGESS) and benefit from deductions under Section 80 CCG.
- No tax is to be paid for redemption of units of an equity scheme held for over a year.
- In case of non-equity mutual funds, benefit from indexation.
- No tax is to be paid on dividends. The fund deducts a dividend distribution tax at source in case of non-equity schemes.
- In case of Equity Oriented Scheme, no dividend distribution tax is deducted at source by the fund house.
- Reduction in rates of Securities Transaction Tax ('STT') for equity oriented funds. (a) Nil charges for delivery-based purchase on recognized stock exchange. (b) 0.001 percentage charges for delivery-based sale on recognized stock exchange. (c) 0.001percentage for sale to the mutual fund".

3.1.9 Recent Regulatory Trends in Mutual Fund Industry

The Securities and Exchange Board of India (SEBI) announced a series of measures to strengthen the mutual fund industry, especially distribution of mutual funds. The latest regulatory amendments are discussed below; (SEBI Master Circular for Mutual Funds (2012).

For Mutual Fund Investors

"SEBI directed mutual funds / AMCs to provide a separate plan for direct investments with a lower expense ratio. It also directed to remove disparity in expense structure of different plans. In order to enhance the reach of mutual fund products amongst small investors, SEBI permitted cash transactions in mutual fund schemes to the extent of Rs. 20,000 per investor per mutual fund per financial year, subject to compliance with anti-money laundering rules and regulations. Mutual funds / AMCs were directed to annually set apart at least two basis points on daily net assets within the maximum limit of total expense ratio ('TER') for investor education and awareness initiatives. The mutual fund investments made for an amount of INR 2 lakhs or more (other than liquid schemes), the closing NAV of the

day on which the funds are actually available for utilisation shall be applicable irrespective of the time of receipt of application. SEBI directed additional disclosure requirements pertaining to portfolio disclosures, financial result disclosures, etc. on mutual funds/AMCs".

For Distributors

"To improve the geographical reach of mutual funds, AMCs were allowed to charge additional TER (up to 30 bps) with respect to inflows beyond top 15 cities, subject to the satisfaction of certain conditions. SEBI permitted a new cadre of distributors which includes postal agents, retired government and semi-government officials, retired teachers, retired bank officers and other persons (such as bank correspondents) to sell units of simple and performing mutual fund schemes. Distributors were permitted of mutual fund products to recover transaction charges of 100 INR for existing investors and 150 INR for new investors per subscription of 10,000 INR and above. In case of SIPs, the transaction charges may be recovered in three to four installments. The SEBI directed AMCs to carry out a due diligence for distributors".

For AMCs

"SEBI allowed AMCs to charge service tax payable on investment and advisory fees to the mutual fund scheme, in addition to the maximum amount of TER. It also directed mutual funds/AMCs to ensure that the total exposure of debt schemes of mutual funds in a particular sector (excluding investments in Bank CDs, CBLO, G-Secs, T-Bills and AAA rated securities issued by Public Financial Institutions and Public Sector Banks) shall not exceed 30% of the net assets of the scheme. To address the issue of mis-selling, the SEBI, with effect from July 1, 2013, directed all existing schemes and all schemes to be launched on or thereafter, to be labeled considering the level of risk associated with them. Product labels must be disclosed in the Key Information Memorandum, Scheme Information Documents and common application forms. SEBI, permitted mutual fund to buy credit protection to hedge the credit risk on their investments in corporate bonds, subject to compliance with the RBI guidelines on CDS for corporate bonds. SEBI , clarified that pending investment of funds by portfolio managers; they can deploy funds, on short term basis, in liquid mutual fund

schemes. To address the issue of conflict of interest wherein a fund manager manages schemes of mutual fund and is engaged in other permissible activities of the AMC, the SEBI has amended the mutual fund regulation. AMCs shall now appoint a separate fund manager for each fund managed by it unless the investment objectives and assets allocations are the same and the portfolio is replicated across all the funds managed by the fund manager. It permitted that an AMC may, itself or through its subsidiaries, undertake portfolio management services and advisory services for other than broad based funds (fund which has at least 20 investors and no single investor accounts for more than 25percentage of the corpus of the fund), subject to compliance with certain prescribed conditions. The Securities and Exchange Board of India (SEBI) and the Reserve Bank of India (RBI) facilitate direct investment by QFIs in mutual fund schemes. It also enabled mutual funds to participate in repos in corporate debt subject to certain conditions. Private placement to less than 50 investors has been permitted as an alternative to a new fund offer to the public. In order to attract funds for infrastructure financing, the infrastructure debt fund scheme was launched where a NBFC or a mutual fund can set up an Infrastructure Debt Fund".

3.1.10 Conclusion

The mutual fund industry depends to a great extent by the economic situation in the country. It apparent that, growth and penetration can be achieved only with support of technology. The key lies in strengthening distribution networks and enhancing levels of investor education to increase presence in rural areas. The risk adverse investors can be attracted to debt funds. It is also critical for the industry to assess and capitalise the value that pension products bring to the growth of the mutual fund industry and emulate some best practices from other industries and sectors to transition to the next level of growth.

The industry needs to have a relook at their distribution path, product design, technology mix, awareness programme for investors and service initiatives among other things to increase penetration and business as a whole.

3.2 India's Savings and Investment Performance Since 2000

3.2.1 Introduction

Savings and investment are important drivers in taking the economic growth process forward. "In an international perspective, India has had a relatively high savings rate as compare to many other countries, except those in East Asia". *(Athukorala and Sen, 1995 & 2001)* "Gross domestic savings have increased continuously from an average of around 10.0 per cent of GDP during the 1950s to almost 31.7 per cent of GDP as on 2012-13". *(GoI, Economic Survey).*

3.2.2 Gross Domestic Savings

The behaviour of the savings rate and economic growth in India during the reform period seems to suggest that the high growth phase is associated with higher increase in domestic savings. A noteworthy feature of these trends is that Indian economic growth has been financed predominantly by domestic savings. The volume and composition of domestic savings in India have undergone significant changes over the years. "The savings rate averaged 18.6 per cent in the 1980s and 23 per cent in the 1990s. The savings rate exceeded 30 per cent for the first time in 2004-05 and has remained above that level ever since. It peaked in 2007-08 at 36.8 per cent and reached an eight-year low in 2011-12" *(GoI, Economic Survey).* The domestic savings rate declined sharply to 30.8 per cent in 2011-12 from 34.0 per cent in the previous year. All three sectors registered a decline in the savings rate, with the public sector accounting for the largest share of the decline. The household sector savings rate declined for the second consecutive year in 2011-12, after touching a high in 2009-10. Within household savings, the financial savings rate declined, while the physical savings rate increased in 2011-12. During the year 2012-13, GDS had a marginal increase to 31.7 percent. Table 1 shows the trends in contribution of the household, private corporate, and public sectors to total savings since 2000-01. Within households, the share of financial savings vis-à-vis physical savings has been declining but it has exceeded during the year 2012-13.

Table 3.15

Gross Domestic Savings (2000-2013)

Item	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
Gross Domestic Savings	23.4	24	24.1	29.6	31.1	33.4	34.6	36.8	32	33.7	34	30.8	31.7
(i) Household Sector	20.9	22.5	22.6	23.7	21.6	23.5	23.2	22.4	23.6	25.2	23.5	22.3	22.8
(a) Financial Saving	11	11.2	10.3	11.3	10.2	11.9	11.3	11.6	10.1	12	10.4	8	12.7
(b) Physical Assets	9.9	11.3	12.3	12.4	11.4	11.7	11.9	10.8	13.5	13.2	13.1	14.3	10.1
(ii) Private Corporate Sector	4.2	4	3.4	4.7	7.1	7.5	7.9	9.4	7.4	8.4	7.9	7.2	7.8
(iii) Public Sector	-1.7	-2.5	-1.9	1.2	2.4	2.4	3.6	5	1	0.2	2.6	1.3	1.1

Source: RBI Annual Reports and 2012-13 estimates from Planning Commission Database

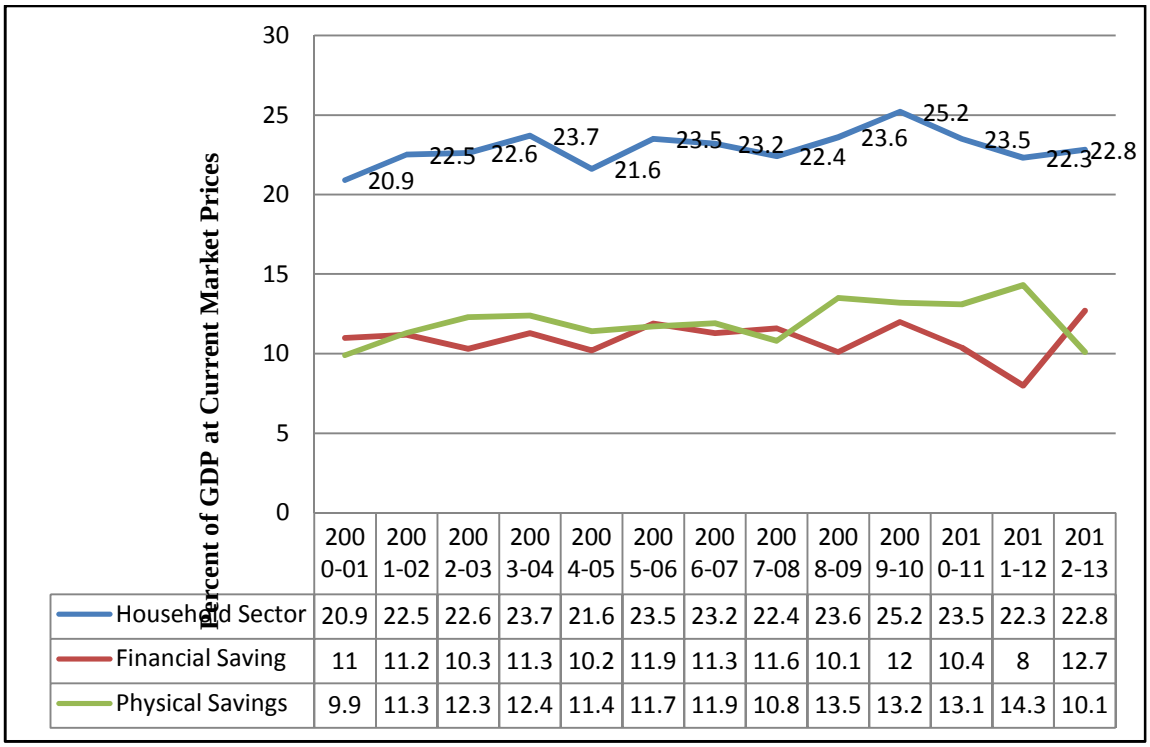
3.2.3 Household Saving

Savings leads to investment and growth in an economy, provided that the macro economic variables are favourable alomg with a developed financial system. India household savings generally constitute the largest share in aggregate domestic savings. The household savings is categorised as financial and physical savings. Financial liberalisation has an important bearing on financial savings as it involves the creation of newer instruments and avenues of savings. Over time, although both financial and physical savings have recorded an increase, the composition of household savings has seen a shift in favour of financial savings reflecting the spread of banking and financial services across the country.

However, since 2001-02, the household sector has shown some preference for savings in the form of physical assets, which could be attributed partly to the soft interest rate regime, substantial growth in self-employment and larger access of bank credit for the households. During 2000-2013 the average GDS was 30.71 percent and household financial savings on an average was 10.92 per cent and average physical savings was 11.99 per cent of GDS during the period.

Fig: 3.12

Household, Physical Financial Savings as a percentage to GDP (2000-2013)

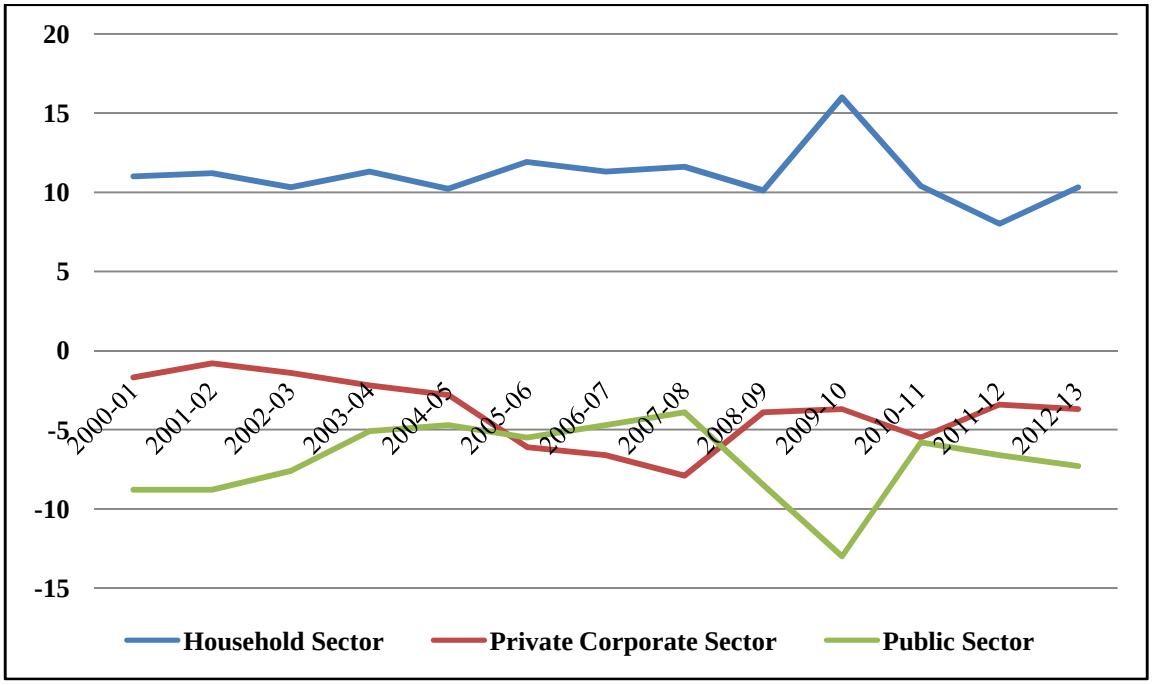


	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
Household Sector	20.9	22.5	22.6	23.7	21.6	23.5	23.2	22.4	23.6	25.2	23.5	22.3	22.8
Financial Saving	11	11.2	10.3	11.3	10.2	11.9	11.3	11.6	10.1	12	10.4	8	12.7
Physical Savings	9.9	11.3	12.3	12.4	11.4	11.7	11.9	10.8	13.5	13.2	13.1	14.3	10.1

Source: RBI Annual Reports and Planning Commission Database

Fig: 3.13

Saving Investment Gap (2000-2013)



Source: RBI Annual Reports and Planning Commission Database

3.2.4 India's Savings Performance over the Five - Year Plans

"Over the eighth to the eleventh plan, 18-year period that coincided with the structural reforms process - the average rate of Gross Domestic Savings (GDS) increased by around 14 percentage points. This was higher than the increase of around 11 percentage points in the GDS rate that occurred over the First to the Seventh Plans, a period of around 40". *(GoI, Economic Survey).* Even though India's savings rate in 2009 remained lower than that in 2007, the extent of decline in India's savings rate was much lower than those in many of the advanced and emerging market economies. More importantly, the gross domestic savings rates of India continue to show an upward trend, even as those of many other emerging and advanced countries have either stabilized at much lower levels or are on a declining trend. During the eleventh plan period (2007-2011) the gross domestic saving rate was the highest with 33.7 percent.

Table 3.16

India's Average Savings Rates over the Five-Year Plans

Five-Year Plan	Gross Domestic Savings Rate (per cent)	Average annual rate of change in the savings rate (percentage points)
First Plan (1951-56)	9.2	
Second Plan (1956-61)	10.6	0.3
Third Plan (1961-66)	12.1	0.3
Fourth Plan (1969-74)	14.7	0.5
Fifth Plan (1974-79)	18.5	0.8
Sixth Plan (1980-85)	17.9	-0.1
Seventh Plan (1985-90)	20.0	0.4
Eighth Plan (1992-1997)	22.9	0.6
Ninth Plan (1997-2002)	23.6	0.1
Tenth Plan (2002-2007)	31.3	1.5
Eleventh Plan so far (2007-2011)	33.7	0.6

Source: Report of the Working Group on Savings during the Twelfth Five-Year Plan (2012-13 to 2016- 17) and RBI Monthly Bulletin June 2012 Page : 1166.

3.2.5 Trend and Composition of Gross Domestic Savings

The Gross Domestic Savings (GDS) has shown an upward trend since 1950s, with some sharp rise over the period 2002- 03 to 2007-08. The composition of GDS shows the continued predominance of household sector savings (at around 70 per cent), notwithstanding a reduction in its share from the peak attained in 2001-02 (over 94 per cent). On average, households accounted for nearly three-fourths of gross domestic savings during the period 1980-81 to 2011-12. The savings rate declined in the recent years, and in the period from 2000 to 2010 it averaged 71.48 per cen. Savings of the private corporate sector accounted for 22.85 per cent of total savings and the public sector averaged to 5.68 during the period. However, during the years 2004-05 to 2011-12, their share increased to 23.2 per cent. The public sector accounted for 10 per cent of total savings on average between 1980-81 and 2011-12. It has been progressively declining and during 2004-05 to 2011-12, public savings as a ratio of total savings averaged 6.7 per cent. *(GoI, Economic Survey).* .

Table 3.17

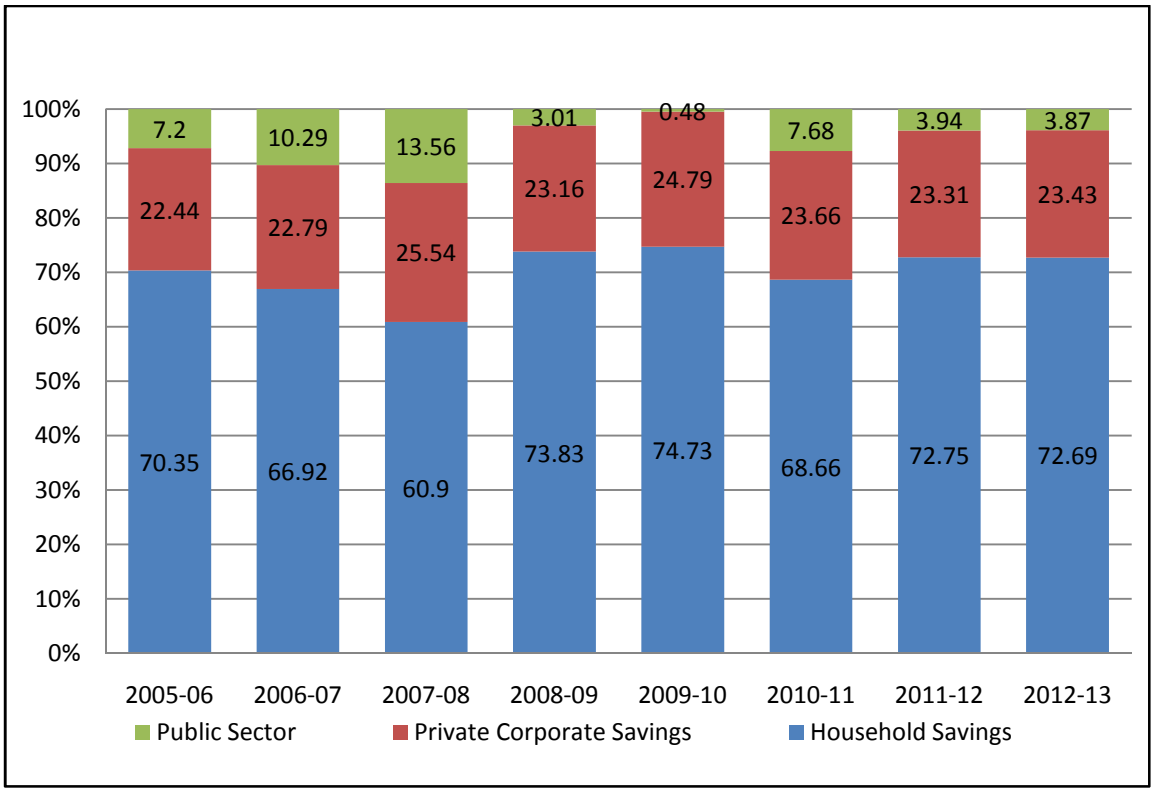
Composition of Domestic Savings (1950-2013)

Year	Household Savings	Private Corporate Savings	Public Sector	Gross Domestic Savings
1950s	69.63	9.56	20.81	100.00
1960s	64.27	10.52	25.21	100.00
1970s	66.38	8.37	25.25	100.00
1980s	72.67	9.37	17.97	100.00
1990s	77.70	16.57	5.73	100.00
2000s	71.48	22.85	5.68	100.00
(i)2000-05	82.46	16.51	1.04	100.00
(ii)2005-06	70.35	22.44	7.20	100.00
(iii)2006-07	66.92	22.79	10.29	100.00
(iv)2007-08	60.90	25.54	13.56	100.00
(v)2008-09	73.83	23.16	3.01	100.00
(vi)2009-10	74.73	24.79	0.49	100.00
(vii)2010-11	68.66	23.66	7.68	100.00
(viii)2011-12	72.75	23.31	3.94	100.00
(ix)2012-13	72.69	23.43	3.87	100.00

Source: RBI Annual Report 2012-13

Fig 3.14

Composition of Gross Domestic Savings (2005-2013)



Source: RBI Annual Report 2012-13

Table 3.18

Composition of (Changes in) Gross Financial Assets 1970-2013

(Percent)

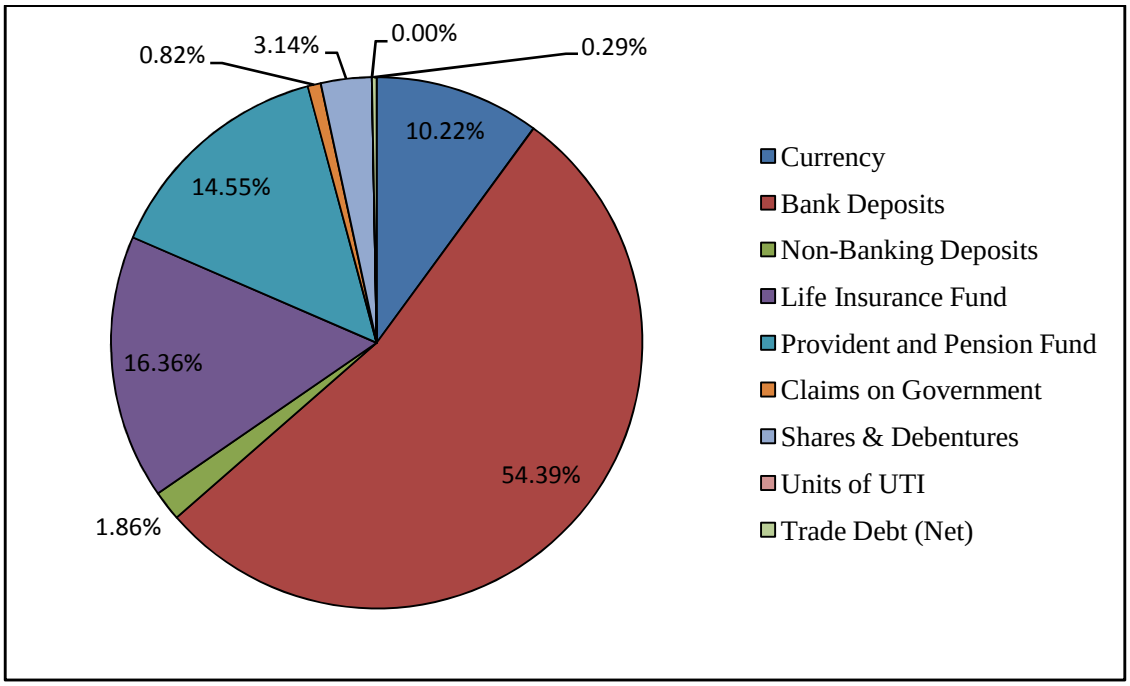
Year	Currency	Bank Deposits	Non-Banking Deposits	Life Insurance Fund	Provident and Pension Fund	Claims on Govern-ment	Shares & Debentures	Units of UTI	Trade Debt (Net)	Changes in Financial Assets (1 to 9)
1970s	13.46	47.21	3.01	8.42	18.77	4.42	1.6	0.48	2.6	100
1980s	12.17	39.03	4.44	7.7	17.71	11.75	4.01	2.78	0.41	100
1990s	9.99	35.69	6.63	10.45	19.37	10.1	6.24	2.58	-1.05	100
2000s	11.03	51.67	1.39	18.55	13.43	1.73	1.82	-0.09	0.47	100
2001-10	9.8	46.31	1.03	18.59	11.84	7.86	4.46	-0.36	0.48	100
2010-11	12.7	50.77	0.47	19.46	13.07	2.74	0.16	0	0.63	100
2011-12	11.39	55.22	2.18	19.79	14.26	-2.85	-0.47	0	0.47	100
2012-13	10.22	54.39	1.86	16.36	14.55	-0.82	3.14	0	0.29	100

Source: RBI Annual Report 2012-13

Financial savings take the form of bank deposits, life insurance funds, pension and provident funds, shares and debentures, etc. (Table 3.18). "During 2000s much of the financial savings of the household sector are in the form of bank deposits (around 51.67 per cent), life insurance funds (18.55 percent) and pension and provident funds (13.43 percent). There has been a decline in the proportion of pension and provident funds, particularly since the late 1990s. This trend continued till 2007-08. These were also the years when the real rate of interest was generally declining. There has been some upward movement in the share of pension and provident funds during 2008-09 and 2009-10, partly due to the increase in disposable income of government servants who are significant contributors to these funds, on account of higher pay and arrears arising from the implementation of the recommendations of the Sixth Pay Commission. Shares and debentures accounted for 6.24 per cent of total financial savings in the1990s and their share decreased to 4.46 per cent in the 2000s". (*RBI's Handbook of Statistics on Indian Economy)*

Fig 3.15

Composition of Gross Financial Assets as on March 2013



3.2.6 Investments

During the 1950s to 2012-13, the domestic investment rate has also increased continuously from around 11 to 31.7 per cent. The growth rate of the economy since

2003- 04 has been strongly correlated with investment rate. The investment rate averaged 34.5 per cent between 2003-04 and 2011-12, much higher rate than earlier years. Since 2004-05, the year when the overall investment rate in the economy first exceeded 30 per cent, the share of public investment in total investment (excluding valuables) has remained fairly stable at around 24 per cent for all the years, except in 2008-09 and 2009-10 when it was 27.6 per cent and 26.5 per cent respectively.

As per the first revised estimates released by the CSO in January 2013, gross domestic capital formation as a ratio of GDP at current market prices (investment rate) is estimated to be 35.0 per cent in 2011-12 as against 36.8 per cent in 2010-11. Both public and private investment declined as a share of GDP. Within private investment, investment by the private corporate sector registered a sharper decline.

Table 3.19

Gross Domestic Savings and Investment (2000-2013)

Item	2000 -01	2001 -02	2002 -03	2003 -04	2004 -05	2005 -06	2006 -07	2007 -08	2008 -09	2009 -10	2010 -11	2011 -12	2012 -13
1. Gross Domestic Saving(i+ii+iii)	**23.4**	**24**	**24.1**	**29.6**	**31.1**	**33.4**	**34.6**	**36.8**	**32**	**33.7**	**34**	**30.8**	***31.7***
(i) Household Sector (a+b)	20.9	22.5	22.6	23.7	21.6	23.5	23.2	22.4	23.6	25.2	23.5	22.3	*22.8*
(a)Financial Saving	*11*	*11.2*	*10.3*	*11.3*	*10.2*	*11.9*	*11.3*	*11.6*	*10.1*	*12*	*10.4*	*8*	*12.7*
(b)Physical Assets	*9.9*	*11.3*	*12.3*	*12.4*	*11.4*	*11.7*	*11.9*	*10.8*	*13.5*	*13.2*	*13.1*	*14.3*	*10.1*
(ii) Private Corporate Sector	4.2	4	3.4	4.7	7.1	7.5	7.9	9.4	7.4	8.4	7.9	7.2	*7.8*
(iii) Public Sector	-1.7	-2.5	-1.9	1.2	2.4	2.4	3.6	5	1	0.2	2.6	1.3	*1.1*
2. Gross Capital Formation(i+ii+iii)	**22.9**	**22.4**	**22.8**	**26.5**	**29.7**	**34.3**	**35.9**	**38**	**35.5**	**36.3**	**37**	**35.5**	***32.4***
(i) Household Sector	9.9	11.3	12.3	12.4	11.4	11.7	11.9	10.8	13.5	9.2	13.1	14.3	*12.5*
(ii) Private Corporate Sector	5.9	4.8	4.8	6.9	9.9	13.6	14.5	17.3	11.3	12.1	13.4	10.6	*11.5*
(iii) Public sector	7.1	6.3	5.7	6.3	7.1	7.9	8.3	8.9	9.4	13.2	8.4	7.9	*8.4*
(iv) Valuables	0	0	0	0.9	1.3	1.1	1.2	1.1	1.3	1.8	2.1	2.7	*0*
(V) Errors and Omissions	1.1	1.3	0.5	**1.5**	1.9	0.4	-0.2	0	1.2	0.2	-0.1	-0.4	*0*
3. Capital Formation##(i+ii+iii+iv +v)	**24**	**23.7**	**23.3**	**28**	**31.6**	**34.7**	**35.7**	**38.1**	**36.7**	**36.5**	**36.9**	**35.1**	***32.4***
4. Saving-Investment Gap (3-1)	**-0.6**	**0.3**	**0.8**	**1.6**	**-0.5**	**-1.2**	**-1.1**	**-1.3**	**-4.7**	**-2.8**	**-2.9**	**-4.3**	***-0.7***
(i) Household Sector	11	11.2	10.3	11.3	10.2	11.9	11.3	11.6	10.1	16	10.4	8	*10.3*
(ii) Private Corporate Sector	-1.7	-0.8	-1.4	-2.2	-2.8	-6.1	-6.6	-7.9	-3.9	-3.7	-5.5	-3.4	*-3.7*
(iii) Public Sector	-8.8	-8.8	-7.6	-5.1	-4.7	-5.5	-4.7	-3.9	-8.5	-13	-5.8	-6.6	*-7.3*

##Includes Valuables, Errors and Omissions

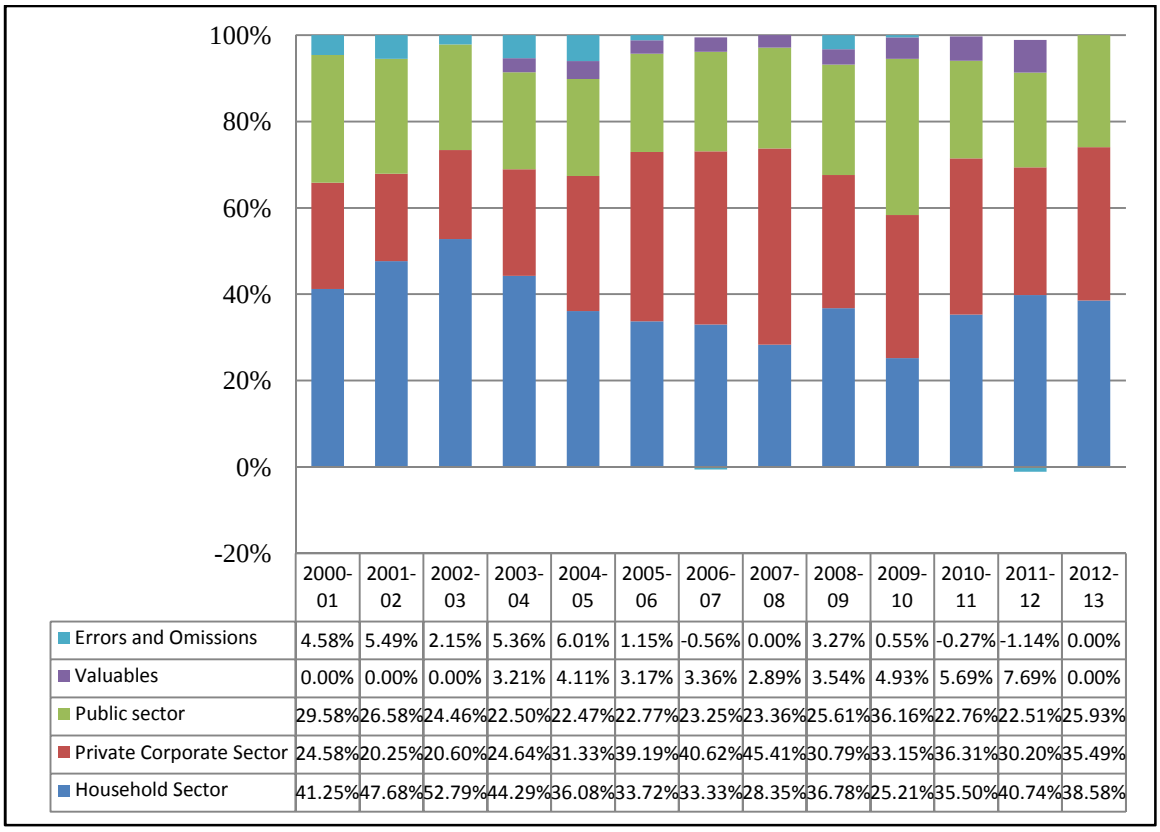
Source: RBI Annual Reports and Planning Commission Database

On an average, the share of the household sector and the private corporate sector in total private investment has been more or less equal between 2004-05 and 2011-12. However, there are large fluctuations from year to year, with the share of the private corporate sector being significantly higher in the high growth years of 2005-06 to 2007-08 and much lower in the years when growth was lower, particularly in 2008-09 and 2011-12. In real terms as well as in terms of percentage of total investment, gross fixed investment of the private corporate sector also declined in 2011-12 as against 2010-11.

Investment in the form of valuables increased in 2011-12 vis-à-vis that in 2010-11. At current prices, investment in the form of valuables registered a nearly 4.5 fold increase between 2007-08 and 2011-12 and their share in total investment increased from 2.8 per cent in 2007-08 to 7.6 per cent in 2011-12. There was a decline in the rate of investment during 2011-12 in respect of the private and public sectors, even as the household investment rate improved over the previous year. Investment in valuables, such as gold and precious stones, continued to remain high at 2.4 per cent of GDP during 2011-12. This largely reflects households' preference for valuables, especially gold, during the recent period due to relatively low real interest rates on deposits and financial instruments such as small savings and uncertain stock market conditions. A part of the increase in this share can be explained by the surge in the prices of gold and other valuables. "However, even at constant prices, the share of valuables increased from 2.9 per cent in 2007-08 to 6.2 per cent in 2011 - 12, thereby pointing to larger acquisition of valuables, including gold. (*GoI, Economic Survey*) and (*RBI's Handbook of Statistics on Indian Economy)*

Fig 3.16

Investment by Type of Institutions (2000-2013)



	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
Errors and Omissions	4.58%	5.49%	2.15%	5.36%	6.01%	1.15%	-0.56%	0.00%	3.27%	0.55%	-0.27%	-1.14%	0.00%
Valuables	0.00%	0.00%	0.00%	3.21%	4.11%	3.17%	3.36%	2.89%	3.54%	4.93%	5.69%	7.69%	0.00%
Public sector	29.58%	26.58%	24.46%	22.50%	22.47%	22.77%	23.25%	23.36%	25.61%	36.16%	22.76%	22.51%	25.93%
Private Corporate Sector	24.58%	20.25%	20.60%	24.64%	31.33%	39.19%	40.62%	45.41%	30.79%	33.15%	36.31%	30.20%	35.49%
Household Sector	41.25%	47.68%	52.79%	44.29%	36.08%	33.72%	33.33%	28.35%	36.78%	25.21%	35.50%	40.74%	38.58%

Source: RBI Annual Reports and Planning Commission Database

3.2.7 Saving and Investment Gap

"In India, the gross domestic investment rate increased to 32.4 in 2012-13 from 24 per cent in 2000-01. During the same period, the gross domestic savings rate increased to 31.7 per cent from 23.4 per cent. The rate of gross domestic capital formation (GDCF) remained above the rate of gross domestic savings (GDS) necessitating foreign capital equal to the amount of saving-investment gap. During 2001-02 to 2003-04, the domestic savings remained above the gross investment due to current account surplus achieved in Balance of Payment (BoP). Thereafter, domestic investment always exceeds the domestic savings. The gross domestic investment rate increased to 34.8 per cent in 2008-09 from 22.8 per cent in 2001-02. This was primarily on account of high growth and economically conducive environment. The gross domestic savings rate also increased to 32 per cent in 2008-09 from 23.5 per cent in 2001-02. This increase in savings along with huge capital

inflows had supported the investment growth". (*GoI, Economic Survey*) and (*RBI's Handbook of Statistics on Indian Economy)*

The household savings and private corporate savings were showing an increase over the period. Public sector savings declined slowly and turned to negative in 1998 on account of higher fiscal deficit. After the FRBM Act, the public sector savings started showing an upward trend. In 2008-09, private corporate and public sector savings declined due to the effect of financial crisis while household sector savings remained the same. The private savings has increased from 4.2 per cent of GDP in 2000-01 to 7.8 percent in 2012-13. However, during the entire period, the corporate savings remained lower than the corporate investment.

A fall in savings due to high inflation in India has widened the saving-investment gap increasing the economy's dependence on external capital. Net financial assets of households as a percentage of GDP and money saved in bank deposits dropped from the highs of the mid-2000s as a result of steep price rise (*Reserve Bank of India, Financial Stability Report – December 2013).* On the other hand, non-financial assets seemed to have enabled households to earn relatively better inflation adjusted returns. Further, differential tax treatment of bank deposits, capital market instruments and non-financial assets like real-estate also creates a bias against bank deposits, which account for a significant proportion of household financial assets.

Table 3.20

Saving and Investment Gap (2000-2013)

Item	**2000-01**	**2001-02**	**2002-03**	**2003-04**	**2004-05**	**2005-06**	**2006-07**	**2007-08**	**2008-09**	**2009-10**	**2010-11**	**2011-12**	**2012-13**
Saving-Investment Gap	-0.6	0.3	0.8	1.6	-0.5	-1.2	-1.1	-1.3	-2.3	-2.8	-2.9	-4.3	-0.7
(i) Household Sector	11	11.2	10.3	11.3	10.2	11.9	11.3	11.6	10.1	16	10.4	8	10.3
(ii) Private Corporate Sector	-1.7	-0.8	-1.4	-2.2	-2.8	-6.1	-6.6	-7.9	-3.9	-3.7	-5.5	-3.4	-3.7
(iii) Public Sector	-8.8	-8.8	-7.6	-5.1	-4.7	-5.5	-4.7	-3.9	-8.5	-13	-5.8	-6.6	-7.3

Source: RBI Annual Reports and Planning Commission Database

3.2.8 Conclusion

Over the period of five year plans, the Indian GDS has increased steadily and is the highest in the world in the recent years .While the household sector savings rate has generally established, trends in private corporate sector savings and public sector savings have influenced the changes in the domestic savings rate. Recent data indicate that after a smart recovery during 2009-10 and 2010-11, real GDP growth slipped sharply to 6.9 per cent during 2011-12, largely on account of the deterioration in the external environment and the slowdown in domestic investment. The slackening of real GDP growth to below its trend in 2011-12 was also evident. Notwithstanding the recent slowdown, the rate of growth of the Indian economy remained quite impressive in cross-country context. However, efforts are required to channel savings away from physical savings into financial savings, which will expand financial intermediation and provide more funds for investment. To mobilize savings of household sector, we need more financial players and product. A greater range of reliable financial savings opportunities and ease of access to these instruments could help in reducing investments in physical assets like gold and will surely enhance the share of financial savings.

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Chapter 4
MUTUAL FUND AS AN INVESTMENT OPTION - AN ANALYSIS

The chapter deals with the analysis of the primary data collected from the sample survey of mutual fund investors in Kerala. The study lays emphasis on the extent to which mutual funds has become a preferred investment avenue among the investors and also examines the behavioural aspects of the investors based on the socio demographic factors. The sampling unit of this survey is an individual, who is technically called as a *'retail investor'* who has invested in mutual funds during the period of study. Retail investors of various AMCs and clients of various depository participants from each zone constituted the source list. After editing of questionnaire for completion, accuracy and consistency the researcher was left out with 472 numbers of questionnaires.

The first part (4.1) of primary data analysis was based on demographic profile. The second part (4.2) comprises of percentage analysis on various aspects of investment planning among mutual fund investors. The third part (4.3) of analysis was based on objectives of the study. The objectives like preference of mutual funds (4.3.1), sources of information and preferred communication mode (4.3.2), issues related to mutual funds (4.3.3), factors that influence mutual fund investment and satisfaction (4.3.4), perception towards mutual fund investment (4.3.5), satisfaction and risk tolerance of mutual fund investors (4.3.6) and mediation analysis (4.3.7) were satistically analysed and tested.

Descriptive statistics such as frequency, percentage, mean, standard deviation, coefficient of variation were used to summarise the properties of data. The tests like independent sample Z test, one way ANOVA and Chi Square was used to test the significance of the hypothesis. Inferential statistics were used for comparison and advanced methods like Post Hoc Turkey HSD, Exploratory factor analysis, Confirmatory factor analysis and Regression model fit indices for CFA were used for modelling the data. Finally Mediation and Sobel test analysis were used to evaluate the mediation effect between the variables under study.

4.1 Demographic Profile of the Respondents

The demographic variables used for the study were gender, age, and educational qualification, area of residence, zone, occupation, marital status, annual income and annual savings. For the research study, Kerala state was divided into three zones viz: south, central and northern zones. The respondents from each zone comprises of south (24.8%), central (56.3%) and north (18.9%) respectively. Further to analyse the geographical distribution of unit holders, the study was focused on corporations (29.2%), municipality (34.1%) and panchayath (36.7%) from each of these three zones. The cross tabulation of the demographic variables were also done for a better comparision and understanding (Table 4.1).

Table 4.1

Demographic Profile of the Respondents

Sl. No	Particulars		Respondents	
			No.	Per cent
1	Gender	Male	347	73.5
		Female	125	26.5
		Total	*472*	*100*
2	Age	Up to 30 Years	147	31.1
		31 - 45	209	44.3
		46 - 60	85	18
		Above 60 Years	31	6.6
		Total	*472*	*100*
3	Educational Qualification	Up to Plus Two	19	4.0
		Graduation	178	37.7
		Post Graduation	191	40.5
		Professional Degree	84	17.8
		Total	*472*	*100*
4	Area of Residence	Panchayath	173	36.7
		Municipality	161	34.1
		Corporation	138	29.2
		Total	*472*	*100*
5	Zone	South	117	24.8
		Central	266	56.4
		North	89	18.9
		Total	*472*	*100*
6	Occupation	Non-Salaried	252	53.4
		Salaried	220	46.6
		Total	*472*	*100*
7	Marital Status	Single	110	23.3
		Married	360	76.3
		Others	2	0.4
		Total	*472*	*100*
8	Annual Income	Up to Rs. 2 lakhs	89	18.9
		200001- 5 lakhs	206	43.6
		500001 - 10 lakhs	132	28.0
		Above 10 lakhs	45	9.5
		Total	*472*	*100*
9	Annual Savings	Less than Rs.50000	130	27.5
		50001 - 100000	171	36.2
		100001 - 200000	79	16.7
		200001 - 300000	31	6.6
		Above Rs.300000	61	12.9
		Total	*472*	*100*

Source: Primary Data

Table 4.2

Cross Tabulation of Gender and Age

Particulars			Age				Total
			Up to 30 years	31-45	46-60	Above 60 years	
Gender	Male	Count	100	155	64	28	347
		% within Gender	28.8%	44.7%	18.4%	8.1%	100.0%
		% within Age	68.0%	74.2%	75.3%	90.3%	73.5%
	Female	Count	47	54	21	3	125
		% within Gender	37.6%	43.2%	16.8%	2.4%	100.0%
		% within Age	32.0%	25.8%	24.7%	9.7%	26.5%
Total		Count	147	209	85	31	472
		% within Gender	31.1%	44.3%	18.0%	6.6%	100.0%
		% within Age	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Primary Data

Table 4.2 shows the composition of the sample mutual fund investors on the base of gender and age. Out of the 472 respondents, 73.5 % of the respondents were male and 26.5 % were female. The largest share of the male respondents (44.7%) and female respondents (43.2%) was from the age group of 31- 45 years. The predominant age group of the respondents (44.3%) was 31-45 years. A good majority of the respondents (31.1%) were in the age group up to 30 years. 18 % and 6.6 % of the investors were in the age groups 46-60 years and above 60 years respectively.

Table 4.3

Cross Tabulation of Educational Qualification and Occupation

Particulars			Occupation Type		Total
			Non Salaried	Salaried	
Educational Qualification	Upto Plus 2	Count	12	7	19
		% within Educational qualification	63.2%	36.8%	100.0%
		% within Occupation Type	4.8%	3.2%	4.0%
	Graduation	Count	94	84	178
		% within Educational qualification	52.8%	47.2%	100.0%
		% within Occupation Type	37.3%	38.2%	37.7%
	Post Graduation	Count	98	93	191
		% within Educational qualification	51.3%	48.7%	100.0%
		% within Occupation Type	38.9%	42.3%	40.5%
	Professional Degree	Count	48	36	84
		% within Educational qualification	57.1%	42.9%	100.0%
		% within Occupation Type	19.0%	16.4%	17.8%
Total		Count	252	220	472
		% within Educational qualification	53.4%	46.6%	100.0%
		% within Occupation Type	100.0%	100.0%	100.0%

Source: Primary Data

Out of the 472 respondents, 46.6 % of the respondents were salaried class and 53.4 % of the respondents were non salaried class (business and professional). A predominant literacy group (40.5%) of the respondents was distributed in post graduation qualification. Of the post graduation, 42.3% and 51.3% are from salaried and non salaried class. A good majority of the remaining respondents (37.7%) were distributed in the degree qualifications and 17.8 % professional degree and 4% up to plus two respectively. The non salaried class comprises of agriculturist, business and self employed, professional, NRIs and retired category.

Table 4.4

Cross Tabulation of Area of Residence and Zone

Particulars			Zone			Total
			South	Central	North	
Area of Residence	Panchayath	Count	27	105	41	173
		% within Area of residence	15.6%	60.7%	23.7%	100.0%
		% within Zone	23.1%	39.5%	46.1%	36.7%
	Municipality	Count	48	77	36	161
		% within Area of residence	29.8%	47.8%	22.4%	100.0%
		% within Zone	41.0%	28.9%	40.4%	34.1%
	Corporation	Count	42	84	12	138
		% within Area of residence	30.4%	60.9%	8.7%	100.0%
		% within Zone	35.9%	31.6%	13.5%	29.2%
Total		Count	117	266	89	472
		% within Area of residence	24.8%	56.4%	18.9%	100.0%
		% within Zone	100.0%	100.0%	100.0%	100.0%

Source: Primary Data

Of the total respondents 56.4 % were from the central zone, 24.8 % from southern zone and 18.9% from northern zone. Out of the total 472 respondents, 173 respondents (36.7%) were from panchayath and 34.1 % from municipality and the rest 29.2% were from corporation.

Table 4.5

Cross Tabulation of Annual Saving and Annual Income

Particulars			Annual Income				Total
			Upto 2 lakh	200001 - 5 lakh	500001 - 10 lakh	Above 10 lakh	
Annual Saving	Less than 50,000	Count	70	56	4	0	130
		% within Annual saving	53.8%	43.1%	3.1%	0.0%	100.0%
		% within Annual income	78.7%	27.2%	3.0%	0.0%	27.5%
	50,001 - 1,00,000	Count	14	112	44	1	171
		% within Annual saving	8.2%	65.5%	25.7%	0.6%	100.0%
		% within Annual income	15.7%	54.4%	33.3%	2.2%	36.2%
	1,00,001 - 2,00,000	Count	1	28	45	5	79
		% within Annual saving	1.3%	35.4%	57.0%	6.3%	100.0%
		% within Annual income	1.1%	13.6%	34.1%	11.1%	16.7%
	2,00,001 - 3,00,000	Count	4	4	17	6	31
		% within Annual saving	12.9%	12.9%	54.8%	19.4%	100.0%
		% within Annual income	4.5%	1.9%	12.9%	13.3%	6.6%
	Above 3,00,000	Count	0	6	22	33	61
		% within Annual saving	0.0%	9.8%	36.1%	54.1%	100.0%
		% within Annual income	0.0%	2.9%	16.7%	73.3%	12.9%
Total		Count	89	206	132	45	472
		% within Annual saving	18.9%	43.6%	28.0%	9.5%	100.0%
		% within Annual income	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Primary Data

The income distribution of mutual fund investors reveals that 43.6% were in the income group of Rs. 2,00,001 to 5 lakh followed by 28.0% in the income range of 500001to 10 lakh. 18.9% and 9.5% of the respondents were in the income group up to Rs.2 lakh and above 10 lakh respectively. Of the mutual fund respondents, 36.2% have an annual savings of Rs. 50001 to100000 followed by 27.5.0% with a saving of less than Rs.50,000. 16.7% and 12.9 % of the respondents were having savings of Rs.100001 to 2 lakh and above 3 lakh respectively. 6.6% of the respondents have an annual savings of Rs. 200001 to 3 lakh.

4.2 Mutual Fund Investors and their Investment Planning

Table 4.6

Tenure of Investment in Mutual Funds

Tenure of investment in mutual funds	Frequency	Per cent
Up to 2 years	158	33.5
2 - 5 year	165	35
5 -10 year	103	21.8
Above 10 years	46	9.7
Total	*472*	*100*

Source: Primary Data

Out of the total 472 respondents, highest of 35 percent of respondent invest into mutual fund for a period 2-5 years followed by an investment tenure up to 2 years with 33.5 percentage and 21.8 percent for a period of 5-10 years.

Table 4.7

Investment Channels

Investment Channels	Frequency	Per cent
Direct	42	8.9
AMC	38	8.1
Bank	176	37.3
Broking Firms/DP's	122	25.8
Agents/Personalised Brokers	94	19.9
Total	*472*	*100*

Source: Primary Data

Of the various investment channels banking channel is the most prominent with 37.3 percent followed by broking firms/DPs by 25.8 percent and agents and brokers with 19.9 percent.

Table 4.8

Route of Investment Decision

Route of Investment Decision	Frequency	Per cent
Own Initiative	155	32.8
Own initiative, but with the help of an expert	254	53.8
Expert Opinion	63	13.4
Total	472	100

Source: Primary Data

Of the total respondents 53.8 percent took their investment decision with the help of an expert, 32.8 percent take their own decision and rest 13.4 percent entirely depends on expert opinion.

Table 4.9

Preferred Mutual Fund Schemes – Operational

Operational Classification	Frequency	Per cent
Open Ended Schemes	329	69.7
Close Ended Schemes	102	21.6
Interval Schemes	41	8.70
Total	*472*	*100*

Source: Primary Data

Table 4.10

Preferred Mutual Fund Schemes – Portfolio

Portfolio Classification	Frequency	Per cent
Equity	219	46.4
Debt	94	19.9
Hybrid/Balance	125	26.5
Money Market/Liquid	34	7.2
Total	*472*	*100*

Source: Primary Data

The preference of mutual fund schemes were asked in two dimensions viz; operational and portfolio. While considering the operational classification, 69.7 percent opted for open ended and 21.6 percent for close ended and the rest 8.7 percent for interval schemes. Based on the portfolio classifications, equity was highly preferred by 46.4 percent followed by balanced fund by 26.5 percent and debt fund by 19.9 percent.

Table 4.11

Investments in Different Types of Mutual Fund

Type of Mutual Funds	Frequency	Per cent
Gilt Funds	14	2.97
Sector Funds	124	26.27
Thematic Funds	31	6.57
ELSS	51	10.81
Arbitrage Funds	7	1.48
Monthly Income Plan	103	21.82
Capital Protected Schemes	24	5.08
Gold Funds	37	7.84
Exchange Traded Funds	23	4.87
Income Fund	58	12.29
Total	*472*	*100*

Source: Primary Data

Of the different types of mutual funds , the most preferred type of fund is sector funds(26.27%) followed by monthly income plans(21.82%) income fund (12.29%) and ELSS by 10.81 percent.

Table 4.12

Preferred Investment Option

Investment Option	Frequency	Per cent
New Fund Offer	60	12.71
Lump Sum Investment	128	27.12
Systematic Investment Plan	278	58.90
Systematic Transfer Plan	6	1.27
Total	*472*	*100*

Source: Primary Data

Table 4.13

Preferred Return Options

Return Option	Frequency	Per cent
Growth	344	72.88
Dividend	128	27.12
Total	*472*	*100*

Source: Primary Data

The preferred investment option among the retail investors is SIP with 58.90 percent followed by lump sum investment of 27.12 percentage and NFO 12.71 percentage. Among the return options 72.88 percent prefer growth option and the rest 27.12 percent prefer dividend option.

Table 4.14

Investment Returns

Investment Returns	Frequency	Per cent
Very High (above 20%)	17	3.6
High (15-20%)	126	26.7
Average (10-15%)	234	49.57
Low (5-10%)	57	12.08
Very Low (below 5%)	38	8.05
Total	*472*	*100*

Source: Primary Data

Of the total 472 respondents, 49.57 percent feel that investment in mutual fund involves average risk, 30.3 percentage feel that the risk is high and 20.2 feel that there is low risk in mutual fund investment.

Table 4.15

Criterions for Selling

Selling Criterions	Frequency	Per cent
Sell mutual fund within a year	32	6.8
Sell when investment objective is achieved	196	41.5
Keep revising the target as price increases	64	13.6
When share market goes up and down	121	25.6
Not interested in selling	46	9.7
Sell MF within a year and keep revising the target as price increases	13	2.8
Total	*472*	*100*

Source: Primary Data

When asked about the criterion for selling the mutual funds, the highest majority of 41.5 percent of mutual fund retail investors opined that they decide to sell the mutual funds when the investment objective is achieved and 25.6 percent told that they would sell when the market moves bullish or bearish.

Table 4.16

Responses towards Under Performing Funds

Response	Frequency	Per cent
Stop investing in that fund and redeem investment in search of a better mutual fund	153	32.41
Buy better performing funds by not selling the current holdings in anticipating that, fund will catch up with the market	135	28.6
Buy under performing funds more aggressively thinking they would benefit from rupee cost averaging	70	14.8
Switch over with other schemes within the same AMC	101	21.40
Redeem underperforming funds , prefer to sit outside feeling that selecting a right mutual fund is too difficult a task	13	2.7
Total	*472*	*100*

Source: Primary Data

When checked about the responses of mutual fund investors towards under performing funds, 32.41 percent opined that, they will stop investing in that fund and redeem their investment in search of a better mutual fund. 28.6 percent opined that they will buy better performing funds, but will not sell the current holdings anticipating that fund will catch up with the market and 21.4 percent registered that they will switch over with other schemes within the same AMC.

Table 4.17

Plan to Exit

Exit Plan	Frequency	Per cent
Yes	115	24.4
No	357	75.6
Total	*472*	*100*

Source: Primary Data

Table 4.18

Reasons to Exit

Reasons to Exit	Frequency	Per cent
Investment in mutual fund is risky	53	46.09
Provides low return	41	35.65
High fund expense	4	3.48
Fund managers have underperformed across the scheme	13	11.30
Grievance redressal has not been effective	4	3.48
Total	*115*	*100*

Source: Primary Data

Of the total 472 respondents who had invested in mutual funds,357 respondents (75.6%) would like to continue mutual fund investment and only the remaining 115 (24.4%) do have a plan to opt out. Of the 115 respondents who have a plan to exit, 46.09 percent exits because they feel that, mutual fund investment is risky and 35.65 percent exit due low return given by mutual funds.

4.3 Analysis Based on Objectives

4.3.1 Preference of Mutual Fund Investors

Based on the mean score of the respondents for the variables, the mean percentage score was calculated. To study the level of preference, the score were divided into four groups as low or poor if the mean % score is less than 35%, average if the mean % score is between 35 to 50 per cent, medium or good if the mean % score lies in the interval 50 to 75% and high or excellent if the mean % score is above 75%.

A one sample Z test was carried out to find the significance of the preference. The following table gives the Mean, SD, Mean % Score and Z value of the variables considered.

Table 4.19

Mean and SD - Preference of Mutual Fund Investors

Variable	Mean	Std. Deviation	Maximum Score	Mean % Score	Z	P value
Preference towards Mutual fund	4.76	1.46	7	68%	-6.870	<0.001

Source: Primary Data Significant at 0.05 level

The mean percentage score of the preference towards Mutual fund is 68% which indicate that a good level of preference prevails among the investors. To test whether the sample information observed exist in the population and or to verify the preference towards Mutual fund is low, average, medium or high, the following hypothesis was formulated. The mean percentage score is 75% (high) percent of the maximum possible score against it is less than 75% (medium).

H_0: *The mean score of preference towards mutual fund is 5.25*
(75 percent of the maximum possible score of 7)

H_1: *The mean score of preference towards mutual fund is less than 5.25.*

To test the above hypothesis one sample Z test was used and the result is exhibited in Table 4.19. From the table the calculated value of Z is -6.870 and is less than -1.675 which indicates that the test is significant. Since the $p<.05$, the null hypothesis is rejected. Hence it is established that mean score of preference towards

mutual fund differ significantly and concluded that the preference towards mutual fund is less than 5.25 ie: medium.

The study further analysed whether the mean score of preference towards mutual fund differs with demographic factors or not. An independent sample Z test was carried out to identify whether the mean score of preference towards mutual fund differs significantly with respect to gender and occupation and an F test or one way ANOVA for the rest of the variables. The results are exhibited in the following table.

4.3.1a Preference towards Mutual Funds as an Investment Avenue with respect to Demographic Factors:

Table 4.20

Mean and SD - Mutual Funds as an Investment Avenue with respect to Age

Age	Mean	N	Std. Deviation	CV
Upto 30 years	4.81	147	1.53	31.81
31-45	4.92	209	1.31	26.63
46-60	4.31	85	1.61	37.35
Above 60 years	4.94	31	1.44	29.15

Source: Primary Data

Based on the mean score of the respondents for the four variables, its Coefficient of Variation was calculated. From the table (4.20) it can be inferred that, the mean value is highest for the age group above 60 years followed by 31-45 years which means that mutual fund as an investment avenue is highly preferred by these groups and the CV indicates that within variation in preference to mutual funds is least for these two groups. The opinion expressed by this two group are more or less stable than the remaining group.

The following hypothesis is proposed for testing

H_o: There is no significant difference in the preference towards mutual fund among investors of different age groups.

H_a: There is significant difference in the preference towards mutual fund among investors of different age groups.

Table 4.21

One way ANOVA - Mutual Funds as an Investment Avenue with respect to Age

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	22.533	3	7.511	3.808	.010
Within Groups	923.046	468	1.972		
Total	945.578	471			

Source: Primary Data Significant at 0.05 level

One-way Anova was used to test the hypothesis. From the table 4.21, the test was found to be significant as p value is 0.010 which is not exceeding the level of significance of 0.05. So it concluded that the mutual fund as an investment avenue differ between different age groups. Post Hoc Tukey test was carried out to identify which among the age group had significant difference.

Table 4.22

Post Hoc Test - Significance of Mean Difference based on Age Groups

(I) Age	(J) Age Group	Mean Difference (I-J)	Sig.
Up to 30 years	31-45	-0.10157	0.923
	46-60	0.50479	0.064
	Above 60 years	-0.12205	0.974
31-45	46-60	.60636*	0.008
	Above 60 years	-0.02048	1
46-60	Above 60 years	-0.62684	0.17

*Source: Primary Data * Significant at 0.05 level*

The result shows that, the respondents in the age group 31-45 significantly differ with the respondents in the age group of 46-60. Other age groups are similar in terms of preferring mutual fund as an investment option.

Mutual Funds as an Investment Avenue with respect to Occupation

Ho: *There is no significant difference in the preference towards mutual fund among investors of different occupation.*

H_a: *There is significant difference in the preference towards mutual fund among investors of different occupation.*

Table 4.23

Z value - Mutual Funds as an Investment Avenue with respect to Occupation

Occupation Type	Mean	N	Std. Deviation	CV	Z	Sig.
Non-Salaried	4.65	252	1.43	30.64	-1.898	0.029
Salaried	4.91	220	1.48	30.20		

Source: Primary Data Significant at the 0.05 level

Among the occupation, the mean value is highest among the salaried class which state that mutual fund is more preferred among this class.

There is significant difference with regard to mutual fund as an investment avenue with respect to occupation as the significant value is 0.029 which is less than 0.05.

Table 4.24

Mean and SD- Mutual Funds as an Investment Avenue with respect to Area of Residence

Area of Residence	Mean	N	Std. Deviation	CV
Panchayath	4.73	164	1.48	31.28
Municipality	4.90	151	1.37	27.96
Corporation	4.69	131	1.52	32.41
Total	4.78	446	1.46	30.54

Source: Primary Data

The mean value for municipality is higher (4.90) stating that mutual fund as an investment option is highly preferred by people residing in municipality.

The following hypothesis is proposed for testing

Ho: There is no significant difference in the preference towards mutual fund among investors residing in different area.

H_a: There is significant difference in the preference towards mutual fund among investors residing in different area.

Table 4.25

One way ANOVA - Mutual Funds as an Investment Avenue with respect to Area of Residence

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.630	2	1.815	.854	.427
Within Groups	941.949	443	2.126		
Total	945.578	445			

Source: Primary Data

To test the above hypothesis, one way ANOVA was used and the result is exhibited in the table 4.25. From the table the p values were found to be greater than 0.05, hence H_0 is accepted stating that there is no significant difference in the preference towards mutual fund among investors residing in different area.

Table 4.26

Mean and SD - Mutual Funds as an Investment Avenue with respect to Zone

Zone	Mean	N	Std. Deviation	CV
South	4.6700	117	1.55735	33.35
Central	4.9884	266	1.40727	28.21
North	4.2727	89	1.36228	31.88

Source: Primary Data

The investors in different zone along with the mean and coefficient of variation is presented in the table 4.26. In the central zone, the average score of investors is high (4.99) which means that among the zones, central zone investors prefer mutual fund as an investment media and the degree of variation is also least as 28.21 which states that, the opinion of central zone investors are more stable.

$H_{0:}$ *There is no significant difference in the preference towards mutual fund among investors with respect to zone.*

H_a*: There is significant difference in the preference towards mutual fund among investors with respect to zone*

Table 4.27

ANOVA - Mutual Funds as an Investment Avenue with respect to Zone

Source of Variation	**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
Between Groups	35.049	2	17.524	9.026	<.001
Within Groups	910.530	469	1.941		
Total	945.578	471			

Source: Primary Data Significant at 0.05 level.

One way Anova test is executed to test the hypothesis. The significance value is .001 which is not exceeding the level of significance of 0.05 and hence the investors in different zone differ in their preference towards mutual fund as an investment option.

Table 4.28

Post Hoc Test - Significance of Mean Difference based on Zone

(I) Zone	**(J) Zone**	**Mean Difference (I-J)**	**Sig.**
South	Central	-0.31837	0.144
	North	0.39727	0.141
Central	North	.71564*	<0.001

*Source: Primary Data *Significant at 0.05 level.*

The Post Hoc result shows that in the case of zone, the investor's preference towards mutual fund in the central zone significantly differ with the investors in the northern zone.

Table 4.29

Mean and SD - Mutual Funds as an Investment Avenue with respect to Annual Savings

Annual Saving	Mean	N	Std. Deviation	CV
Less than 50,000	4.6667	130	1.42959	30.63
50,001 - 1,00,000	4.6325	171	1.42825	30.83
1,00,001 - 2,00,000	4.8684	79	1.41744	29.12
2,00,001 - 3,00,000	5.6296	31	1.14852	20.40
Above 3,00,000	4.9074	61	1.67409	34.11

Source: Primary Data

The mean score of mutual fund is highest for those investors having their annual savings between 200001 lakh-3 lakh with mean value 5.63, followed by above 3 lakh with mean value 4.91, which shows that as savings increases preference to mutual fund investment also increases.

Ho: There is no significant difference in the preference towards mutual fund among investors with respect to annual savings.

H_a: There is significant difference in the preference towards mutual fund among investors with respect to annual savings.

Table 4.30

ANOVA - Mutual Funds as an Investment Avenue with respect to Annual Saving

Source of Variation	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	26.143	4	6.536	3.32	.011
Within Groups	919.435	467	1.969		
Total	945.578	471			

Source: Primary Data Significant at 0.05 level

The hypothesis was tested using one way ANOVA. The significant value 0.011 is not exceeding the level of significance of 0.05 and hence there is significant difference with regard to mutual fund as an investment avenue among investors

having different annual savings. So it is concluded that, there is significant difference in the preference towards mutual fund among investors with respect to annual savings. Since the test is found to be significant the post hoc test was conducted.

Table 4.31

Post Hoc Test - Significance of Mean Difference based on Annul Savings

(I) Annual Saving	(J) Annual Saving	Mean Difference (I-J)	Sig.
Less than Rs. 50,000	50,001 - 1,00,000	0.03414	1
	1,00,001 - 2,00,000	-0.20175	0.874
	2,00,001 - 3,00,000	-.96296*	0.016
	Above 3,00,000	-0.24074	0.845
50,001 - 1,00,000	1,00,001 - 2,00,000	-0.23589	0.763
	2,00,001 - 3,00,000	-.99710*	0.008
	Above 3,00,000	-0.27488	0.743
1,00,001 - 2,00,000	2,00,001 - 3,00,000	-0.76121	0.13
	Above 3,00,000	-0.03899	1
2,00,001 - 3,00,000	Above 3,00,000	0.72222	0.212

Source: Primary Data ** Significant at 0.05 level.*

The result shows that in the case of annual savings, the respondents with annual savings less than Rs.50000 and Rs.50001-100000 significantly differ with the respondents with annual savings Rs. 200001-300000.

Table 4.32

Preferred Investment Option – Gender, Occupation and Area of Residence

Investment Option	Gender				Occupation				Area of Residence					
	Male		Female		Non-Salaried		Salaried		Panchayath		Municipality		Corporation	
	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank
Bank Deposits	5.2369	1	5.7417	1	5.3445	1	5.4058	1	5.5305	1	5.3791	1	5.1641	1
Post Office Savings	3.855	10	4.1429	8	3.935	9	3.9242	8	3.9277	8	3.9236	10	3.9403	8
National Savings Certificate	3.7508	11	3.9292	9	3.8151	11	3.775	10	3.7862	10	3.8562	11	3.7381	10
Pension and Provident Fund	4.52	6	4.7826	3	4.4739	6	4.6683	5	4.9018	2	4.6849	5	3.9921	7
RBI Infrastructure Bonds	3.906	9	3.9252	10	4.0263	8	3.7778	9	3.9038	9	4.2585	8	3.5041	12
Mutual Funds	4.7754	2	4.7768	4	4.6525	3	4.9143	2	4.7256	4	4.9007	3	4.6947	5
Equity	4.6717	4	4.2222	7	4.5169	5	4.6127	6	4.3697	7	4.6577	6	4.6984	4
Debentures	3.9255	8	3.5728	12	3.9123	10	3.7563	11	3.6065	12	4.0135	9	3.9262	9
Insurance	4.3223	7	4.2328	6	4.4167	7	4.1635	7	4.5269	5	4.2848	7	4.0231	6
Chits	3.6262	12	3.8056	11	3.7611	12	3.5714	12	3.7848	11	3.6419	12	3.561	11
Gold and Silver	4.7335	3	5.2703	2	4.8291	2	4.91	3	4.869	3	4.9054	2	4.8217	3
Real Estates	4.638	5	4.7	5	4.6167	4	4.7406	4	4.3916	6	4.8301	4	4.8496	2

Source: Primary Data

4.3.1b Preferred Investment Option

Twelve investment options were given and the respondents were asked to mark their preference in a seven point scale. Based on the mean score the investment options were ranked.

Preferred Investment Option – Gender

Analysing the investment options with gender, bank deposits turns to be the highest ranked option for both male and female with mean score of 5.24, followed by mutual funds by male and gold and silver by females. Mutual fund turns to be the fourth preferred investment option for females.

Preferred Investment Option – Occupation

Based on occupation, bank deposits are the most preferred option, followed by gold and silver by non salaried investors and mutual funds by the salaried class. For non salaried investors, mutual fund turns to be the third preferred investment option.

Preferred Investment Option – Area of Residence

Irrespective of the area of residence, bank deposits turn to be the most preferred investment option. The second preferred investment option for panchayath is provident fund, municipality is gold and silver and corporation is real estates. Mutual fund turns to be the fourth, third and fifth preferred option for panchayath, municipality and corporation respectively.

Preferred Investment Option-Rank

In order to assess the attitude of the respondents to different investment avenues a seven point scale question was asked from highly favourable to not at all favourable. The mean score for each of the investment avenue is found based on the score given by the respondents from among the option 1 to 7. Based on this mean score the avenues are ranked in ascending order of magnitude and the result is exhibited in the table (4.33).

Table 4.33

Preferred Investment Option- Rank

Investment Option	Mean	Rank
Bank Deposit	5.3730	1
Gold/ Silver	4.8674	2
Mutual Funds	4.7758	3
Real Estate	4.6748	4
Pension & Provident Fund	4.5655	5
Equity	4.5614	6
Insurance	4.2991	7
Post Office Savings	3.9300	8
RBI/ Infrastructure Bond	3.9108	9
Debentures (Private & Govt.)	3.8400	10
National Savings Certificate	3.7968	11
Chits	3.6713	12
Others	3.1286	13

Source: Primary Data

Table 4.33 shows that , out of the thirteen investment options , bank deposits is still the most preferred option with the highest mean score of 5.37 followed by gold and silver with mean score of 4.87 and mutual fund turns to be the third preferred investment option with 4.78 mean score among the retail investors.

4.3.1c Investment Objectives

In order to find out the objectives of the investment a six option were given and the respondents were requested to rank their option from most preferred to least from 1 to 6. The weighted mean of each of the option were found with 6 to 1 as the values for rank 1 to 6 and the number of respondents chasseing each rank as weight. The investment objective is then ranked based on this and exhibited in the following table.

Table 4.34

Investment Objectives- Rank

Investment Objectives	Mean	Rank
Capital appreciation	5.0270	1
To meet the contingencies for specific purpose	4.7249	2
Supplement the current income	4.1347	3
Tax saving shelter	3.9596	4
Income after retirement	3.7700	5
Others	3.2500	6

Source: Primary Data

From the table 4.34 the mean score of capital appreciation emerges as the main objective of investment with the highest mean score of 5.03 followed by contingencies for specific purpose a mean sore 4.72. Supplementing the current income and tax saving shelter came in the third and fourth position with 4.23 and 3.96 respectively. Income after retirement and other options were the last two investment objectives.

Table 4.35

Investment Objectives – Gender, Occupation and Area of Residence

Investment Objectives	Gender				Occupation				Area of Residence						Total	
	Male		Female		Non-Salaried		Salaried		Rural		Semi-Urban		Urban			
	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Grand Mean	Rank
Capital Appreciation	5.167	1	4.593	2	5.044	1	5.007	1	4.714	1	5.124	1	5.287	1	5.027	1
Supplement the Current Income	4.093	3	4.271	3	4.220	3	4.030	3	4.142	3	4.301	3	3.914	4	4.135	3
Tax Saving Shelter	3.936	4	4.029	5	3.915	4	4.008	4	3.918	4	3.727	5	4.244	3	3.960	4
To meet Contingencies	4.647	2	4.929	1	4.506	2	4.942	2	4.605	2	4.838	2	4.758	2	4.725	2
Income after Retirement	3.680	5	4.059	4	3.848	5	3.674	5	3.845	6	3.789	4	3.663	5	3.770	5
Any Other	3.320	6	3.091	6	3.375	6	3.000	6	3.846	5	2.571	6	3.444	6	3.250	6

Source: Primary Data

The highest preferred investment objectives for all the variables under study is ‘capital appreciation” except for females, followed by the investment objective “to meet contingencies” except for females which turn to be the most preferred investment objective.

4.3.2 Source of Information and Communication mode

The analysis of retail mutual fund investors with respect to sources of information and communication mode in the context of their selection of various mutual funds for their investments is done here. Primary data collected was used to assess the components of sources of information. The three components for source of information viz; advertisement, data and information and advice and recommendations, and four components for communication viz; information in graphical format, alphanumeric information, summary information and written text format (descriptive) were identified for analysis. Chi Square test was used to find out the association between these variables and demographic variables.

4.3.2a Source of Information

Table 4.36

Source of Information – Frequency

Source of Information	Frequency	Per cent
Advertisement	64	13.6
Data & Information	171	36.2
Advice & Recommendation	237	50.2
Total	*472*	*100*

Source: Primary Data

Of the various sources of information for mutual fund investment, 50.2 percent of investors prefer advice and recommendation followed by 36.2 percent as data and information and only 13.6 percent relay on advertisement.

Ho: There is no association between demographic variables (gender, age, and educational qualification, area of residence, zone, occupation, annual income, and annual savings) and source of information.

Ha: Significant association exists between demographic variables (gender, age, and educational qualification, area of residence, zone, occupation, annual income, and annual savings) and source of information.

Table 4.37

Source of Information - Chi-Square Results

Demographic Variable	Chi-Square	df	p value	Conclusion
Gender	0.108	2	0.948	Not significant
Age	9.723	4	0.045	Significant
Educational Qualification	0.238	4	0.993	Not significant
Area of Residence	0.615	4	0.961	Not significant
Zone	6.713	4	0.152	Not significant
Occupation	5.23	2	0.073	Not significant
Annual Income	13.037	6	0.042	Significant
Annual Saving	6.734	6	0.346	Not significant

Source: Primary Data Significant at 0.05 level

The Pearson Chi square test was used to test the significance of the hypothesis. The significance values in the case of demographic variables namely age and annual income are less than .05. Hence the null hypothesis is rejected in the case of age and annual income stating that, there is association between the demographic variables namely age, and annual income to source of information. Investors belonging to different age and income group's significantally differ with sources of information.

4.3.2b Preferred Communication Mode

Table 4.38

Communication Modes - Frequency

Communication Mode	Frequency	Percent
Information in Graphical Format	126	26.70
Alphanumeric Information	83	17.58
Summary Information	164	34.75
Written Text Format (Descriptive)	99	20.97
Total	*472*	*100*

Source: Primary Data

The most preferred communication mode among the investors is summary information with 34.75 percentage followed by graphical format with 26.70 percentage.

Ho: There is no association between demographic variables (gender, age, educational qualification, area of residence, zone, occupation, annual income, and annual savings) and communication modes.

Ha: There is association between demographic variables (gender, age, educational qualification, area of residence, zone, occupation, annual income, and annual savings) and communication modes.

Table 4.39

Communication Modes - Chi-Square Results

Demographic Variable	Chi-Square	df	p value	Conclusion
Gender	9.821	4	0.044	Significant
Age	13.529	8	0.095	Not significant
Educational Qualification	8.7	8	0.368	Not significant
Area of Residence	10.731	8	0.217	Not significant
Zone	30.295	8	<0.001	Significant
Occupation	6.487	4	0.166	Not significant
Annual Income	10.296	8	0.245	Not significant
Annual Saving	4.149	12	0.981	Not significant

Source : Primary Data *Significant at 0.05 level.*

The Pearson chi square test was used to test the significance of the hypothesis. The significance values in the case of demographic variables namely gender and zone are less than .05. Hence the null hypothesis is rejected in the case of gender and zone. It can be inferred that, there is association between the demographic variables namely gender and zone to communication modes i.e; only gender and zone has significant influence in communication mode.

4.3.3 Issues Related to Mutual Fund Investment

Mutual Funds are a retail product which is designed for those who do not directly invest in the share market because of its unpredictable and volatile nature. Individual investors are generally constrained by inadequate knowledge, non availability of information, lack of investment skill etc; have an effect on issues related to mutual fund investment. The proper knowledge regarding issues faced by mutual fund investors will attract more investors and increase the satisfaction level.

4.3.3a Factor analysis - Issues related to mutual fund investment

The researcher used the factor analysis for identifying the underlying variables. To identify the various issues related to mutual fund, the respondents were asked to rate the importance of the specified variables on a 7 point scale ranging from Strongly Agree (5) to Strongly Disagree (1).

The correlation matrix showed sufficient items to justify the factorability of data. The KMO and Bartlett's test of sphericity produces the Kaiser-Meyer-Olkin measure of sampling adequacy and Bartlett's test. KMO test revealed 0.897 of KMO sampling adequacy (Table 4.40) which is greater than 0.6 and Barlett's test of Sphericty (BTS) value is found significant (p<.000)which meant that data was appropriate for EFA.

Table 4.40

KMO and Bartlett's Test- Issues related to mutual fund investment

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.897
Bartlett's Test of Sphericity	Approx. Chi-Square	2158.236
	df	78
	Sig.	0.000

Source: Primary Data

Those items having their communalities below 0.4 and Cronbach's alpha below 0.6 were removed from the final questionnaire resulting in 13 statements for issues faced in mutual fund investments. The scree plot was used for selecting the accurate number of factors. The data were analysed using principal component analysis, with the rotation method; vaimax with Kaisan normalization. Then the 13 identified variables were classified under the appropriate group as *Complexity, Non- Performance and Management Issues* based on the factor loading.

Table 4.41

Major Issues related to Mutual Fund Investment - Factor loadings after Varimax Rotation

Variables	Statements	Factor Loading		
		F1	**F2**	**F3**
Complexity	Lack of portfolio customization	0.682		
	Overload of schemes	0.686		
	Too much of scheme variants	0.602		
	Major changes in attribute of funds	0.647		
	High expense ratio for funds	0.538		
	Fees by investment adviser/ agent	0.591		
Non-Performance	Funds not performing		0.526	
	Variation in return		0.817	
Management Issues	Fund manager has changed			0.488
	Fund risk			0.671
	Lack of service standards and disclosures			0.751
	Under performance of professional fund managers			0.701
	Grievance redresses has not been effective			0.673
	Cronbach's alpha	0.816	.652	.779

Source: Primary Data

The Cronbach's α value for the different factors of issues related to mutual fund ranged from 0.652 to 0.816 indicating that the scale was internally consistent and reliable. After identifying the variables and classifying the statements under each factor using EFA the next stage was to confirm the factor structure. Since the data being opinion data, measured under Likert scale, Structural Equation Model (SEM) using AMOS 18.0 was used to perform the Confirmatory Factor Analysis (CFA). The measurement model indicated an acceptable fit of the data and confirms to the three factor structure of issues related to mutual fund investment.

Table 4.42

Model Fit Indices- Issues Related to Mutual Fund Investment

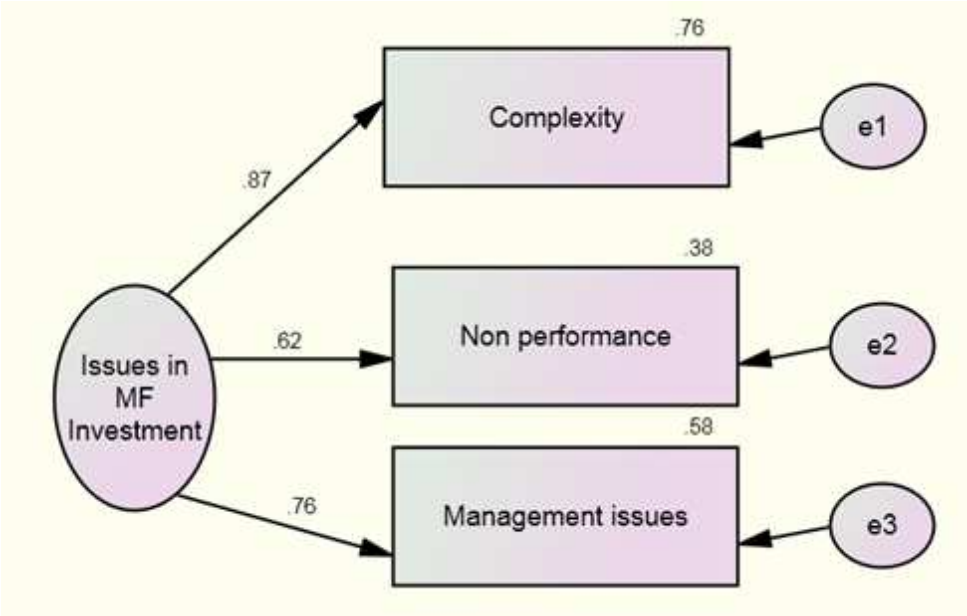
	χ^2	DF	P	Normed χ^2	GFI	AGFI	NFI	TLI	CFI	RMR	RMSEA
Recommended			>0.05	<3	>0.90	>0.90	>0.90	>0.90	>0.90	<1	<0.5
	48.047	48	0.471	1.001	0.980	0.961	0.964	1.00	1.00	.158	0.002

Source: Primary Data

For the analysis initially an input model was developed by using AMOS-18 graphics. The rectangle represents observed variables- Complexity, Non performance and Management issues; oval drawn in the diagram represents unobserved variables- Issues related to mutual fund investments. The straight headed arrow represents the regression coefficients of the observed variables. The small circles with arrows pointing from the circles to the observed variables represent errors unique factors, which are also known as squared multiple correlation of the standard error. The value above each rectangular box represents the R-Squared value of the observed variables. The statistic measures how successful the fit is explaining the variation of the data. i.e. it is the percentage of the response variable variation that is explained.

Fig: 4.1

The Regression Coefficients showing Issues in Mutual Fund Investment



The regression coefficient obtained in the CFA analysis is given in the following table.

Table 4.43

The Regression Coefficients showing Issues in Mutual Fund Investment

Dependent Variable	Independent Variable	Regression Coefficient
Issues in Mutual Fund Investment	Complexity	.873
	Non Performance	.616
	Management Issues	.763

Source: Primary Data

From the table 4.43, it is found that Complexity is the most affected issue with regression weight 0.873 followed by Management Issues and Non Performance with regression weight 0.763 and 0.616 respectively. The regression equation for issues of Mutual Fund Investment

= 0.873 Complexity +.616 Non Performance +.763 Management Issues

From the above equation it is concluded that one unit decrease in complexity results in decrease of the problems of mutual fund investment by 0.873 units provided the other two variables remains constant. The R^2 value indicates that this change occurs in 76% cases. The R^2 value .76 for the variable complexity means that the fit explains 76% of the total variation in the data.

4.3.3b Demographic variables and Issues in Mutual Fund Investment:

Gender and Core Issues among Mutual Fund Investors

H_0: There is no significant difference among Gender for Core issues (Complexity, Non Performance and Management Issues) in mutual fund investment.

Ha: There is significant difference among Gender for Core issues (Complexity, Non Performance and Management Issues) in mutual fund investment.

Table 4.44

Z test - Core Issues among Mutual Fund Investors with regard to Gender

Issues in MF Investment	Gender	N	Mean	Std. Deviation	Z	P value
Complexity	Male	347	25.0058	6.74215	1.100	.272
	Female	125	24.1920	7.99364		
Non Performance	Male	347	9.3055	2.37254	.068	.946
	Female	125	9.2880	2.66645		
Management Issues	Male	347	21.4207	5.82216	1.014	.311
	Female	125	20.8000	5.99866		

Source: Primary Data Significant at 0.05 level.

Based on the gender the mean value for male is highest for all the issues in mutual fund investment. To test the above hypothesis, independent sample z-test was used and the result is exhibited in the table 4.44. From the table the p values were found to be greater than 0.05, hence H_0 is accepted stating that core issues (*Complexity, Non Performance and Management Issues)* does not significantly differs between male and female in mutual fund investment.

Table 4.45

Mean & SD - Core Issues among Mutual Fund Investors with regard to Age

Age		Complexity	Non Performance	Management Issues
Upto 30 years	Mean	25.3469	8.9728	21.2041
	Std. Deviation	6.06771	2.32893	5.38890
	N	147	147	147
31-45	Mean	23.8182	9.1483	20.8373
	Std. Deviation	7.10941	2.48882	5.77647
	N	209	209	209
46-60	Mean	26.5412	10.0353	22.2353
	Std. Deviation	7.82328	2.56091	6.86025
	N	85	85	85
Above 60 years	Mean	23.9032	9.8710	21.6452
	Std. Deviation	8.47488	2.01233	5.68359
	N	31	31	31
Total	Mean	24.7903	9.3008	21.2564
	Std. Deviation	7.09538	2.45091	5.86942
	N	472	472	472

Source: Primary Data

Among the core issues in mutual fund investment, the total mean score of complexity is the highest when compared to other issues in mutual fund investments. The mean value for age group 46-60 has maximum average score (26.54) with respect to all the core issues in mutual fund investments.

H_0: There is no significant difference among Age for Core issues (Complexity, Non Performance and Management Issues) in mutual fund investment.

Ha : There is significant difference between Age for Core issues (Complexity , Non Performance and Management Issues) in mutual fund investment.

Table 4.46

OneWay ANOVA- Issues faced in Mutual Fund Investment with regard to Age

		Sum of Squares	df	Mean Square	F	Sig.
Complexity	Between Groups	528.023	3	176.008	3.553	.014
	Within Groups	23184.213	468	49.539		
	Total	23712.235	471			
Non performance	Between Groups	76.609	3	25.536	4.342	.005
	Within Groups	2752.671	468	5.882		
	Total	2829.280	471			
Management issues	Between Groups	123.244	3	41.081	1.194	.312
	Within Groups	16102.737	468	34.408		
	Total	16225.981	471			

Source: Primary Data Significant at 0.05 level

There is significant difference among respondents of different age groups regarding core issues in mutual fund investment. From the table 4.46 the p values were found to be lesser than 0.05, for age in the case of complexity and non performance, hence H_0 is rejected stating that there is difference between age and core issues – complexity and non performance in mutual fund investment. The Tukey's multiple comparison tests was done to identify which age group of investors have significant difference.

Table 4.47

Significance of Mean Difference in Issues in MF Investment based on Age - PostHoc

Dependent Variable	(I) Age	(J) Age	Mean Difference (I-J)	Sig.
Complexity	Upto 30 years	31-45	1.52876	0.183
		46-60	-1.19424	0.598
		Above 60 years	1.44371	0.727
	31-45	46-60	-2.72299*	0.015
		Above 60 years	-0.08504	1
	46-60	Above 60 years	2.63795	0.281
Non Performance	Upto 30 years	31-45	-0.17554	0.907
		46-60	-1.06251*	0.008
		Above 60 years	-0.89818	0.241
	31-45	46-60	-.88697*	0.024
		Above 60 years	-0.72264	0.41
	46-60	Above 60 years	0.16433	0.988
Management Issues	Upto 30 years	31-45	0.36676	0.938
		46-60	-1.03121	0.57
		Above 60 years	-0.44108	0.981
	31-45	46-60	-1.39797	0.25
		Above 60 years	-0.80784	0.891
	46-60	Above 60 years	0.59013	0.964

Source: Primary Data ** Significant at 0.05 level.*

The Post Hoc analysis reveals the details regarding the significance of means difference between each component of issues in mutual fund investment to each pair of age group. While comparing between respondents of different age groups with respect to core issues in mutual fund investments, the p value shows significance in the case of respondents in the age group 31- 45 and to 46 - 60 in the case of complexity and non performance. The core issue - non performance has also significant difference to respondents in the age group up to 30 and 46 - 60. No such significant difference was observed in other age groups.

Table 4.48

Means - Core Issues faced in Mutual Fund Investment with regard to Area of Residence

Area of Residence		Complexity	Non Performance	Management Issues
Panchayath	Mean	24.6012	9.2197	21.1156
	Std. Deviation	7.33876	2.48911	6.12547
	N	173	173	173
Municipality	Mean	24.5901	9.2484	21.2795
	Std. Deviation	6.72074	2.48000	5.30591
	N	161	161	161
Corporation	Mean	25.2609	9.4638	21.4058
	Std. Deviation	7.23869	2.37739	6.19705
	N	138	138	138
Total	Mean	24.7903	9.3008	21.2564
	Std. Deviation	7.09538	2.45091	5.86942
	N	472	472	472

Source: Primary Data

Among the area of residence, the mean value for corporation has maximum average score (25.26) in complexity. The standard deviation (degree of variability) is the highest in panchayath (7.34).

H_0 : *There is no significant difference among area of residence for core issues (Complexity, Non Performance and Management Issues) in mutual fund investment*

Ha : *There is significant difference among area of residence for core issues (Complexity, Non Performance and Management Issues) in mutual fund investment*

Table 4.49

Oneway ANOVA - Major Issues faced in Mutual Fund Investment with regard to Area of Residence

Issues		Sum of Squares	df	Mean Square	F	Sig.
Complexity	Between Groups	43.203	2	21.601	.428	.652
	Within Groups	23669.033	469	50.467		
	Total	23712.235	471			
Non Performance	Between Groups	5.246	2	2.623	.436	.647
	Within Groups	2824.034	469	6.021		
	Total	2829.280	471			
Management Issues	Between Groups	6.595	2	3.298	.095	.909
	Within Groups	16219.386	469	34.583		
	Total	16225.981	471			

Source: Primary Data Significant at 0.05 level

From the table (4.49) the p values were found to be greater than 0.05 for area of residence in the case of issues regarding mutual fund investment. Hence, H_0 is accepted stating that there is no difference in between area of residence for core issues in mutual fund investments. It is established that, irrespective of the area of residence, mutual fund investors encounter the similar kind of problems.

Table 4.50

Means - Major Issues faced in Mutual Fund Investment with regard to Zone

Zone		Complexity	Non Performance	Management Issues
South	Mean	25.5556	9.9060	22.7009
	Std. Deviation	7.40392	2.29686	5.63435
	N	117	117	117
Central	Mean	24.2857	8.9586	20.6053
	Std. Deviation	6.96468	2.53321	5.94552
	N	266	266	266
North	Mean	25.2921	9.5281	21.3034
	Std. Deviation	7.02302	2.23144	5.65967
	N	89	89	89
Total	Mean	24.7903	9.3008	21.2564
	Std. Deviation	7.09538	2.45091	5.86942
	N	472	472	472

Source: Primary Data

Among the core issues in mutual fund investment, the total mean score of complexity is the highest when compared to other issues followed by management issues. Among the various zone, the mean value for south zone has maximum average score (25.56) in complexity. The standard deviation (degree of variability) is also the highest in south zone (7.40).

H_0 : There is no significant difference among different zones for core issues (Complexity, Non Performance and Management Issues) in mutual fund investment.

Ha: There is significant difference among different zones for core issues (Complexity, Non Performance and Management Issues) in mutual fund investment.

Table 4.51

Oneway ANOVA - Major Issues faced in Mutual Fund Investment with regard to Zone

Issues		Sum of Squares	df	Mean Square	F	Sig.
Complexity	Between Groups	158.656	2	79.328	1.580	.207
	Within Groups	23553.579	469	50.221		
	Total	23712.235	471			
Non Performance	Between Groups	78.589	2	39.294	6.700	.001
	Within Groups	2750.691	469	5.865		
	Total	2829.280	471			
Management Issues	Between Groups	357.089	2	178.545	5.277	.005
	Within Groups	15868.892	469	33.836		
	Total	16225.981	471			

Source: Primary Data Significant at 0.05 level

From the table the p values were found to be lesser than 0.05, for zone in the case of non performance and management issues. Hence H_0 is rejected stating that there is difference between zone and core issues – non performance and management issues in mutual fund investment. Since the ANOVA is found to be significant, Tukey's multiple comparison tests were conducted to identify which group of investors have significant difference.

Table 4.52

Significance of Mean Difference in Issues in MF Investment based on Zone – PostHoc

Dependent Variable	(I) Zone	(J) Zone	Mean Difference (I-J)	Sig.
Complexity	South	Central	1.26984	0.24
		North	0.26342	0.962
	Central	North	-1.00642	0.478
Non Performance	South	Central	.94734*	0.001
		North	0.37789	0.509
	Central	North	-0.56944	0.134
Management Issues	South	Central	2.09559*	0.004
		North	1.39748	0.203
	Central	North	-0.69811	0.59

Source: Primary Data **Significant at 0.05 level.*

Comparing between respondents of different zone with respect to core issues in mutual fund investments, the p value shows significant difference in the case of respondents of south to central zone, in the case of non performance and management issues.

Z test - Major Issues faced in Mutual Fund Investment with regard to Occupation

H_0: There is no significant difference among salaried and non salaried class for core issues (Complexity, Non performance and Management Issues) in mutual fund investments.

Ha: There is significant difference among salaried and non salaried class for core issues (Complexity, Non performance and Management Issues) in mutual fund investments.

Table 4.53

Z test - Major Issues faced in Mutual Fund Investment with regard to Occupation

	Occupation Type	Mean	Std. Deviation	CV	Z	Sig
Complexity	Non salaried	25.17	7.11	28.26	1.234	0.218
	Salaried	24.36	7.07	29.01		
Non Performance	Non salaried	9.37	2.40	25.67	0.609	0.543
	Salaried	9.23	2.51	27.17		
Management Issues	Non salaried	21.82	5.84	26.75	2.232	0.026
	Salaried	20.61	5.85	28.40		

Source: Priiary Data *Significant at 0.05 level.*

As the p vale is less than .05 H_0 is rejected, which means that the type of occupation significantly differs in the case of issues related to mutual fund investments. There is significant difference between salaried and non salaried class of investors with respect to core issues - management.

Table 4.54

Means – Core Issues faced in Mutual Fund Investment with regard to Annual Saving

Annual Saving		**Complexity**	**Non Performance**	**Management Issues**
Less than 50,000	Mean	24.2923	8.8615	20.6692
	Std. Deviation	6.66990	2.45187	5.87517
	N	130	130	130
50,001 - 1,00,000	Mean	25.0585	9.4971	21.6842
	Std. Deviation	6.05631	2.15126	5.15578
	N	171	171	171
1,00,001 - 2,00,000	Mean	24.0886	9.5316	19.7975
	Std. Deviation	7.78590	2.50556	6.43185
	N	79	79	79
2,00,001 - 3,00,000	Mean	24.7419	8.7097	22.5806
	Std. Deviation	6.10992	2.19383	5.50620
	N	31	31	31
Above 3,00,000	Mean	26.0328	9.6885	22.5246
	Std. Deviation	9.75699	3.10130	6.73450
	N	61	61	61
Total	Mean	24.7903	9.3008	21.2564
	Std. Deviation	7.09538	2.45091	5.86942
	N	472	472	472

Source: Primary Data

Among the core issues in mutual fund investment with respect to annual savings, the total mean score of complexity is the highest (24.79) when compared to other issues followed by management issues (21.25). Among the annual savings, the mean value and standard deviation above 3 lakh has maximum average score (26.03) in complexity along with standard deviation (9.76).

H_0 : There is no significant difference among annual saving for core issues in mutual fund investment (Complexity, Non Performance and Management Issues) in mutual fund investments.

Ha : There is significant difference among annual saving for Core issues (Complexity, Non Performance and Management Issues) in mutual fund investments.

Table 4.55

One way ANOVA - Major Issues faced in Mutual Fund Investment with regard to Annual Savings

Issues		Sum of Squares	df	Mean Square	F	Sig.
Complexity	Between Groups	177.678	4	44.420	.881	.475
	Within Groups	23534.557	467	50.395		
	Total	23712.235	471			
Non Performance	Between Groups	55.883	4	13.971	2.352	.053
	Within Groups	2773.396	467	5.939		
	Total	2829.280	471			
Management Issues	Between Groups	396.736	4	99.184	2.926	.021
	Within Groups	15829.245	467	33.896		
	Total	16225.981	471			

Source: Primary Data Significant at 0.05 level

From the table (4.55) the p values were found to be lesser than 0.05, for annual savings in the case of management issues. Hence H_0 is rejected stating that there is relationship between annual saving and core issues – management issues in mutual fund investment. Since the ANOVA is found to be significant, Tukey's multiple comparison tests was conducted to identify which group of investors have significant difference.

Table 4.56

Significance of Mean Difference in Issues in MF Investment based on Annual Saving – PostHoc

Dependent Variable	(I) Annual Saving	(J) Annual Saving	Mean Difference (I-J)	Sig.
Complexity	Less than 50,000	50,001 - 1,00,000	-0.76617	0.886
		1,00,001 - 2,00,000	0.2037	1
		2,00,001 - 3,00,000	-0.44963	0.998
		Above 3,00,000	-1.74048	0.511
	50,001 - 1,00,000	1,00,001 - 2,00,000	0.96987	0.853
		2,00,001 - 3,00,000	0.31654	0.999
		Above 3,00,000	-0.97431	0.889
	1,00,001 - 2,00,000	2,00,001 - 3,00,000	-0.65333	0.993
		Above 3,00,000	-1.94418	0.494
	2,00,001 - 3,00,000	Above 3,00,000	-1.29085	0.923
Non Performance	Less than 50,000	50,001 - 1,00,000	-0.63554	0.166
		1,00,001 - 2,00,000	-0.67011	0.304
		2,00,001 - 3,00,000	0.15186	0.998
		Above 3,00,000	-0.82699	0.187
	50,001 - 1,00,000	1,00,001 - 2,00,000	-0.03457	1
		2,00,001 - 3,00,000	0.7874	0.463
		Above 3,00,000	-0.19145	0.985
	1,00,001 - 2,00,000	2,00,001 - 3,00,000	0.82197	0.504
		Above 3,00,000	-0.15688	0.996
	2,00,001 - 3,00,000	Above 3,00,000	-0.97885	0.363
Management Issues	Less than 50,000	50,001 - 1,00,000	-1.01498	0.564
		1,00,001 - 2,00,000	0.87176	0.832
		2,00,001 - 3,00,000	-1.91141	0.471
		Above 3,00,000	-1.85536	0.242
	50,001 - 1,00,000	1,00,001 - 2,00,000	1.88674	0.122
		2,00,001 - 3,00,000	-0.89643	0.934
		Above 3,00,000	-0.84038	0.869
	1,00,001 - 2,00,000	2,00,001 - 3,00,000	-2.78318	0.161
		Above 3,00,000	-2.72712*	0.049
	2,00,001 - 3,00,000	Above 3,00,000	0.05605	1

Source: Primary Data **Significant at 0.05 level.*

The Post Hoc analysis reveals the details regarding the significance of means difference between each component of issues in mutual fund investment to each pair of annual savings. While comparing between respondents of different saving s group with respect to core issues in mutual fund investments, the p value shows significant difference in the case of respondents having annual savings Rs.100001-2 lakh, in the case of management issues.

4.3.3c Issues in Mutual Fund Investment and Source of Information

Table 4.57

Means and Standard Deviations and F value between Issues in Mutual Fund Investment and Source of Information

Complexity	Advertisement	64	25.75	7.42	3.095	.046
	Data & Information	171	25.54	7.07		
	Advice & Recommendation	237	23.99	6.96		
Non Performance	Advertisement	64	9.98	2.57	3.276	.039
	Data & Information	171	9.32	2.58		
	Advice & Recommendation	237	9.11	2.30		
Management Issues	Advertisement	64	22.39	5.14	3.509	.031
	Data & Information	171	21.78	5.94		
	Advice & Recommendation	237	20.57	5.93		

Source: Primary Data Significant at 0.05 level.

To verify whether the mean core of complexity, non performance, and management issues significantly differ with the source of information, the following hypothesis were formulated

Ho : There is no significant difference among investors depending on different sources of information for various issues in mutual fund investments.

Ha : There is significant difference among investors depending on different sources of information for various issues in mutual fund investments.

To test the above hypothesis, one way ANOVA or F test was used and the result is exhibited in table (4.57). From the table all the p values were found to be less than 0.05, so Ho was rejected and concludes that major issues faced by the investors like complexity, non-performance and management issues differ significantly on the basis of information used.

Since the ANOVA is found to be significant Tukey's multiple comparison tests was conducted to identify which group of investors have significant difference

Table 4.58

Significance of Mean Difference in Issues in MF Investment based on Source of Information – Post Hoc

Dependent Variable	I	J	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Complexity	Advertisement	Data & Information	.20614	1.03514	.978	-2.2277	2.6399
		Advice & Recommendation	1.76266	.99511	.180	-.5770	4.1023
		Advice & Recommendation	1.55652	.70878	.073	-.1099	3.2230
Non Performance	Advertisement	Data & Information	.66859	.35742	.148	-.1718	1.5090
		Advice & Recommendation	.87889*	.34360	.029	.0710	1.6868
		Advice & Recommendation	.21030	.24474	.666	-.3651	.7857
Management Issues	Advertisement	Data & Information	.61285	.85554	.754	-1.3987	2.6244
		Advice & Recommendation	1.81679	.82246	.071	-.1170	3.7505
		Advice & Recommendation	1.20394	.58580	.100	-.1734	2.5813

Source: Primary Data * *Significant at 0.05 level.*

The Post Hoc analysis reveals the details regarding the significance of means difference between each component of issues in mutual fund investment to each source of information. While comparing between responses of investors on sources of information with respect to core issues in mutual fund investments, the p value shows significant difference in the case of respondents of advertisement to advice & recommendation in the case of non performance.

4.3.4 Factors that Influence the Investment in Mutual Fund

The study has made an attempt to understand the financial behaviour of mutual fund investors with respect to mutual funds and the factors determining their investment decisions and preferences.

4.3.4a Factor analysis - Factors that influence the investment in mutual fund

The researcher used the factor analysis for identifying the underlying variables. To identify the factors that influence the investment in mutual funds, the respondents were asked to rate the importance of the specified variables on a 7 point scale ranging from Strongly Agree (5) to Strongly Disagree (1).

The correlation matrix showed sufficient items to justify the factorability of data. The KMO and Bartlett's test of sphericity produces the Kaiser-Meyer-Olkin measure of sampling adequacy and Bartlett's test. KMO test revealed .933 of KMO sampling adequacy (Table 4.59) which is greater than 0.6 and Barlett's Test of Sphericty (BTS) value is found significant, ($p<.000$)which meant that data was appropriate for EFA.

Table 4.59

Factors that influences the Mutual Fund Investment - KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.933
Bartlett's Test of Sphericity	Approx. Chi-Square	5733.058
	df	351
	Sig.	0.000

Source: Primary Data

Those items having their communalities below 0.4 and Cronbach's alpha below 0.6 were removed from the final questionnaire resulting in 27 statements for factors that influence the mutual fund investments. The screen test was used for selecting the accurate number of factors. The data were analysed using principal component analysis, with the rotation method; vaimax with Kaisan normalization. Then the 27 identified variables were classified under the appropriate group as *Fund, Investor, AMC/ Sponsor related factors* based on the factor loading.

Table 4.60

Factors that influences the Mutual Fund Investment - Factor loadings after Varimax Rotation

Variables	Statements	Factor Loading		
		F1	F2	F3
Fund related	Withdrawal facilities (SWP, Partial)	0.519		
	Products with tax benefits	0.448		
	Nature of fund (open & close ended fund)	0.614		
	Past record of AMC	0.422		
	Relative size of mutual fund companies (AUM)	0.606		
	Investment objectives	0.551		
	Service from distribution channels	0.645		
	Disclosure of risk factors	0.613		
	Investment options within a scheme	0.577		
	Fund size	0.661		
	Fund age	0.680		
	Lock in period	0.612		
	Innovativeness of the scheme	0.599		
	AMC has well developed network	0.576		
	Experience of fund management team	0.557		
Investor related	Scheme Performance and track record of the fund		0.696	
	Fund managers reputation and tenure		0.545	
	Systematic way of investing (SIP, STP)		0.700	
	Better information accessibility		0.718	
	Funds rated by rating entity		0.561	
AMC/ Sponsor related	Management fees & Expense ratio			0.441
	Grievance redressed was not effective			0.631
	Minimal follow up with brokers and companies			0.683
	Reputation of fund sponsor			0.543
	AMC has efficient research department			0.488
	Minimal initial investment			0.624
	Variety of schemes by an AMC			0.510
	Cronbach's alpha	.915	.736	.790

Source: Primary Data

The Cronbach's α value for the different factors that influence the purchase of mutual fund ranged from 0.736 to 0.915 indicating that the scale was internally consistent and reliable. After identifying the variables and classifying the statements under each factor using EFA the next stage was to confirm the factor structure. Since the data being opinion data, measured under Likert scale, Structural Equation Model (SEM) using AMOS 18.0 was used to perform the Confirmatory Factor Analysis

(CFA). The measurement model indicated an acceptable fit of the data and confirms to the three factor structure of in selecting the mutual funds for investment.

Table 4.61

The Model Fit Indices - Factors that influences the Mutual Fund Investment

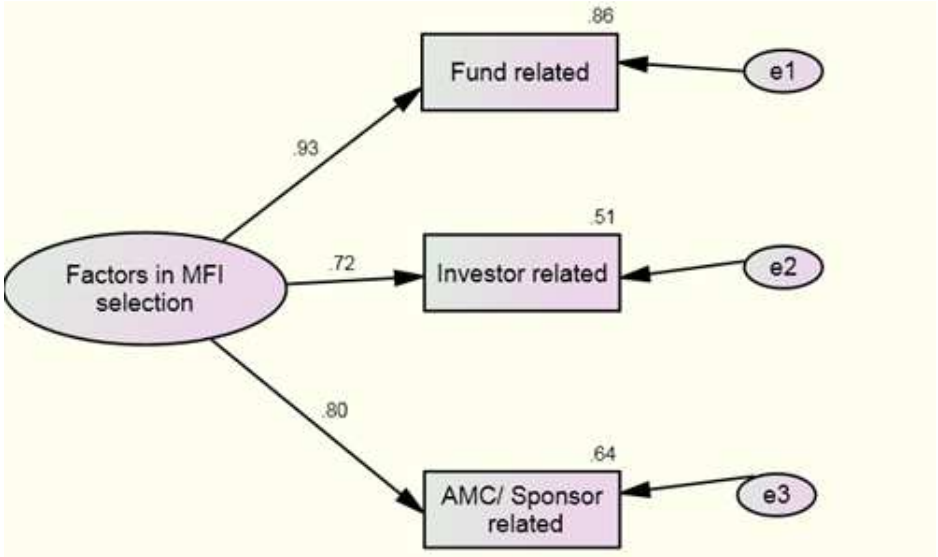
	Normed χ^2	GFI	AGFI	NFI	TLI	CFI	RMR	RMSEA
Recommended	<3	>0.90	>0.90	>0.90	>0.90	>0.90	<1	<0.5
	0	1.000	1.000	1.000	1.000	1.000	0	0

Source: Primary Data

For the analysis an input model was developed by using AMOS-18 graphics. The rectangle represents observed variables- Fund related, Investor related and AMC/ Sponsor related; oval drawn in the diagram represents unobserved variable- Factors considered for in mutual fund investment. The straight headed arrow represents the regression coefficients of the observed variables. The small circles with arrows pointing from the circles to the observed variables represent errors unique factors, which are also known as, squared multiple correlation of the standard error. The value above each rectangular box represents the R-Squared value of the observed variables.

Fig: 4.2

The Regression Coefficients showing Factors in Mutual Fund Investment



Source: Primary Data

The regression coefficient obtained in the CFA analysis is given in the following table

Table 4.62

The Regression Coefficients showing Factors in Mutual Fund Investment

Dependent Variable	Independent Variable	Regression Coefficient
Factors in Mutual Fund Investment	Fund Related Factors	.93
	Investor Related Factors	.72
	AMC – Sponsor Related Factors	.80

Source: Primary Data

From the table (4.62) fund related factor is the most important factor in mutual fund selection with regression weight 0.93 followed by AMC – Sponsor and Investor related factors with regression weight 0.80 and 0.72 respectively. The regression equation for issues of mutual fund investment is

= 0.93 Fund related +.80 AMC/ Sponsor related +.72 Investor related

From the above equation one can conclude that one unit increase in fund related factors results in increase in MF investments by 0.93 units provided the other two variables remains constant. The R^2 value indicates that this change occurs in 86% cases.

4.3.4b Demographic Variables and Factors Influencing the Purchase of Mutual Fund:

Table 4.63

Mean & SD – Gender and Factors Influencing the Purchase of Mutual Fund Investment

Group Statistics					
Influencing Factors	**Gender**	**N**	**Mean**	**Std. Deviation**	**Std. Error Mean**
Fund related	Male	347	75.2565	15.05521	.80821
	Female	125	72.5360	16.73635	1.49695
Investor related	Male	347	26.7464	4.93474	.26491
	Female	125	26.5120	5.92101	.52959
AMC/ Sponsor related	Male	347	32.9798	6.75262	.36250
	Female	125	32.1840	8.22504	.73567

Source: Primary Data

Among the factors influencing purchase of mutual funds, the mean is highest for fund related factors for both the genders stating that fund related factor is the most influencing factor among the investors.

H_0 : *There is no gender wise difference in factors influencing the purchase of mutual fund (Fund, Investor, AMC-Sponsor)*

Ha : *There is gender wise difference in factors influencing the purchase of mutual fund (Fund, Investor, AMC-Sponsor)*

Table 4.64

Z – test – Gender and Factors Influencing the Purchase of Mutual Fund Investment

Influencing Factors	Gender	N	Mean	Std. Deviation	CV	Z	P value
Fund related	Male	347	75.26	15.06	20.01	1.681	0.093
	Female	125	72.54	16.74	23.07		
Investor related	Male	347	26.75	4.93	18.45	0.431	0.667
	Female	125	26.51	5.92	22.33		
AMC/ Sponsor related	Male	347	32.98	6.75	20.48	1.064	0.288
	Female	125	32.18	8.23	25.56		

Source: Primary Data *Significant at 0.05 level*

From the table the p values were found to be greater than 0.05 for factors influencing purchase of mutual fund, hence H_0 is accepted stating that there is no gender wise difference for factors influencing purchase of mutual funds.

Table 4.65

Mean & SD – Factors Influencing Purchase of Mutual Fund with regard to Age

Age		Fund related	Investor related	AMC/ Sponsor related
Upto 30 years	Mean	73.8912	26.7551	32.4286
	Std. Deviation	16.03811	5.10787	7.67579
	N	147	147	147
31-45	Mean	73.1100	26.3636	32.0191
	Std. Deviation	15.43573	5.09259	6.44426
	N	209	209	209
46-60	Mean	77.0824	26.9529	34.7176
	Std. Deviation	15.37485	5.81236	7.49700
	N	85	85	85
Above 60 years	Mean	80.2258	27.7742	34.0968
	Std. Deviation	12.68519	4.73082	7.63917
	N	31	31	31
Total	Mean	74.5360	26.6843	32.7691
	Std. Deviation	15.54648	5.20859	7.17152
	N	472	472	472

Source: Primary Data

From the table 4.65 it is evident that as age increases fund knowledge also increases. The mean value is highest for investors above 60 years followed by 46 to 60.

H_0 : There is no age wise difference among investors in the factors influencing purchase of mutual fund (Fund, Investor, AMC-Sponsor)

Ha : There is age wise difference among investors in the factors influencing purchase of mutual fund (Fund, Investor, AMC-Sponsor)

Table 4.66

Oneway ANOVA - Factors Influencing Purchase of Mutual Fund with regard to Age

Influencing Factors		Sum of Squares	df	Mean Square	F	Sig.
Fund related	Between Groups	2040.817	3	680.272	2.848	.037
	Within Groups	111796.570	468	238.882		
	Total	113837.388	471			
Investor related	Between Groups	65.186	3	21.729	0.800	.494
	Within Groups	12712.778	468	27.164		
	Total	12777.964	471			
AMC/ Sponsor related	Between Groups	511.972	3	170.657	3.368	.018
	Within Groups	23711.857	468	50.666		
	Total	24223.828	471			

Source: Primary Data Significant at 0.05 level.

From the table the p values were found to be lesser than 0.05, for age in the case of fund related and AMC-Sponsor related factors and hence H_0 is rejected stating that there is relationship between age and factors influencing purchase of mutual fund. Since the ANOVA is found to be significant Tukey's multiple comparison tests was conducted to identify which group of investors have significant difference.

Table 4.67

Significance of Mean Difference in Fund Selection Factors based on Age – Post Hoc

Dependent Variable	(I) Age	(J) Age	Mean Difference (I-J)	Sig.
Fund related	Upto 30 years	31-45	0.78111	0.966
		46-60	-3.1912	0.429
		Above 60 years	-6.33465	0.163
	31-45	46-60	-3.97231	0.19
		Above 60 years	-7.11576	0.08
	46-60	Above 60 years	-3.14345	0.767
Investor related	Upto 30 years	31-45	0.39147	0.898
		46-60	-0.19784	0.992
		Above 60 years	-1.01909	0.756
	31-45	46-60	-0.5893	0.816
		Above 60 years	-1.41056	0.496
	46-60	Above 60 years	-0.82125	0.876
AMC/ Sponsor related	Upto 30 years	31-45	0.40943	0.951
		46-60	-2.28908	0.086
		Above 60 years	-1.6682	0.636
	31-45	46-60	-2.69851*	0.018
		Above 60 years	-2.07764	0.428
	46-60	Above 60 years	0.62087	0.976

Source: Primary Data **Significant at 0.05 level.*

The Post Hoc analysis reveals the details regarding the significance of means difference between each pair of age group with respect to each component of factors influencing purchase of mutual fund. The result shows that in the case of AMC-Sponsor related, the respondents in the age group 31- 45 significantly differ with the respondents in the age group 46 - 60.

Table 4.68

Means - Factors Influencing Purchase of Mutual Fund with regard to Area of Residence

Area of Residence		Fund related	Investor related	AMC/ Sponsor related
Panchayath	Mean	73.0925	25.9422	32.0694
	Std. Deviation	17.95934	5.95986	8.02365
	N	173	173	173
Municipality	Mean	74.0497	26.4783	32.9255
	Std. Deviation	13.99679	4.50567	6.61490
	N	161	161	161
Corporation	Mean	76.9130	27.8551	33.4638
	Std. Deviation	13.73284	4.77914	6.61469
	N	138	138	138
Total	Mean	74.5360	26.6843	32.7691
	Std. Deviation	15.54648	5.20859	7.17152
	N	472	472	472

Source: Primary Data

The mean and standard deviation is highest in the case of corporation for all the three factors

Ho : There is no significant difference between Area of Residence and Factors influencing purchase of mutual fund (Fund, Investor, AMC-Sponsor)

Ha : There is significant relationship between Area of Residence and Factors influencing purchase of mutual fund (Fund, Investor, AMC-Sponsor)

Table 4.69

Oneway ANOVA - Factors Influencing Purchase of Mutual Fund with regard to Area of Residence

Influencing Factors		Sum of Squares	df	Mean Square	F	Sig.
Fund related	Between Groups	1178.308	2	589.154	2.453	.087
	Within Groups	112659.079	469	240.211		
	Total	113837.388	471			
Investor related	Between Groups	291.267	2	145.633	5.470	.004
	Within Groups	12486.697	469	26.624		
	Total	12777.964	471			
AMC/ Sponsor related	Between Groups	155.236	2	77.618	1.512	.221
	Within Groups	24068.592	469	51.319		
	Total	24223.828	471			

Source: Primary Data Significant at 0.05 level.

From the table (4.69) the p values were found to be lesser than 0.05, for area of residence in the case of factors influencing purchase of mutual fund – *Investor related*, hence H_0 is rejected stating that there is relationship between area of residence and factors influencing purchase of mutual fund. Since the ANOVA is found to be significant Tukey's multiple comparison test was conducted to identify which group of investors have significant difference.

Table 4.70

Significance of Mean Difference in Fund Selection Factors based on Area of Residence - Post Hoc

Dependent Variable	(I) Area of residence	(J) Area of residence	Mean Difference (I-J)	Sig.
Fund related	Panchayath	Municipality	-0.9572	0.839
		Corporation	-3.82056	0.079
	Municipality	Corporation	-2.86335	0.25
Investor related	Panchayath	Municipality	-0.53606	0.61
		Corporation	-1.91288*	0.004
	Municipality	Corporation	-1.37681	0.057
AMC/ Sponsor related	Panchayath	Municipality	-0.8561	0.52
		Corporation	-1.3944	0.204
	Municipality	Corporation	-0.5383	0.794

Source: Primary Data **Significant at 0.05 level.*

The Post Hoc analysis reveals the details regarding the significance of means difference between area of residence to each component of factors influencing purchase of mutual fund. The result shows that in the case of investor related factors, the respondents residing in the panchayath significantly differ with the respondents residing in the corporation area.

Table 4.71

Means - Factors Influencing Purchase of Mutual Fund with regard to Zone

Zone		Fund related	Investor related	AMC/ Sponsor related
South	Mean	72.6410	26.8034	32.1197
	Std. Deviation	15.63730	4.80345	7.23159
	N	117	117	117
Central	Mean	76.3910	27.1654	33.0564
	Std. Deviation	15.62428	4.97189	6.92389
	N	266	266	266
North	Mean	71.4831	25.0899	32.7640
	Std. Deviation	14.54469	6.08769	7.82046
	N	89	89	89
Total	Mean	74.5360	26.6843	32.7691
	Std. Deviation	15.54648	5.20859	7.17152
	N	472	472	472

Source: Primary Data

With respect to factors influencing the purchase of mutual fund with regard to zone, the total mean score and the variability is highest for fund related factors. When comparing between different zones, the mean and standard deviation is the highest for the central zone.

Ho : There is no zone wise difference in the factors influencing purchase of mutual fund (Fund, Investor, AMC-Sponsor)

Ha : There is zone wise difference in the factors influencing purchase of mutual fund (Fund, Investor, AMC-Sponsor)

Table 4.72

Oneway ANOVA - Factors Influencing Purchase of Mutual Fund with regard to Zone

Influencing Factors		Sum of Squares	df	Mean Square	F	Sig.
Fund related	Between Groups	2164.902	2	1082.451	4.546	.011
	Within Groups	111672.486	469	238.108		
	Total	113837.388	471			
Investor related	Between Groups	289.483	2	144.741	5.436	.005
	Within Groups	12488.481	469	26.628		
	Total	12777.964	471			
AMC/ Sponsor related	Between Groups	71.305	2	35.652	.692	.501
	Within Groups	24152.524	469	51.498		
	Total	24223.828	471			

Source: Primary Data Significant at 0.05 level.

From the table (4.72) the p values were found to be lesser than 0.05, for Zone in the case of factors influencing purchase of mutual fund – fund related and investor related, hence H_0 is rejected stating that there is relationship between zone and factors influencing purchase of mutual fund. Since the ANOVA is found to be significant Tukey's multiple comparison tests were conducted to identify which group of investors have significant difference.

Table 4.73

Significance of Mean Difference in Fund Selection Factors based on Zone - Post Hoc

Dependent Variable	(I) Zone	(J) Zone	Mean Difference (I-J)	Sig.
Fund related	South	Central	-3.74995	0.074
		North	1.15788	0.855
	Central	North	4.90783*	0.026
Investor related	South	Central	-0.36199	0.802
		North	1.71353*	0.049
	Central	North	2.07553*	0.003
AMC/ Sponsor related	South	Central	-0.93673	0.468
		North	-0.64439	0.799
	Central	North	0.29235	0.941

Source: Primary Data **Significant at 0.05 level.*

The Post Hoc analysis reveals the details regarding the significance of means difference between each pair of zone with respect to each component factors influencing purchase of mutual fund. The result shows that in the case of fund related factors respondents of central zone significantly differs with northern zone and with respect to investor related factors the respondents in the south zone and central significantly differ with the respondents in the north zone.

Table 4.74

Mean & SD – Occupation and Factors influencing the purchase of Mutual Fund Investment

Influencing Factors	Occupation Type	N	Mean	Std. Deviation	Std. Error Mean
Fund related	Non salaried	252	74.9722	13.32983	.83970
	Salaried	220	74.0364	17.76762	1.19789
Investor related	Non salaried	252	26.2937	5.00528	.31530
	Salaried	220	27.1318	5.40893	.36467
AMC/ Sponsor related	Non salaried	252	33.2738	6.16833	.38857
	Salaried	220	32.1909	8.14705	.54927

Source: Primary Data

The mean score and the variability are highest for fund related factors in the case of occupation. With regard to type of occupation and factors influencing the purchase of mutual fund the variability is high among the salaried class when compared to non salaried.

Ho: There is no occupation wise difference in the factors influencing purchase of mutual fund (Fund, Investor, AMC- Sponsor).

Ha: There is occupation wise difference in the factors influencing purchase of mutual fund (Fund, Investor, AMC- Sponsor).

Table 4.75

Z-Test -Occupation and Factors Influencing the Purchase of Mutual Fund Investment

Influencing Factors	Occupation Type	N	Mean	Std. Deviation	CV	Z	P value
Fund related	Non salaried	252	74.97	13.33	17.78	0.652	0.515
	Salaried	220	74.04	17.77	24.00		
Investor related	Non salaried	252	26.29	5.01	19.04	-1.748	0.081
	Salaried	220	27.13	5.41	19.94		
AMC/ Sponsor related	Non salaried	252	33.27	6.17	18.54	1.639	0.102
	Salaried	220	32.19	8.15	25.31		

Source: Primary Data *Significant at 0.05 level*

From the table the p values were found to be greater than 0.05, hence Ho is accepted stating that there is no significant difference between type of occupation and factors influencing purchase of mutual funds.

Table 4.76

Means - Factors Influencing Purchase of Mutual Fund with regard to Annual Savings

Annual Savings		Fund related	Investor related	AMC/ Sponsor related
Less than 50,000	Mean	73.0615	26.4154	32.0385
	Std. Deviation	18.51660	5.70432	7.95862
	N	130	130	130
50,001 - 1,00,000	Mean	75.4795	26.9474	32.8655
	Std. Deviation	13.52398	4.39286	6.10685
	N	171	171	171
1,00,001 - 2,00,000	Mean	72.4684	25.9367	32.5949
	Std. Deviation	16.80952	6.10872	8.06944
	N	79	79	79
2,00,001 - 3,00,000	Mean	75.1613	26.6129	33.6774
	Std. Deviation	13.08204	4.60925	5.35031
	N	31	31	31
Above 3,00,000	Mean	77.3934	27.5246	33.8197
	Std. Deviation	12.94769	5.23325	7.75566
	N	61	61	61
Total	Mean	74.5360	26.6843	32.7691
	Std. Deviation	15.54648	5.20859	7.17152
	N	472	472	472

Source: Primary Data

Among the factors influencing the purchase of mutual fund, the respondents having annual income above Rs. 3 lakh is having the highest mean stating that higher income investors are largely influenced by the factors influencing the purchase of mutual funds.

Ho : There is no significant relationship between annual saving and factors influencing purchase of mutual fund (Fund, Investor, AMC- Sponsor).

Ha : There is significant relationship between annual saving and factors influencing purchase of mutual fund (Fund, Investor, AMC- Sponsor).

Table 4.77

Oneway ANOVA - Factors Influencing Purchase of Mutual Fund with regard to Annual Saving

Influencing Factors		Sum of Squares	df	Mean Square	F	Sig.
Fund related	Between Groups	1282.780	4	320.695	1.331	.258
	Within Groups	112554.608	467	241.016		
	Total	113837.388	471			
Investor related	Between Groups	108.617	4	27.154	1.001	.407
	Within Groups	12669.347	467	27.129		
	Total	12777.964	471			
AMC/ Sponsor related	Between Groups	166.286	4	41.571	.807	.521
	Within Groups	24057.543	467	51.515		
	Total	24223.828	471			

Source: Primary Data Significant at 0.05 level.

From the table (4.77) the p values were found to be greater than 0.05, for annual saving in the case factors influencing purchase of mutual fund, hence H_0 is accepted stating that there is no significant relationship between annual savings and factors influencing purchase of mutual fund.

4.3.5 Investors Perception towards Mutual Fund Investment

The researcher tries to categorize the retail investor's perception towards mutual fund investments by identifying various perceptual factors and further analysis was done based on demographic factors so as to unveil some extremely valuable information to support financial decision making of mutual funds.

4.3.5a Factor analysis - Investors perception towards mutual fund investment

KMO test revealed .843 of KMO sampling adequacy (Table 4.78) which is greater than 0.6 and Barlett's Test of Sphericty (BTS) value is found significant, ($p<.000$) which meant that data was appropriate for EFA.

Table 4.78

Investor's perception towards mutual fund investment - KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.843
Bartlett's Test of Sphericity	Approx. Chi-Square	3118.990
	df	351
	Sig.	<0.001

Source: Primary Data

Those items having their communalities below 0.4 and Cronbach's alpha below 0.6 were removed from the final questionnaire resulting in 22 statements for perceptual factors of mutual fund investors. The screen test was used for selecting the accurate number of factors. The data were analysed using principal component analysis, with the rotation method; vaimax with Kaisan normalization. Then the 22 identified variables were classified under four heads as *Knowledge & Awareness, Regulation & Transparency, Convenience & Flexibility and Return & Affordability* based on the factor loading.

The result of the final solution is exhibited with 22 statements to identify the various issues related to mutual fund investments.

Table 4.79

Investor's perception towards mutual fund investment - Factor loadings after Varimax Rotation

Variables	Statements	Factor Loading			
		F1	F2	F3	F4
Knowledge & Awareness	Mutual funds provide the service of experienced and skilled professionals in fund management	0.544			
	Mutual fund investment helps in diversification and reduction of risk	0.556			
	Fund managers keep track of investments and changes in market conditions	0.539			
	Systematic ways of investing (SIP, STP) are enormously useful in making a disciplined investment and average the cost of investment	0.563			
	Mutual funds provide a shield against risk loss than to direct investment in shares	0.623			
	Good structural requirements of mutual fund ensure the investors protection	0.613			
	Mutual fund units involve investment risk including the possible loss of principal amount	0.624			
	Past performance of the scheme does not guarantee future performance of scheme	0.643			
Regulation & Transparency	Public sector mutual fund players are more secure than private sector players		0.674		
	Loads and taxes reduces the investors return that is earned by the scheme		0.640		
	Mutual funds with large corpus perform better		0.668		
	Investment in mutual funds by AMC's are based on adequate research and after ensuring prudent process		0.413		
	Disclosure norms prescribed by SEBI and AMEI are significant factors in investor services		0.473		
	There is no credit rating for mutual funds, and the rating given to the funds by rating agency has no legal sanctity		0.467		
Convenience & Flexibility	Mutual fund is an ideal option for individual investors who do not have the time, knowledge & expertise in the stock market			0.441	
	Reputation of AMC, is the important quality I look forward before investing in a fund			0.631	
	Flexibility in investment pattern attracts me			0.683	
	The private sector mutual funds have benefitted the investors by providing them more options and better services			0.543	
	Day to day disclosure of NAV by the funds is really beneficial for me			0.488	
	SEBI and other controlling bodies are effective in regulating the mutual fund market			0.624	
Return & Affordability	Mutual fund have failed to provide adequate return in investments to me				0.701
	The mutual funds are quite wrongly promoted as an alternative to equity investing and create very high expectations in the minds of the investors				0.748
		.799	.669	.734	.648

Source: Primary Data

The Cronbach's α value for the different perception factors of investors ranged from 0.648 to 0.799 indicating that the scale was internally consistent and reliable. After identifying the variables and classifying the statements under each variable using EFA, the appropriate regression model (SEM) was used for the analysis. Accordingly CFA was performed. From the table (model fit 4.80) all the fit were found to be within the limit, indicating the suitability of CFA.

Table 4.80

Model Fit Indices for CFA

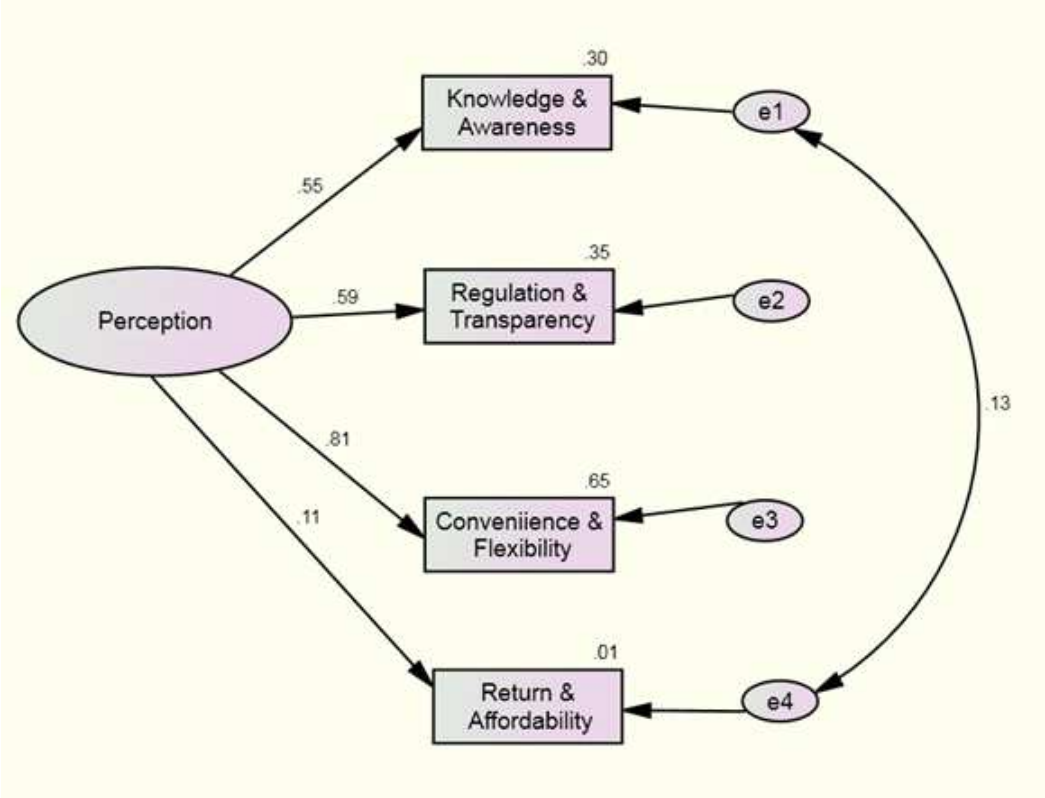
	χ^2	DF	P	Normed χ^2	GFI	AGFI	NFI	TLI	CFI	RMR	RMSEA
Recommended			>0.05	<3	>0.90	>0.90	>0.90	>0.90	>0.90	<1	<0.5
Regression	1.013	1	.314	1.000	.999	.989	.996	1.00	1.00	.074	.005

Source: Primary Data

Using AMOS-18 graphics an input model was developed. The rectangle represents observed variables- Knowledge & Awareness, Regulation & Transparency, Convenience & Flexibility and Return and Affordability; oval drawn in the diagram represents unobserved variable- Perception of mutual fund investors. The curved double headed arrows represent correlations or co-variances among the unobserved variables and the straight headed arrow represents the regression coefficients of the observed variables. The small circles with arrows pointing from the circles to the observed variables represent errors unique factors, which are also known as squared multiple correlation of the standard error. The value above each rectangular box represents the R-Squared value of the observed variables.

Fig: 4.3

The Regression Coefficients showing Perception of Investors



Source: Primary Data

The regression coefficient obtained in the CFA analysis is given in the following table.

Table 4.81

The Regression Coefficients showing Perception of Investors

Dependent Variable	Independent Variable	Regression Coefficient
Perception	Knowledge& Awareness	.547
	Regulation & Transparency	.592
	Convenience & Flexibility	.809
	Return & Affordability	.111

With respect to perception of investors towards mutual fund investment, convenience and flexibility is the most important factor that investor perceive with regression weight 0.809 followed by regulation and transparency, knowledge and awareness and return and affordability with regression weights 0.592, 0.547 and 0.111 respectively. The regression equation for perception of mutual fund investors

= 0.809 Convenience and Flexibility + 0.592 Regulation and Transparency + 0.547 Knowledge and Awareness + 0.111 Return and Affordability

From the above equation one can conclude that of the four perceptual factors, *convenience and flexibility* results in the increase of mutual fund investments by 0.81 units provided the other three variables remains constant. i.e. One unit increase in *convenience and flexibility* results in increase of mutual fund investments by 0.81 units provided the other three variables remains constant. The R^2 value indicates that this change occurs in 65% cases.

4.3.5b Demographic Variables and Perception of Mutual Fund Investors:

Table 4.82

Means – Perception of Mutual Fund Investors with regard to Gender

Perceptual Factors	Gender	N	Mean	Std. Deviation	Std. Error Mean
Knowledge & Awareness	Male	347	28.6282	5.44256	.29217
	Female	125	27.9280	5.94623	.53185
Regulation & Transparency	Male	347	19.4467	3.99630	.21453
	Female	125	19.5120	3.80495	.34033
Convenience & Flexibility	Male	347	21.9539	4.04572	.21719
	Female	125	21.2080	4.98918	.44625
Return & Affordability	Male	347	5.2882	1.64227	.08816
	Female	125	5.3520	1.78369	.15954

Source: Primary Data

Among the gender, with regard to the perceptual factor – knowledge and awareness is high among the males followed by convenience and flexibility. The variability is high among the female class except for the perceptual factor regulation & transparency.

Table 4.83

Z test – Perception of Mutual Fund Investors with regard to Gender

Perceptual Factors	Gender	N	Mean	Std. Deviation	Z	P value
Knowledge & Awareness	Male	347	28.6282	5.44256	1.203	.230
	Female	125	27.9280	5.94623		
Regulation & Transparency	Male	347	19.4467	3.99630	-.159	.874
	Female	125	19.5120	3.80495		
Convenience& Flexibility	Male	347	21.9539	4.04572	1.657	.098
	Female	125	21.2080	4.98918		
Return & Affordability	Male	347	5.2882	1.64227	-.364	.716
	Female	125	5.3520	1.78369		

Source: Primary Data *Significant at 0.05 level*

From the table (4.83) the p values were found to be greater than 0.05, for gender and hence H_0 is accepted stating that there is no significant relationship between gender and perceptual factors towards mutual fund investment.

Table 4.84

Means – Perception of Mutual Fund Investors with regard to Age

Age		Knowledge & Awareness	Regulation & Transparency	Convenience & Flexibility	Return & Affordability
Upto 30 years	Mean	27.2041	19.5646	21.2925	5.2109
	Std. Deviation	6.59071	4.11490	4.73866	1.62275
	N	147	147	147	147
31-45	Mean	28.9187	19.1483	21.9809	5.3493
	Std. Deviation	5.00270	3.52628	4.17981	1.52148
	N	209	209	209	209
46-60	Mean	28.8588	19.4706	21.5412	5.4706
	Std. Deviation	5.12034	4.81710	4.12759	2.22319
	N	85	85	85	85
Above 60 years	Mean	29.9677	21.0968	23.0323	5.0000
	Std. Deviation	4.35495	2.63761	3.46875	1.15470
	N	31	31	31	31
Total	Mean	28.4428	19.4640	21.7564	5.3051
	Std. Deviation	5.58251	3.94263	4.32270	1.67919
	N	472	472	472	472

Source: Primary Data

With regard to age, the overall mean is highest for knowledge and awareness followed by convenience and flexibility. Higher the age, higher is the perception regarding mutual fund investors.

H_0: There is no significant difference in perceptual factors with respect to different age groups.

Ha : There is significant difference in perceptual factors with respect to different age groups.

Table 4.85

Oneway ANOVA - Perception of Mutual Fund Investors with regard to Age

Perceptual Factors		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
Knowledge & Awareness	Between Groups	359.687	3	119.896	3.919	.009
	Within Groups	14318.768	468	30.596		
	Total	14678.456	471			
Regulation & Transparency	Between Groups	104.964	3	34.988	2.269	.080
	Within Groups	7216.424	468	15.420		
	Total	7321.388	471			
Convenience & Flexibility	Between Groups	96.562	3	32.187	1.731	.160
	Within Groups	8704.419	468	18.599		
	Total	8800.981	471			
Return & Affordability	Between Groups	6.926	3	2.309	.818	.484
	Within Groups	1321.141	468	2.823		
	Total	1328.068	471			

Source: Primary Data Significant at 0.05 level

From the table the p values were found to be lesser than 0.05 for age in the case of perceptual factors of mutual fund investors, hence H_0 is rejected stating that there is relationship among age and perceptual factors of mutual fund investors. Since the ANOVA is found to be significant, Tukeys multiple comparison test was done to identify which group of investors have significant difference.

Table 4.86

Significance of Mean Difference in Perception Factors based on Age - Post Hoc

Dependent Variable	(I) Age	(J) Age	Mean Difference (I-J)	Sig.
Knowledge & Awareness	Upto 30 years	31-45	-1.71458*	0.022
		46-60	-1.65474	0.126
		Above 60 years	-2.76366	0.057
	31-45	46-60	0.05984	1
		Above 60 years	-1.04908	0.758
	46-60	Above 60 years	-1.10892	0.775
Regulation & Transparency	Upto 30 years	31-45	0.4163	0.758
		46-60	0.09404	0.998
		Above 60 years	-1.53215	0.199
	31-45	46-60	-0.32226	0.92
		Above 60 years	-1.94845	0.05
	46-60	Above 60 years	-1.62619	0.199
Convenience& Flexibility	Upto 30 years	31-45	-0.68834	0.449
		46-60	-0.24866	0.975
		Above 60 years	-1.73974	0.174
	31-45	46-60	0.43968	0.858
		Above 60 years	-1.0514	0.585
	46-60	Above 60 years	-1.49108	0.353
Return & Affordability	Upto 30 years	31-45	-0.1384	0.87
		46-60	-0.2597	0.668
		Above 60 years	0.21088	0.921
	31-45	46-60	-0.12131	0.943
		Above 60 years	0.34928	0.702
	46-60	Above 60 years	0.47059	0.541

Source: Primary Data **Significant at 0.05 level.*

The Post Hoc Analysis reveals the details regarding the significance of means difference between each pair of age group with respect to perceptual factors of mutual fund investors. The result shows that in the case of knowledge and awareness, the respondents in the age group up to 30 years significantly differ with the respondents in the age group 31- 45.

Table 4.87

Means - Perception of Mutual Fund Investors with regard to Area of Residence

Area of Residence		Knowledge & Awareness	Regulation & Transparency	Convenience & Flexibility	Return & Affordability
Panchayath	Mean	27.8786	19.4277	21.4913	5.1618
	Std. Deviation	5.55441	4.11912	4.65135	1.73451
	N	173	173	173	173
Municipality	Mean	28.6149	19.6894	22.3354	5.5093
	Std. Deviation	5.27975	2.89663	3.45497	1.43665
	N	161	161	161	161
Corporation	Mean	28.9493	19.2464	21.4130	5.2464
	Std. Deviation	5.92942	4.71496	4.74723	1.85146
	N	138	138	138	138
Total	Mean	28.4428	19.4640	21.7564	5.3051
	Std. Deviation	5.58251	3.94263	4.32270	1.67919
	N	472	472	472	472

Source: Primary Data

Among the perceptual factors, with regard to area of residence, the overall mean value and standard deviation is highest for knowledge & awareness followed by convenience & flexibility.

Ho : There is no significant difference among area and perceptual factors towards mutual fund investment.

Ha : There is significant difference among area and perceptual factors towards mutual fund investment.

Table 4.88

Oneway ANOVA - Perception of Mutual Fund Investors with regard to Area of Residence

Perceptual Factors		Sum of Squares	df	Mean Square	F	Sig.
Knowledge & Awareness	Between Groups	95.235	2	47.618	1.531	.217
	Within Groups	14583.220	469	31.094		
	Total	14678.456	471			
Regulation & Transparency	Between Groups	14.946	2	7.473	.480	.619
	Within Groups	7306.442	469	15.579		
	Total	7321.388	471			
Convenience& Flexibility	Between Groups	82.399	2	41.200	2.216	.110
	Within Groups	8718.582	469	18.590		
	Total	8800.981	471			
Return & Affordability	Between Groups	10.740	2	5.370	1.912	.149
	Within Groups	1317.327	469	2.809		
	Total	1328.068	471			

Source: Primary Data Significant at 0.05 level

From the table (4.88) the p values were found to be greater than 0.05, for area of residence with respect to perceptual factors of mutual fund investors, hence H_0 is accepted, stating that there is no significant relationship among area of residence and perceptual factors.

Table 4.89

Means - Perception of Mutual Fund Investors with regard to Zone

Zone		Knowledge & Awareness	Regulation & Transparency	Convenience& Flexibility	Return & Affordability
South	Mean	29.0256	19.5043	22.1197	5.0427
	Std. Deviation	5.62240	3.84309	4.68152	1.77333
	N	117	117	117	117
Central	Mean	28.4812	19.4060	21.9211	5.3534
	Std. Deviation	5.88776	4.22577	4.29978	1.70768
	N	266	266	266	266
North	Mean	27.5618	19.5843	20.7865	5.5056
	Std. Deviation	4.41576	3.15079	3.77333	1.42321
	N	89	89	89	89
Total	Mean	28.4428	19.4640	21.7564	5.3051
	Std. Deviation	5.58251	3.94263	4.32270	1.67919
	N	472	472	472	472

Source: Primary Data

Among the perceptual factors of mutual fund investors with respect to zone, the mean score of perceptual factors is highest for south zone except return & affordability.

Ho : There is no significant difference among zone and perceptual factors towards mutual fund investment.

Ha : There is significant difference among zone and perceptual factors towards mutual fund investment.

Table 4.90

Oneway ANOVA - Perception of Mutual Fund Investors with regard to Zone

Perceptual Factors		Sum of Squares	df	Mean Square	F	Sig.
Knowledge & Awareness	Between Groups	109.216	2	54.608	1.758	.174
	Within Groups	14569.239	469	31.064		
	Total	14678.456	471			
Regulation & Transparency	Between Groups	2.371	2	1.186	.076	.927
	Within Groups	7319.016	469	15.606		
	Total	7321.388	471			
Convenience & Flexibility	Between Groups	106.370	2	53.185	2.869	.058
	Within Groups	8694.611	469	18.539		
	Total	8800.981	471			
Return & Affordability	Between Groups	12.252	2	6.126	2.184	.114
	Within Groups	1315.815	469	2.806		
	Total	1328.068	471			

Source: Primary Data Significant at 0.05 level

From the table (4.90) the p values were found to be greater than 0.05, for zone with respect to perceptual factors of mutual fund investors, hence H_0 is accepted stating that there is no significant relationship between zone and perceptual factors.

Table 4.91

Means - Perception of Mutual Fund Investors with regard to Occupation

Perceptual Factors	Occupation Type	N	Mean	Std. Deviation	Std. Error Mean
Knowledge & Awareness	Non salaried	252	28.4921	4.94712	.31164
	Salaried	220	28.3864	6.24250	.42087
Regulation & Transparency	Non salaried	252	19.6111	3.75966	.23684
	Salaried	220	19.2955	4.14453	.27942
Convenience& Flexibility	Non salaried	252	21.9048	3.95881	.24938
	Salaried	220	21.5864	4.70857	.31745
Return & Affordability	Non salaried	252	5.3571	1.68170	.10594
	Salaried	220	5.2455	1.67815	.11314

Source: Primary Data

Among occupation, the mean value of perceptual factors is highest for non salaried class of investors. The variation is also least for non salaried class except for the perceptual factor return & affordability.

Ho : There is no significant difference among occupation and perceptual factors towards mutual fund investment.

Ha : There is significant difference among occupation and perceptual factors towards mutual fund investment.

Table 4.92

Z-Test Perception of Mutual Fund Investors with regard to Occupation

Perceptual Factors	Occupation Type	N	Mean	Std. Deviation	CV	Z	P value
Knowledge & Awareness	Non salaried	252	28.49	4.95	17.36	0.205	0.838
	Salaried	220	28.39	6.24	21.99		
Regulation & Transparency	Non salaried	252	19.61	3.76	19.17	0.867	0.386
	Salaried	220	19.30	4.14	21.48		
Convenience& Flexibility	Non salaried	252	21.90	3.96	18.07	0.798	0.425
	Salaried	220	21.59	4.71	21.81		
Return & Affordability	Non salaried	252	5.36	1.68	31.39	0.720	0.472
	Salaried	220	5.25	1.68	31.99		

Source: Primary Data Significant at 0.05 level

From the table (4.92) the p values were found to be greater than 0.05, for occupation with respect to perceptual factors of mutual fund investors, hence H_0 is accepted stating that there is no relationship between occupation and perceptual factors.

Table 4.93

Means - Perception of Mutual Fund Investors with regard to Annual Saving

Annual Saving		Knowledge & Awareness	Regulation & Transparency	Convenience & Flexibility	Return & Affordability
Less than 50,000	Mean	27.1462	18.5846	20.9154	5.3308
	Std. Deviation	6.23706	4.59151	4.86728	1.81462
	N	130	130	130	130
50,001 - 1,00,000	Mean	28.4444	20.1170	21.6608	5.2573
	Std. Deviation	4.98481	3.48919	3.98551	1.43215
	N	171	171	171	171
1,00,001 - 2,00,000	Mean	28.2278	19.2532	22.4810	5.0759
	Std. Deviation	5.93544	3.27957	3.84928	1.78865
	N	79	79	79	79
2,00,001 - 3,00,000	Mean	30.0645	19.9677	23.2258	5.4194
	Std. Deviation	4.65428	3.30135	3.33376	1.36074
	N	31	31	31	31
Above 3,00,000	Mean	30.6557	19.5246	22.1311	5.6230
	Std. Deviation	4.89178	4.43699	4.73454	1.99302
	N	61	61	61	61
Total	Mean	28.4428	19.4640	21.7564	5.3051
	Std. Deviation	5.58251	3.94263	4.32270	1.67919
	N	472	472	472	472

Source: Primary Data

The mean value for the perceptual factors is highest for investors having higher savings.

Ho : There is no significant difference among annual saving and perceptual factors towards mutual fund investment.

Ha : There is significant difference among annual saving and perceptual factors towards mutual fund investment.

Table 4.94

Oneway ANOVA - Perception of Mutual Fund Investors with regard to Annual Saving

Perceptual Factors		Sum of Squares	df	Mean Square	F	Sig.
Knowledge & Awareness	Between Groups	602.470	4	150.618	4.997	.001
	Within Groups	14075.985	467	30.141		
	Total	14678.456	471			
Regulation & Transparency	Between Groups	185.040	4	46.260	3.027	.017
	Within Groups	7136.348	467	15.281		
	Total	7321.388	471			
Convenience & Flexibility	Between Groups	210.493	4	52.623	2.861	.023
	Within Groups	8590.488	467	18.395		
	Total	8800.981	471			
Return & Affordability	Between Groups	11.192	4	2.798	.992	.411
	Within Groups	1316.876	467	2.820		
	Total	1328.068	471			

Source: Primary Data *Significant at 0.05 level*

From the table the p values were found to be lesser than 0.05, for annual saving in the case of perceptual factors of mutual fund investors and hence Ho is rejected stating that there is relationship between annual saving and perceptual factors of mutual fund investors. Since the ANOVA is found to be significant Tukeys multiple comparison tests was conducted to identify which group of investors have significant difference.

Table 4.95

Significance of Mean Difference in Perception Factors based on Annual Saving - Post Hoc

Dependent Variable	(I) Annual Saving	(J) Annual Saving	Mean Difference (I-J)	Sig.
Knowledge & Awareness	Less than 50,000	50,001 - 1,00,000	-1.29829	0.252
		1,00,001 - 2,00,000	-1.08169	0.64
		2,00,001 - 3,00,000	-2.91836	0.062
		Above 3,00,000	-3.50958*	0
	50,001 - 1,00,000	1,00,001 - 2,00,000	0.2166	0.998
		2,00,001 - 3,00,000	-1.62007	0.555
		Above 3,00,000	-2.21129	0.055
	1,00,001 - 2,00,000	2,00,001 - 3,00,000	-1.83667	0.512
		Above 3,00,000	-2.42789	0.073
	2,00,001 - 3,00,000	Above 3,00,000	-0.59122	0.988
Regulation & Transparency	Less than 50,000	50,001 - 1,00,000	-1.53234*	0.007
		1,00,001 - 2,00,000	-0.66855	0.752
		2,00,001 - 3,00,000	-1.38313	0.392
		Above 3,00,000	-0.93997	0.531
	50,001 - 1,00,000	1,00,001 - 2,00,000	0.86379	0.483
		2,00,001 - 3,00,000	0.14922	1
		Above 3,00,000	0.59237	0.848
	1,00,001 - 2,00,000	2,00,001 - 3,00,000	-0.71458	0.91
		Above 3,00,000	-0.27143	0.994
	2,00,001 - 3,00,000	Above 3,00,000	0.44315	0.986
Convenience& Flexibility	Less than 50,000	50,001 - 1,00,000	-0.74543	0.567
		1,00,001 - 2,00,000	-1.56563	0.08
		2,00,001 - 3,00,000	-2.31042	0.056
		Above 3,00,000	-1.21576	0.359
	50,001 - 1,00,000	1,00,001 - 2,00,000	-0.82019	0.624
		2,00,001 - 3,00,000	-1.56499	0.335
		Above 3,00,000	-0.47033	0.948
	1,00,001 - 2,00,000	2,00,001 - 3,00,000	-0.74479	0.925
		Above 3,00,000	0.34987	0.989
	2,00,001 - 3,00,000	Above 3,00,000	1.09466	0.776
Return & Affordability	Less than 50,000	50,001 - 1,00,000	0.07346	0.996
		1,00,001 - 2,00,000	0.25482	0.825
		2,00,001 - 3,00,000	-0.08859	0.999
		Above 3,00,000	-0.29218	0.795
	50,001 - 1,00,000	1,00,001 - 2,00,000	0.18136	0.932
		2,00,001 - 3,00,000	-0.16204	0.988
		Above 3,00,000	-0.36564	0.589
	1,00,001 - 2,00,000	2,00,001 - 3,00,000	-0.34341	0.871
		Above 3,00,000	-0.547	0.313
	2,00,001 - 3,00,000	Above 3,00,000	-0.2036	0.982

Source: Primary Data **Significant at 0.05 level.*

The Post Hoc analysis reveals the details regarding the significance of means difference between annual saving with respect to perceptual factors of investors. The result shows that in the case of knowledge and awareness, the respondents in the saving group of

less than Rs. 50000 significantly differ above Rs. 3 lakhs and in the case of regulation & transparency, the respondents in the saving group of less than Rs. 50000 significantly differ with the respondents in the saving group of Rs. 50,001 - 1, 00,000.

4.3.6 Risk tolerance and Satisfaction level of the Mutual Fund Retail Investors

One of the pillars concepts for investments and decision making is the concept of risk. In the traditional theories risk is determined using both the deviations from the average return and the probability of those deviations. An investor attitude toward risk could be characterized as risk-aversion, risk seeking or risk neutrality. Generally mutual fund investors assume to bear some risk. The study has divided the respondents risk tolerance based on high, moderate and less risk tolerance. Their risk attitude is mostly influenced by demographic factors. Chi- square test was used to find the association between risk tolerance and demographic factors and one way ANOVA was calculated to find out whether there is any significance difference among the risk tolerance level of mutual fund investors and their satisfaction level.

4.3.6a Chi-Square – Demographic to Risk Tolerance Level

The respondents were asked to mark their risk tolerance level on a five point scale and the score were tabulated based on three criterions viz; high, moderate and low risk tolerance. They were classified into high risk tolerance group if the score were five and four, three for moderate risk tolerance and two and one scores were classified under less risk tolerance investors.

Table 4.96

No. of Respondents to Risk Tolerance Level

Risk Tolerance	Frequency	Per cent	Valid Percent	Cumulative Percent
High risk tolerance	100	21.19	21.19	21.19
Moderate risk tolerance	208	44.07	44.07	65.26
Less risk tolerance	164	34.74	34.74	100.0
Total	472	100.0	100.0	

Source: Primary Data

Of the total respondents 21.19 % of mutual fund investors have high risk toleranceand 44.07% had moderate risk tolerance.

Table 4.97

Chi-Square – Demographic to Risk Tolerance Level

Demographic Variable	Chi-Square	df	p value	Conclusion
Gender	0.121	2	0.941	Non-Significant
Age	12.734	6	0.047	Significant
Educational Qualification	3.9	4	0.42	Non-Significant
Area of Residence	2.62	4	0.623	Non-Significant
Zone	5.529	4	0.237	Non-Significant
Occupation	0.924	2	0.63	Non-Significant
Annual Income	9.046	6	0.171	Non-Significant
Annual Saving	8.154	8	0.419	Non-Significant

Source: Primary Data Significant at 0.05 level

Ho: There is no association between demographic variables (gender, age, and educational qualification, area of residence, zone, occupation, annual income, and annual savings) to risk tolerance level.

Ha: There is association between demographic variables (gender, age, educational qualification, area of residence, zone, occupation, annual income, and annual savings) to risk tolerance level.

The Pearson chi square test was used to test the significance of the hypothesis. Among the various demographic variables, only in the case of age, the significance value was less than .05. Hence the null hypothesis is rejected in the case of age and concluded that, there is only association between the demographic variables namely age, and risk tolerance level.

4.3.6 b Satisfaction level of Mutual Fund Investors

The respondents were asked to mark their level of satisfaction on a five point scale and the score were tabulated based on three criterions viz; satisfied, moderately satisfied and dissatisfied. They were classified into satisfied group if the score were five and four, three for moderately satisfied and two and one scores were classified under dissatisfied investors.

Table 4.98

Satisfaction Level

Satisfaction Level	Frequency	Per cent
Dissatisfied	40	8.5
Moderately Satisfied	386	81.8
Satisfied	46	9.7
Total	*472*	*100*

Source: Primary Data

Of the total respondents, 82% were moderately satisfied with mutual fund as an investment avenue.

Satisfaction Level based on Demographics

The study also intents to examine the satisfaction level of respondents with respect to various demographic factors of mutual fund investors.

***Ho**: There is no association between demographic variables (gender,age, educational qualification, area of residence, zone, occupation, annual income, and annual savings) to level of satisfaction.*

***Ha**: There is association between demographic variables (gender, age, educational qualification, area of residence, zone, occupation, annual income, and annual savings) to level of satisfaction*

Table 4.99

Chi-Square of Satisfaction based on Demographics

Demographic Variable	Chi-Square	df	p value	Conclusion
Gender	1.427	2	0.49	Non-Significant
Age	14.623	4	0.006	Significant
Educational Qualification	4.33	2	0.115	Non-Significant
Area of Residence	2.182	4	0.702	Non-Significant
Zone	12.524	4	0.014	Significant
Occupation	5.721	2	0.057	Non-Significant
Annual Income	7.167	4	0.127	Non-Significant
Annual Saving	4.356	6	0.629	Non-Significant

Source: Primary Data Significant at 0.05 level

The Pearson chi square test was used to test the significance of the hypothesis. The significance values in the case of demographic variables namely age and zone are less than .05. Hence the null hypothesis is rejected in the case of age and zone. It can be

concluded that, there is association between the demographic variables namely age, and zone to level of satisfaction.

From the table (model fit 100) all the fit were found to be within the limit, indicating the suitability of CFA.

Table 4.100

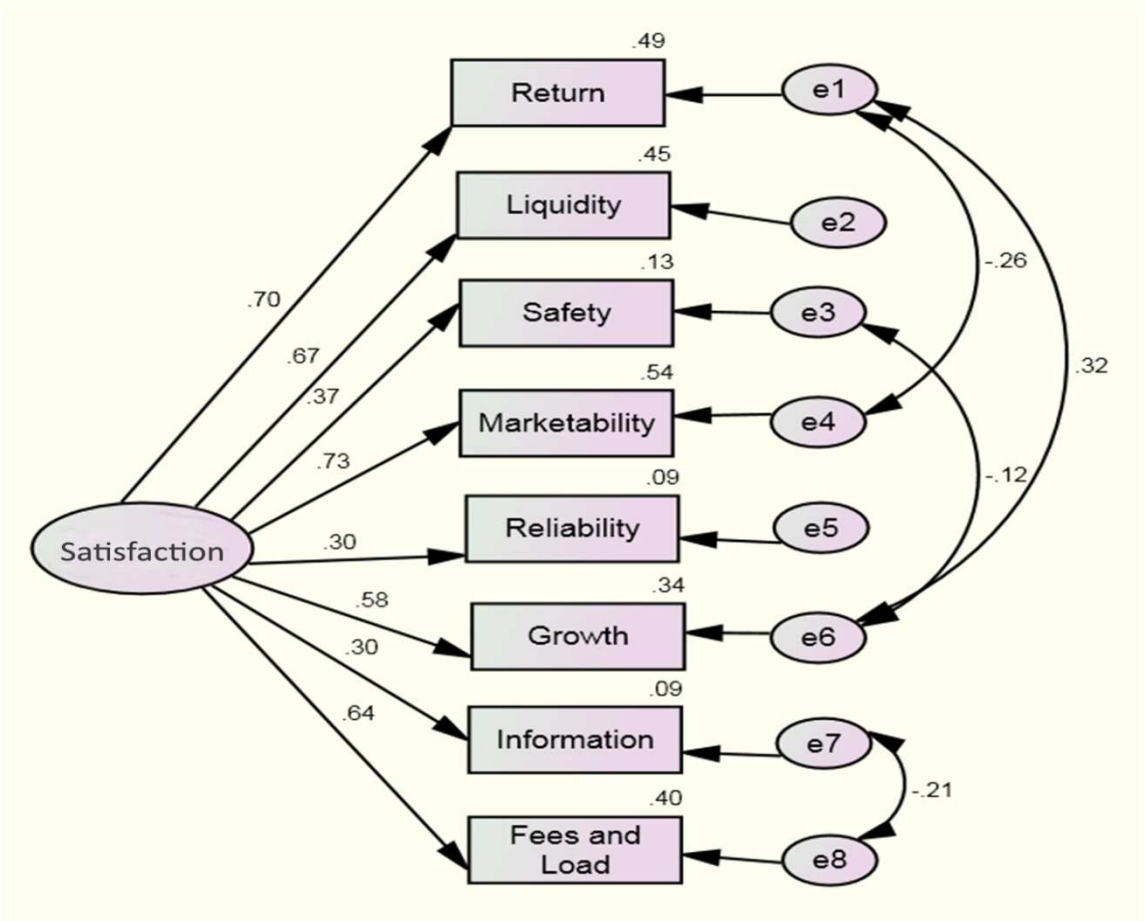
Model Fit Indices for CFA

	χ^2	DF	P	Normed χ^2	GFI	AGFI	NFI	TLI	CFI	RMR	RMSEA
Recommended			>0.05	<3	>0.90	>0.90	>0.90	>0.90	>0.90	<1	<0.5
	16.919	16	.391	1.057	0.988	0.974	0.973	0.997	0.998	0.080	0.013

Source: Primary Data

Fig: 4.4

The Regression Coefficients showing Satisfaction



Source: Primary Data

The regression coefficient obtained in the CFA analysis along with the ranking of satisfactory variables is given in the following table.

Table 4.101

The Regression Coefficients showing Factors in Satisfaction Level

Dependent Variable	Independent Variable	Regression Coefficient	Rank
Satisfaction	Return	0.702	2
	Liquidity	0.671	3
	Safety	0.365	6
	Marketability	0.733	1
	Reliability	0.303	7
	Growth	0.581	5
	Information availability	0.296	8
	Fees and load structure	0.635	4

Source: Primary Data

From the table (4.101) return with a regression coefficient the most important satisfying factor that an investor look forward is marketability (.733) followed by return(.702) and liquidity (.671). It is worth mentioning that, safety and reliability were the least ranked factors.

4.3.6c Risk Tolerance and Satisfaction level

Table 4.102

Means – Level of Satisfaction with regard to Risk Tolerance of Mutual Fund Investors

Risk Tolerance	Mean	Std. Deviation	N
High risk tolerance	25.6852	6.62147	108
Moderate risk tolerance	27.6862	4.55066	188
Less risk tolerance	26.7727	6.68769	176
Total	26.8877	5.94901	472

Source: Primary Data

The mean value is the highest for the moderate risk tolerance category which means that their level of satisfaction is higher when compared to other categories.

Ho : *There is no significant difference among risk tolerance level of mutual fund investors and their satisfaction level.*

Ha : *There is significant difference among risk tolerance level of mutual fund investors and their satisfaction level.*

Table 4.103

Oneway ANOVA –Level of Satisfaction of Mutual Fund Investors with regard to Risk Tolerance

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	278.359	2	139.180	3.982	.019
Within Groups	16390.689	469	34.948		
Total	16669.049	471			

Source: Primary Data

From the table (4.103) the p values were found to be lesser than 0.05, for risk tolerance in the case of level of satisfaction of mutual fund investors and hence Ho is rejected stating that there is relationship between risk tolerance and satisfaction level of mutual fund investors. Since the ANOVA is found to be significant, Tukeys multiple comparison test was conducted to identify which group of risk investors have significant difference.

Table 104

Significance of Mean Difference in Level of Satisfaction based on Risk Tolerance - Post Hoc

(I)	(J)	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
High risk tolerance	Moderate risk tolerance	-2.00099*	.71378	.005	-3.4036	-.5984
	Less risk tolerance	-1.08754	.72261	.133	-2.5075	.3324
Moderate risk tolerance	Less risk tolerance	.91344	.62005	.141	-.3050	2.1319

Source: Primary Data *Significant at the 0.05 level*

The Post Hoc analysis reveals the significance of means difference between risk tolerances with respect to satisfaction level of investors. The result shows that in the

case of satisfaction level, the respondents in the high risk category significantly differ from the respondents of moderate risk category.

4.3.7 Mediation Analysis

From the literature review it was evident that, the perceptual factors influence the satisfaction level of mutual fund investors and they are positively related. (Tapan and Tripathy (2002), Sanjay Das (2012), Vennila and Nandhagopal R (2012), Rajesh Kumar and Arora R.S. (2013)).

The analysis was done to understand the relation between perceived factors and satisfaction level and its impact on two important variables under study viz; issues in mutual fund investment and factors influencing the purchase of mutual fund. The reason for this mediation analysis is the assumption that enhancing a better perception about mutual fund will in turn, lead to more satisfaction and there by more and more retail investors will be attracted towards mutual fund as an investment option. Figure (4.5 & 4.6) shows the simplified model of analysis considered for this study. In addition, the researcher further tested the present model using Sobel test (Sobel, 1982). The purpose of this test is to verify whether a mediator carries the influence of an independent variable (Perception) to a dependant variable (Satisfaction).

4.3.7a Mediation – Core Issues in Mutual Fund Investment

Table 4.105

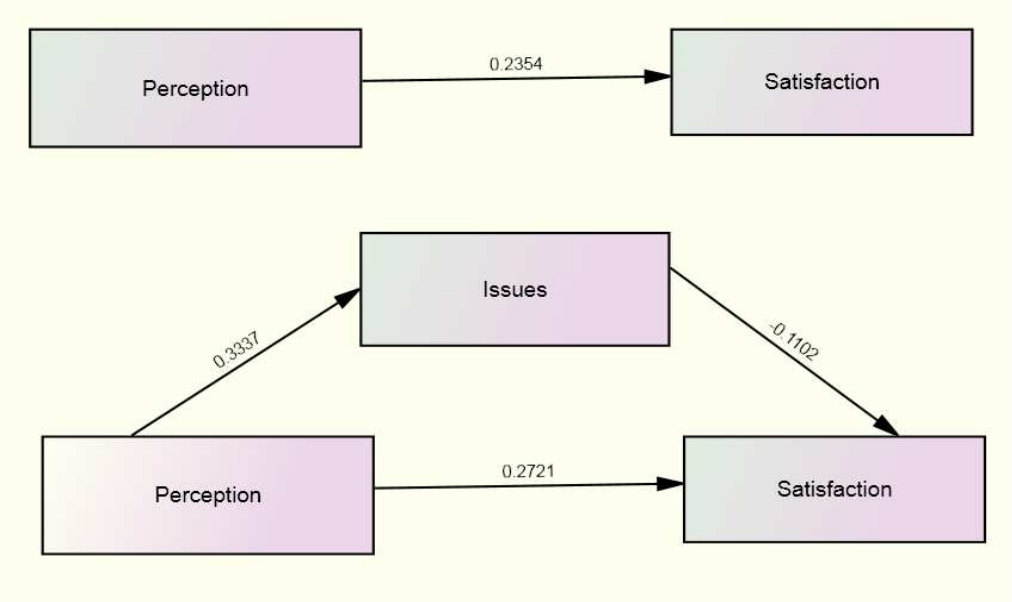
The Regression Coefficients and p value for mediation effect on Core Issues in MF investment

CusRet-Eloyalty-Ecommitment	Value	Se	t	p
a=bmx	.3337	.0529	6.3117	<0.001
b=bym.x	-.1102	.0185	-5.9510	<0.001
c=byx	.2354	.0220	10.7096	<0.001
c'=byx.m	.2721	.0221	12.3160	<0.001
Indirect effect	-.0368	.0085	-4.3014	<0.001
Sobel test			-4.331	<0.001

Source: Primary Data

Fig: 4.5

Mediation Effect on Core Issues in MF Investment



Source: Primary Data

Issues related to mutual fund investment, increases the relationship between Perception and Satisfaction. Issues positively mediate the relationship between Perception and Satisfaction which was further confirmed by the Sobel test was found to be significant (t = - 4.331 p = <0.001). Sobel test verified that the mediator ie; issues related to mutual fund investment carries the influence of the independent variable (Perception) to the dependant variable (Satisfaction).

4.3.7b Mediation - Factors Influencing Purchase of MF

Table 4.106

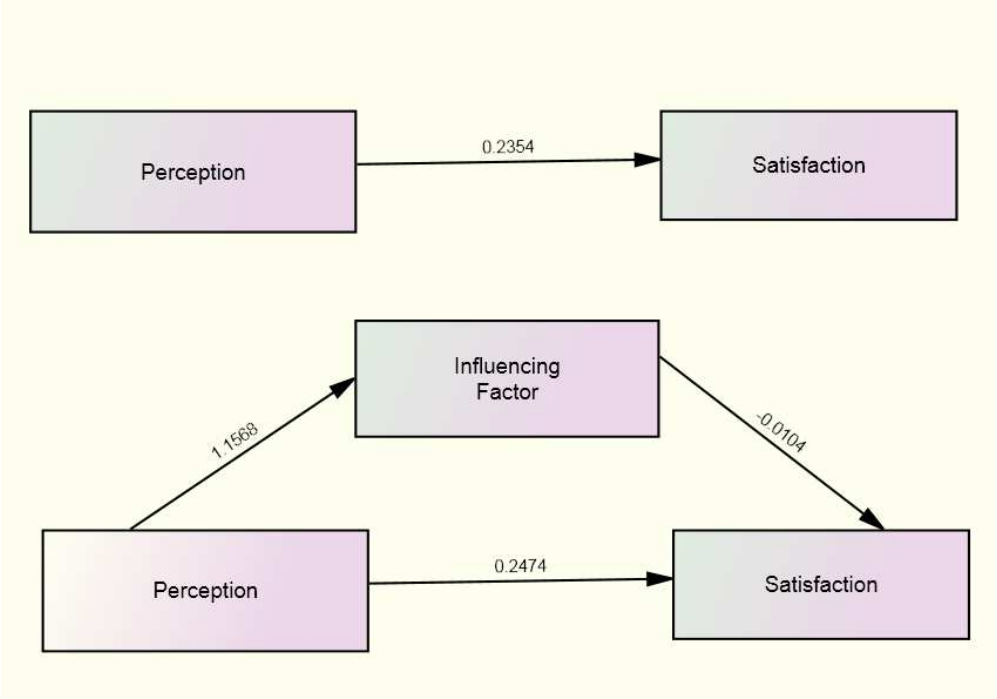
The Regression Coefficients and p value for mediation effect of factors influencing purchase of mutual fund

CusRet-Eloyalty-Ecommitment	Value	Se	t	p
a=bmx	1.1566	.0892	12.9733	<0.001
b=bym.x	-.0104	.0114	-.9142	0.361
c=byx	.2354	.0220	10.7096	<0.001
c'=byx.m	.2474	.0256	9.6577	<0.001
Indirect effect	-.0120	.0132	-.9093	.363
Sobel test			-0.910	.363

Source: Primary Data

Fig: 4.6

Mediation Effect of Factors Influencing Purchase of Mutual Fund



Source: Primary Data

Factors influencing the purchase of mutual fund increase the relationship between Perception and Satisfaction and it positively mediates the relationship between Perception and Satisfaction. The Sobel test was not found to be significant (t= -0.910 p=0.363) .So it is concluded that the mediation effect observed is only a sample character or in other word, factors influencing the purchase of mutual fund does not mediate the relationship between Perception and Satisfaction.

Chapter 5
CONCLUSION

The mutual fund industry has emerged as an important financial intermediary in channelising the savings of individuals into investments in capital market. The present dynamic financial environment has led to a paradigm shift in investment avenues of retail investors. The success of an investment activity largely depends on the knowledge and ability of investors to invest in the right amount, in the right type of investment, at the right time. Though, Indian mutual fund industry has been growing exceptionally well on the back of country's booming economy, mutual funds need to create more lucrative solutions to suit investor's expectations. Investors need to identify those attributes or characteristics of mutual funds that are important while making investment decisions.

Mutual Funds are looked upon by individual investors as a financial intermediary who process information, identify investment opportunities, formulate investment strategies, invest funds and monitor progress at low cost. Individual investors are generally constrained by inadequate knowledge, non availability of information, lack of investment skill, etc that affect the investment activities. The expectations of investors play a vital role in investments and are influenced by the behavioural factors. The factors that influence the investment process were studied to offer some extremely valuable suggestions to the stake holder, inorder to support financial decision making of mutual funds.

5.1 Summary of Chapters

Chapter 1: Introduction enumerates the basic mechanics of research. It describes the background of the research, significance of the study and statement of the problem. The chapter also enumerates the objectives of the study, hypotheses, methodology applied for the study, reference period of the study and the limitations.

Chapter 2: Literature Review gives a brief description of previous studies related to the study. The review of literature was detalied under seven heads based on the variables of the study.

Chapter 3: Conceptual frame work provides the theoretical background of the study. The first part discuss about the growth, performance and prospects of mutual fund

industry in India since its inception and the second part deals with the savings and investment trends in India since 2000 to 2013.

Chapter 4: Mutual Fund as an Investment Option deals with the detailed analysis of the data collected from the retail investors. This chapter includes the the demographic profile of sample respondents. The behavioural factors viz; preference of mutual fund investors, source of information and communication mode, issues related to mutual fund investment, factors that influence the investment in mutual fund, investors perception towards mutual fund, risk tolerance and satisfaction level of the mutual fund investors and mediation analysis were done based on the objectives of the study.

Chapter 5: Conclusion chapter includes findings of the study , suggestions and scope for future studies.

5.2 Findings of the Study

The findings of the study was classified under two heads (i) based on the secondary data (ii) based on the analysis of data collected from the mutual fund retail investors ie; on primary data .

Based on the Secondary Data:

Penetration and Mobilisation of Mutual Funds

- The Indian mutual fund industry has evolved into a high growth and competitive market on account of favourable economic and demographic factors. Since the inception of mutual funds in 1964 there were only INR 25crore AUM but it has grown to INR 7,01,443 crore at the end of the fiscal year March 2013 with 1294 mutual fund schemes and 44 fund houses.
- In relation to the GDP of India, the total AUM has fallen from 11.7 percentage during the financial year end 2008 to 6.6 percent during the year 2012.
- The mutual fund industry has registered a CAGR of 18% from 2009-2013, but a large population of the country is still unbanked with a very low level of financial inclusion.
- The business of Indian mutual funds industry is largely confined within the Tier 1 cities; however, the industry is focussed on developing the penetration ratio and increasing its presence in other cities. Currently, the top five cities of India

contribute to 74% of the entire pie, with the remaining 26% distributed among other cities.

- The assets under management of mutual funds increased by 47.13 per cent to Rs.6,13,979 crore at the end of March 2010. From Rs.4,17,300 crore over the previous year, the AUM further decreased by 0.8 percent to Rs.5,87,216 crore at the end of March 2012 from Rs.5,92,250 crore at the end of March 2011. The AUM increased by 19.5 percent to Rs. 7,01,443 crore at the end of March 2013 from Rs. 5,87,217crore a year ago.
- There were 1,294 mutual fund schemes of which, 857 were income/debt oriented schemes, 347 were growth/equity oriented schemes and 32 were balanced schemes. In addition, there were 37 Exchange Traded Funds, of which 14 were Gold ETFs and 23 other ETFs. Also, there were 21 schemes operating as Fund of Funds which invested in overseas securities as on March , 2013.
- A sectoral breakup of the private sector and public sector mutual funds indicates the domination of private sector mutual funds in terms of share in total folios and total net assets. While the private sector mutual funds had 65.2 percent share in total folios, the corresponding share of public sector mutual funds was 34.8 percent as at the end of March 2013. The share of private sector mutual funds in total net assets was 82.6 percent for the private sector mutual funds compared to 17.4 percent for public sector mutual funds.
- As on March 31, 2013, while individuals subscribed 96.9 percent of the total folios, their share in the total net assets was 45.7 percent. On the other hand, corporate/ institutions had a miniscule share of 1.22 percent in the total number of folios, their share in the total net assets was a sizeable 48.61 percent. NRIs/ OCBs with 1.84 percent share in folios had 4.7 percent share in total net assets and FIIs percentage to total asset was 0.9.

Investment and Savings

- The volume and composition of domestic savings in India have undergone significant changes over the years and the magnitude of increase in domestic savings rate during the period 2000-2007 was among the highest.
- The gross domestic savings rate have increased continuously from an average of around 10.0 per cent of GDP during the 1950s, 18.6 per cent in the 1980s and 23

per cent in the 1990s. The savings rate exceeded 30 per cent for the first time in 2004-05 and has remained above that level ever since. It peaked in 2007-08 at 36.8 per cent and reached an eight-year low in 2011-12 to 30.8 per cent and went up to 31.7 percent during 2012-13. During the eleventh plan period (2007-2011) the gross domestic saving rate was the highest with 33.7 percentages.

- During 2000-2013 the average GDS was 30.71 percent and household financial savings on an average was 10.92 per cent and average physical savings was 11.99 per cent of GDS during the period. The house hold sectors preference for savings in form of physical assets weigh a little more than savings in financial assets during this period.
- The composition of GDS shows the continued predominance of household sector savings (at around 70 per cent), notwithstanding a reduction in its share from the peak attained in 2001-02 (over 94 per cent). On average, households accounted for nearly three-fourths of gross domestic savings during the period 1980-81 to 2011-12. In the period from 2000 to 2010 it averaged 71.48 per cent of total savings. The house hold saving composition on total GDS during 2012-13 is 72.69 percentages.
- During 2000s much of the financial savings of the household sector are in the form of bank deposits (around 51.67 per cent), life insurance funds (18.55 per cent) and pension and provident funds (13.43 per cent). There has been a decline in the proportion of pension and provident funds, particularly since the late 1990s. This trend continued till 2007-08.
- There has been some upward movement in the share of pension and provident funds during 2008-09 and 2009-10, partly due to the increase in disposable income of government servants who are significant contributors to these funds.
- Shares and debentures accounted for 6.24 per cent of total financial savings in the1990s and their share decreased to 4.46 per cent in the 2000s. Though India has a high household saving ratio, the mutual funds have not been able to make a profound impact in channelizing these savings from the households to the securities market.

Based on the Primary Data:

Mutual Fund as an Investment Option

Demographic Profile

- Out of the 472 respondents, 73.5 % of the respondents were male and 26.5 % were female. The largest share of the male respondents (44.7%) and female respondents (43.2%) was from the age group of 31- 45 years. The predominant age group of the respondents (44.3%) was 31- 45 years followed by 31.1% in the age group upto 30 years.
- Based on the occupation, 46.6 % of the respondents were salaried class and 53.4 % of the respondents were non salaried class (business and professional). A predominant literacy group (40.5%) of the respondents was distributed in post graduation qualification. Of the post graduation, 42.3% and 51.3% are from salaried and non salaried class and a good majority of the remaining respondents (37.7%) were distributed in the degree qualifications and 17.8 % professional degree and 4% up to plus two respectively.
- Of the total respondents 56.4 % were from the central zone, 24.8 % from southern zone and 18.9% from northern zone. Out of the total 472 respondents, 173 respondents (36.7%) were from panchayath and 34.1 % from municipality and the rest 29.2% were from corporation.
- The income distribution of mutual fund investors reveals that 43.6% were in the income group of Rs. 200001 to 5 lakh followed by 28.0% in the income range of Rs.500001 to 10 lakh. 18.9% and 9.5% of the respondents were in the income range up to Rs.2 lakh and above 10 lakh respectively. Of the mutual fund respondents, 36.2% have an annual savings of Rs. 50001 to100000 followed by 27.50% with a saving of less than Rs.50, 000. 16.7% and 12.9 % of the respondents were having savings of Rs.100001 to 2 lakh and above 3 lakh respectively. 6.6% of the respondents have an annual savings of Rs. 200001 to 3 lakh.

Investment Planning

- Out of the total 472 respondents, highest of 35 percent of respondent invest into mutual fund for a period 2-5 years followed by an investment tenure up to 2 years with 33.5 percent and 21.8 percent for a period of 5-10 years
- Of the various investment channels, banking channel is the most prominent with 37.3 percent followed by broking firms/DPs by 25.8 percent and agents and brokers with 19.9 percent.
- Among the total respondents, 53.8 percent took their investment decision with the help of an expert, 32.8 percent take their own decision and rest 13.4 percent entirely depends on expert opinion.
- The preference of mutual fund schemes based on operational classification, 69.7 percent opted for open ended and 21.6 percent for close ended and the rest 8.7 percent for interval schemes and on the portfolio classifications, equity was highly preferred by 46.4 percent followed by balanced fund by 26.5 percent and debt fund by 19.9 percent.
- The most preferred type of fund is sector funds (26.27%) followed by monthly income plans (21.82%) income fund (12.29%) and ELSS by 10.81 percent.
- The preferred investment option among the retail investors is SIP with 58.90 percent followed by lump sum investment of 27.12 percent and NFO 12.71 percent. Among the return options 72.88 percent prefer growth option and the rest 27.12 percent prefer dividend option.
- Majority respondents, 49.57 percent feel that investment in mutual fund involves average risk, 30.3 percent feel that the risk is high and 20.2 feel that there is low risk in mutual fund investment.
- Regarding the criterion for selling the mutual funds, the highest majority of 41.5 percent of mutual fund retail investors opined that they decide to sell the mutual funds when the investment objective is achieved and 25.6 percent told that they would sell when the market moves bullish or bearish.
- With the under-performing funds, 32.41 percent told that, they will stop investing in that fund and redeem their investment in search of a better mutual fund. 28.6 percent opined that they will buy better performing funds, but will not sell the current holdings anticipating that fund will catch up with the market and 21.4

percent registered that they will switch over with other schemes within the same AMC.

- Of the total 472 respondents who had invested in mutual funds, 357 respondents (75.6%) would like to continue mutual fund investment and only the remaining 115 (24.4%) do have a plan to opt out. Of the 115 respondents who have a plan to exit, 46.09 percent exits because they feel that, mutual fund investment is risky and 35.65 percent exit due to low return given by mutual funds.

Preference of mutual fund investors

- The mean percentage score of the preference towards mutual fund is 68% which indicate that there is a good level of preference towards MF among the investors
- The preference of mutual fund investors significantly differs with the demographic factors viz: age, zone, occupation and annual savings.
- The mean value is highest for the age group above 60 years followed by 31-45 years which means that mutual fund as an investment avenue is highly preferred by these age groups.
- Among the occupation, the mean value is highest among the salaried class which state that, mutual fund is mostly preferred by the salaried class.
- Investors residing in municipal area and central zone highly prefer mutual fund as an investment option.
- The mean score of mutual fund is highest for those investors having higher annual savings, which states that as savings increases preference to mutual fund investment also, increases.
- With gender, bank deposits turns to be the highest ranked option for both male and female with mean score of 5.24, followed by mutual funds by male and gold and silver by females. Mutual fund turns to be the fourth preferred investment option for females.
- Based on occupation, bank deposits are the most preferred option, followed by gold and silver by non salaried investors and mutual funds by the salaried class. For non salaried investors, mutual fund turns to be the third preferred investment option.

- Irrespective of the area of residence, bank deposits turn to be the most preferred investment option. The second preferred investment option for panchayath is provident fund, municipality is gold and silver and corporation is real estates. Mutual fund turns to be the fourth, third and fifth preferred option for panchayath, municipality and corporation respectively.
- Bank deposits is still the most preferred option with the highest mean score of 5.37 followed by gold and silver with mean score of 4.87 and mutual fund turns to be the third preferred investment option with 4.78 mean score among the retail investor.
- The mean score of capital appreciation emerges as the main objective of investment with the highest mean score of 5.03 followed by contingencies for specific purpose a mean sore 4.72. Supplementing the current income and tax saving shelter came in the third and fourth position with 4.23 and 3.96 respectively. Income after retirement and other options were the last two investment objectives.
- The Post hoc result shows that, the preference of respondents in the age group 30-45 significantly differ with the age group of 45-60. The investor's preference towards mutual fund in the central zone significantly differs with the investors in the north zone. In the case of annual savings, the respondents with annual savings less than Rs. 50000 and 50001-100000 significantly differ with the respondents with annual saving Rs. 200001-300000.

Source of information and communication mode

- Of the various sources of information for mutual fund investment, 50.2 percent of investors prefer advice and recommendation followed by 36.2 percent as data and information and only 13.6 percent relay on advertisement.
- There is association between the demographic variables namely age, and annual income to source of information. Investors belonging to different age and income groups prefer different sources of information.
- The most preferred communication mode among the investors is summary information with 34.75 percent followed by graphical format with 26.70 percent.

- There is association between the demographic variables namely gender and zone to communication modes i.e; only age and zone has significant influence in communication mode.

Issues related to mutual fund investment

- The factors identified for issues related to mutual fund investment are complexity, non-performance and management issues.
- Among the various issues faced by mutual fund investors, complexity is the most affected issue with regression weight 0.873 followed by management issues and non performance with regression weight 0.763 and 0.616 respectively.
- One unit decrease in complexity results in decrease of the problems of mutual fund investment by 0.873 units provided the other two variables remains constant. The R^2 value indicates that this change occurs in 76% cases.
- There is significant difference among, age, zone, occupation and annual saving for core issues (Complexity, Non performance and Management Issues) in mutual fund investments.
- Among the gender the mean value for male is highest for all the issues in mutual fund investment.
- Among the core issues in mutual fund investment, the total mean score of complexity is the highest for age, area of residence, zone and annual savings.
- Respondents in the age group 46-60, residing in south zone and annual savings above Rs.3 lakh has maximum average score with regard to issues in mutual fund investment.
- The non salaried class of investors is having highest mean score which state that issues regarding mutual fund is mostly faced by non salaried class.
- The Post Hoc analysis reveals that with respect to core issues in mutual fund investments, the p value shows significance in the case of respondents in the age group 31- 45 and to 46-60 in complexity and non performance. The core issue - non performance has also significant difference to respondents in the age group up to 30 and 46-60.
- While comparing between respondents of different zone with respect to core issues in mutual fund investments, the p value shows significant difference in the case of

respondents of south to central zone, in the case of non performance and management issues. The p value also shows significant difference in the case of respondents having annual savings Rs.100001-2 lakh, in the case of management issues.

Issues in mutual fund investment and source of information

- Major issues faced by the investors like complexity, non-performance and management issues differ significantly on the basis of source of information.
- The Post Hoc comparison between responses of investors on sources of information with respect to core issues in mutual fund investments, the p value shows significant difference in the case of respondents of advertisement to advice & recommendation in the case of non performance.

Factors that influence the investment in mutual fund

- The influencing factors related to mutual fund investment are Fund related, Investor related and AMC/ Sponsor related factors.
- Fund related factor is the most important factor in mutual fund selection with regression weight 0.93 followed by AMC – Sponsor and Investor related factors with regression weight 0.80 and 0.72 respectively.
- It is concluded that one unit increase in fund related factors results in increase in MF investments by 0.93 units provided the other two variables remains constant. The R^2 value indicates that this change occurs in 86% cases.
- There is significant difference among, age, area and zone for factors influencing (Fund related, Investor related and AMC/ Sponsor related factors) mutual fund investments.
- Among the factors influencing purchase of mutual funds, the mean is highest for fund related factors for both the genders stating that fund related factor is the most influencing factor among the investors.
- The mean value is highest for investors above 60 years followed by 46 to 60 years substantiating that as age increases fund knowledge also increases
- With respect to factors influencing the purchase of mutual fund the mean score is the highest for the central zone.

- Among the factors influencing the purchase of mutual fund, the respondents having annual income above Rs.3 lakh is having the highest mean stating that higher income investors are largely influenced by the factors influencing the purchase of mutual funds.
- The Post Hoc analysis reveals that in the case of AMC-Sponsor related, the respondents in the age group 31-45 significantly differ with the respondents in the age group 46-60.
- In the case of investor related factors, the respondents residing in the panchayath significantly differ with the respondents residing in the corporation area and in the case of fund related factors respondents of central zone significantly differs with northern zone and with respect to investor related factors the respondents in the south zone and central significantly differ with the respondents in the north zone.

Investors' perception towards mutual fund investment

- The perceptual factors identified were classified under four heads as Knowledge & Awareness, Regulation & Transparency, Convenience & Flexibility and Return & Affordability
- With respect to perception of investors towards mutual fund investment, convenience and flexibility is the most important factor that investor perceive with regression weight 0.809 followed by regulation and transparency, knowledge and awareness and return and affordability with regression weights 0.592, 0.547 and 0.111 respectively.
- Of the four perceptual factors, convenience and flexibility results in the increase of mutual fund investments by 0.81 units provided the other three variables remains constant. i.e. One unit increase in convenience and flexibility results in increase of mutual fund investments by 0.81 units provided the other three variables remains constant. The R^2 value indicates that this change occurs in 65% cases.
- There is significant difference among age and annual saving with respect to perceptual factors (Knowledge & Awareness, Regulation & Transparency, Convenience & Flexibility and Return & Affordability) towards mutual fund investment.

- Among the gender, with regard to the perceptual factor – knowledge and awareness is high among the males followed by convenience and flexibility.
- With regard to age, the overall mean is highest for knowledge and awareness followed by convenience and flexibility. Higher the age higher is the perception regarding mutual fund investors.
- Among the perceptual factors of mutual fund investors with respect to zone, the mean score of perceptual factors is highest for south zone except return & affordability
- Among occupation, the mean value of perceptual factors is highest for non salaried class of investors. The variation is also least for non salaried class except for the perceptual factor return & affordability.
- The mean value for the perceptual factors is highest for investors having higher savings.
- The PostHoc analysis reveals that in the case of knowledge and awareness, the respondents in the age group up to 30 years significantly differ with the respondents in the age group 31-45.
- In the case of perceptual factor- knowledge and awareness, the respondents in the saving group of less than Rs. 50000 significantly differ above Rs. 3 lakhs and in the case of regulation & transparency, the respondents in the saving group of less than Rs. 50000 significantly differ with the respondents in the saving group of Rs. 50,001 - 1, 00,000.

Risk tolerance and Satisfaction level of the mutual fund retail investors

- Of the total respondents 21.19 % of mutual fund investors have high risk tolerance and 44.07% had moderate risk tolerance.
- There is association between the demographic variables age and risk tolerance level.
- Of the total respondents, 82% were moderately satisfied with mutual fund as an investment source.
- There is association between age and zone with regard to the satisfaction of mutual fund investors.

- The most important satisfying factor that an investor look forward is marketability (.733) followed by return (.702) and liquidity (.671). It is worth mentioning that, safety and reliability were the least ranked factors.
- The mean value is the highest for the moderate risk tolerance category which means that, their level of satisfaction is higher when compared to other categories.
- There is significant difference among risk tolerance level of mutual fund investors and their satisfaction level and the respondents in the high risk category significantly differ from the respondents of moderate risk category.
- The Post Hoc analysis reveals the significance of means difference between risk tolerances with respect to satisfaction level of investors. The result shows that in the case of satisfaction level, the respondents in the high risk category significantly differ from the respondents of moderate risk category.

Mediation analysis

- Issues related to mutual fund investment, increases the relationship between Perception and Satisfaction. Issues positively mediate the relationship between Perception and Satisfaction which was further confirmed by the Sobel test was found to be significant ($t = -4.331$ $p = <0.001$). Sobel test verified that the mediator ie; issues related to mutual fund investment carries the influence of the independent variable (Perception) to the dependant variable (Satisfaction).
- Factors influencing the purchase of mutual fund increase the relationship between Perception and Satisfaction and it positively mediates the relationship between Perception and Satisfaction. The Sobel test was not found to be significant ($t= -0.910$ $p=0.363$) .So it is concluded that the mediation effect observed is only a sample character or in other word, factors influencing the purchase of mutual fund does not mediate the relationship between Perception and Satisfaction.

5.3 Suggestions

In the light of the findings of the study, observations made during the period of survey and discussions with the AMCs, distributors and investors the following suggestions were put forward to support financial decision making on mutual funds for the regulators, AMCs and retail investors inorder to retain the existing investors and to attract new investors to participate in the capital market through mutual fund investments.

The research finding clearly suggests the following:

To the Regulators

- National awareness campaigns for mutual funds and financial literacy should continue to remain a focus area for investors and distributors. Investors should be encouraged to invest for a larger tenure, make them aware of the sectors in which they are investing and should be educated on the performance and risk of their investments.
- As more of young, salaried class investors with high income are opting mutual fund as an investment avenue, tax benefits can be offered to push more investments into mutual funds.
- Efforts are required to channelise savings from physical to financial savings which will expand financial intermediation and provide more funds for investment.
- The role of tax can be enhanced to be a growth enabler on various fronts such as management of offshore funds from India, tax breaks on pension products etc.
- Equity culture should be improved among the retail investors and mutual fund investment is one best option for developing a large retail investor base in the capital market.
- The fund houses should be allowed to sell pension products will act as a huge catalyst for growth of the industry and this move will energise AMCs, distributors and investors alike, while contributing to the deepening of capital markets in India.
- With multiple positive regulatory changes taking place in the Indian market, overseas players are likely to gauge the opportunity of increasing penetration. There is huge opportunity in the category of infrastructure debt funds, given the heavy

investments in infrastructure planned for India. The fund houses should be permitted in launching new funds in this area.

- The smaller fund houses should be allowed to consolidate as they face operational issues like upgrading technology into their processes, increase competition and cost burden, sustainability and profitability, high distribution and operational costs, lack of funds etc.
- The step taken by SEBI for 'product labelling' with colour coding , considering the level of risk associated and AMFI best practice for standardisation of product labelling for its uniform application across the mutual fund industry should be implemented fussily.
- To introduce investor awareness campaign in regional languages both in print and electronic media.
- The investors must be channelised into the markets via mutual funds rather than directly investing into equities themselves through Rajiv Gandhi Equity Savings Scheme and the first time investors should be incentivised.
- Mutual Funds should disclose the AUM and break up of AUM on monthly basis in order to enhance transparency and increase the quality of the disclosures for the investors.
- SEBI should mandate a standardized summary disclosure for investors to improve comprehension, facilitate fund differentiation, and increase awareness of key information like factors related to risk, return and expenses.
- Considering the higher costs of acquisition of a retail investor, SEBI could consider evaluating differential expenses being charged to retail and institutional investors.
- SEBI should take ample steps to increase the pool of available talent in the industry. The frequent movement of fund managers and key people should be curtailed as it de-stabilise the teams and operational environment.
- The industry through AMFI should tie up with universities and colleges to offer programmes dedicated to the financial services industry in general and the mutual fund industry in particular, which would cover various critical aspects of the financial services industry ranging from fund management, market analysis, treasury operations etc.

- There is a great need to increase penetration of mutual funds in Tier II and Tier III cities. Rural participation in mutual funds continues to be poor due to lack of investor awareness, inefficiencies in fund transfer mechanisms, presence of safer substitutes and cost of establishing presence in smaller areas. They need adequate support in terms of banking infrastructure, distribution services and technological solutions to ensure a sustainable cost-benefit model of growth.

To the Asset Management Companies

- The mutual fund industry needs to explore an alternative mode of distribution, for expansion and growth. AMCs need to look at the possibility of investing in an active sales force. The full potential of on line channel of distribution need to be exploited.
- Training and educating the distributors are integral to increasing penetration of mutual fund products. The new cadre of distributors such as postal agents, retired hands etc will likely gather in inflows from smaller towns and cities and direct more towards mutual fund investments.
- Mutual Funds/ AMCs need to develop a system for active support to banks to distribute mutual fund products through them.
- Measures need to be taken to improve the existing infrastructure and to bring in more efficiency while increasing the scale of operations with the back-up of a good technology mix to capture down underpenetrated markets.
- AMCs should endeavour to design suitable schemes to meet the multiple needs of adequate returns, safety and liquidity in a reasonable proportion as these features have been rated high by individual investors.
- By proper segmentation and by targeting the right product to the right customer, mutual fund companies can hope to win the confidence of their customers and 'own' them for a lifetime.
- Servicing the customers and guiding them to achieve their financial goals over a period of time will lead the industry towards sustainability and asset retention.
- Fund managers need to enhance the growth of their systematic investment plan as these plans are highly preferred by the retail investors and have the capacity to deal with volatility over a long-time horizon and generate steady returns.

- To attract retail investors, a stable long-term performance by funds is highly desirable. AMCs with a good track record over a period of time will be successful in drawing more funds from investors.
- A rational look at schemes of an AMC by their management teams is needed to better understand the mix, the cost and the benefits to the investors as well as to the AMCs.
- As SIPs is the most preferred route of investment, the reach and re-positioning of SIPs is the most important factor to be focused.
- The issues viz; overlap among products, lack of clear-cut differentiators between product classes, product positioning, inconsistent performance and communications by the industry have not seen the desired result to push the mutual fund as a preferred investment option among the retail investors.
- Mutual funds need to be positioned appropriately as a long term product in the investor's mind. Distributors hence need to be incentivised adequately in order to sell the product correctly to investors.
- AMCs should diversify their distribution base, especially those that involve a low distribution cost. Alternate technology-based channels including the internet and mobile banking could be explored with the aim of reaching to a larger customer base at lower costs.
- The mobile phones and secure payment gateways should be used to directly reach investors by providing an online investment facility for reasons other than merely communicating the daily NAV.
- The industry has to work together for communications-related expenses. Initiatives such as consolidated statement of holding across schemes, consolidated Know Your Customer (KYC) process will help to reduce the cost.
- Mutual fund companies should segment and target their customers and position their various products based on the investors need. Products such as growth, income and balanced schemes should be targeted to respective group of investors based on their risk tolerance level.
- The mutual fund product designers have to craft strategies to introduce innovative products to improve the scope of the mutual funds market. Schemes with assured and steady returns should be marketed among the retired people.

To the Investors

- As lack of knowledge and thorough analysis of investor leads to inappropriate responses in terms of investment, investor's education programme should be made compulsory before investing.
- The wrong perception of investors viz; long-term refers to a period of two to three years, returns are not linked to market performance and other risk factors has to be clearly educated before selling the mutual funds to the investors.
- As systematic investment plans (SIPs) are emerging rapidly as an investment alternative method of regular savings for investors having long term commitments, more number of investors should be attracted to this mode of investment.
- Better communication of scheme returns on a relative basis to investors is required.
- Charges and loads play vital role in the mutual fund selection. Therefore, the mutual fund companies should regulate the charges to be paid by the investors as mutual fund products are at a disadvantage, compared with some other financial products investments.

The fact remains that in our country mutual funds are sold rather than bought and this trend has been observed uniformly across all classes of investors and for all kinds of products. To attract retail investors, a stable long-term performance by funds is most desirable. Asset management companies with a good track record over a period of time will be successful in drawing more funds from investors. Mutual funds need to be positioned appropriately as a long term product in the investor's mind. Distributors hence need to be incentivised adequately in order to sell the product correctly to investor's.

5.4 Conclusion

The research was undertaken with the primary objective to know about the behavioural aspects of retail investors towards mutual fund as an investment option. The researcher examined the preference of mutual fund investors, the issues related to mutual fund investment, the factors influencing the purchase of mutual fund, the perceptual factors and the satisfaction and risk tolerance level of investors. The study reveals that the preference of retail investors towards mutual fund as an investment option is good. As far as the demographic variables are considered age, zone, occupation, and annual savings have been found influencing the preference of investor's towards mutual fund significantally. Investors prefer advice and recommendation as the most important source of information and the most preferred communication mode is the summary information. Among the various issues related to mutual fund, complexity is the most affected issue related to mutual fund investment. It positively mediates between the perception of the investors and the satisfaction level of the retail investor. Fund related factor is the most persuading factor in mutual fund investment and convienience and flexibility is the most imperative factor that investor perceives . Investors with moderate risk tolerance level prefer to invest in mutual funds and return, marketability and liquidity are the most satisfying factors investor looks into.

The mutual fund industry is evolving continuously through effectively managing investments and designing long term strategy for targeting and retaining customers. It has to develop products to fulfil customer's needs and help them to understand how its products cater to their needs. The long term strategy will need to supplement with innovative strategies in distribution, product innovation and creating customer awareness. The mutual fund industry manifests huge opportunity for growth and further penetration with technological support. The key lies in strengthening distribution networks and enhancing levels of investor education to increase presence in rural areas.

The outlook of the mutual fund industry is governed to a great extent by the economic situation in the country, which is predicted to stir volatility and adversely impact perceptions, resulting in depressed equity inflows into the market. Efforts should be made jointly by regulatory bodies, AMCs and distributors to instil confidence

in the minds of the investor and to encourage them to invest in mutual funds, even in times of uncertainty.

5.5 Scope for Future Studies

- The performance of growth schemes of mutual fund industry, which is a near substitute for direct investment in shares.
- Role played by sources of information in mutual fund selection and purchase.
- Fund manager's ability in selecting the funds in the present scenario of innumerable mutual fund schemes.
- Fund manager- investor conflit in mutual fund.
- Do mutual fund investors really show heuristic and disposition effect during mutual fund selection.
- Financial behaviour of investors while investing in mutual fund –Studies based on cognitive dissonance, regret and prospect theory.

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APPENDIX I

QUESTIONNAIRE FOR RETAIL INVESTORS IN MUTUAL FUNDS

Dear Sir/ Madam,

Thank you for participating in the Investors' survey. Please share your experience as an investor by responding to the questionnaire. Your responses will be held confidential and will be used for the purpose of academic research only.

Please put a tick mark in the square box ☐ corresponding to your choice. Thanks for your valuable time.

1. Gender : ☐ Male ☐ Female

2. Age in Years : ☐ Upto 30 Years ☐ 31-45 ☐ 46-60 ☐ Above 60 Years

3. Educational Qualification:

☐ Up to Plus 2 ☐ Graduation ☐ Post Graduation ☐ Professional Degree

4. Area of your Residence:

☐ Panchayath ☐ Municipality ☐ Corporation

5. Your District: (*Pls specify*)

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6. Occupation:

☐ Agriculture ☐ Business /Self Employed ☐ Salaried ☐ Professional (*Doctor, Engineer, Lawyer, Chartered Accountant*)

☐ NRI/ PIO ☐ Retired.

7. Marital Status:

☐ Single ☐ Married ☐ Other

8. Annual Income:

☐ Upto 2 lakh ☐ 200001- 5 lakh ☐ 500001 -10 lakh ☐ Above 10 lakh

9. Annual Saving:

☐ Less than 50,000 ☐ 50, 001- 1,00,000 ☐ 1,00,001- 2,00,000

☐ 2,00,001- 3,00,000 ☐ Above 3,00,000

10. What is your attitude towards the following investment avenues?

Please mark (√) between 1 to 7 for each investment avenues by ticking the suitable column

		Highly Favourable						***Not at all Favourable***
1	Bank Deposit	7	6	5	4	3	2	1
2	Post Office Savings	7	6	5	4	3	2	1
3	National Savings Certificate	7	6	5	4	3	2	1
4	Pension & Provident Fund	7	6	5	4	3	2	1
5	RBI/ Infrastructure Bond	7	6	5	4	3	2	1
6	Mutual Funds	7	6	5	4	3	2	1
7	Equity	7	6	5	4	3	2	1
8	Debentures(Private & Govt.)	7	6	5	4	3	2	1
9	Insurance	7	6	5	4	3	2	1
10	Chits	7	6	5	4	3	2	1
11	Gold/ Silver	7	6	5	4	3	2	1
12	Real Estate	7	6	5	4	3	2	1
13	Others(Pls. Specify)	7	6	5	4	3	2	1

11. What are the objectives of your investment? (*Please rank '1' for the highest and '5' for the least*)

☐ Capital appreciation ☐ Supplement the current income ☐ Tax saving shelter

☐ To meet contingencies for specific purpose (*Education, Marriage, Fixed Assets*)

☐ Income after retirement ☐ Any other (*Pls. specify*)

12. How long have you been investing in mutual funds?

☐ Upto 2 years ☐ 3-5year ☐ 5-10 year ☐ Above 10 years

13. What are the channels through which you have made investment in mutual funds?

☐ Direct ☐ AMC ☐ Banks ☐ Broking firm/DP's ☐ Agents/Personalized brokers

14. Your investment decisions are based on

☐ Own initiative ☐ Own initiative, but with the help of an expert

☐ Made by expert on my behalf

15. How did you come to know about mutual fund investment scheme?

(*Please Tick the applicable ones*)

☐ Fund prospectus ☐ Investment literature from mutual fund research house

☐ Professional investment consultant/analyst ☐ Brokers/Agents ☐ Banker

☐ Magazines & Newspapers ☐ Channels ☐ Reference groups & Friends

☐ Websites & Internet ☐ Comprehensive Data Source & Independent Ranking

16. How would you like to avail yourself the information regarding the various schemes before investing?

☐ Information in graphical format ☐ Alphanumeric information

☐ Summary information ☐ Written text format (Descriptive)

17. Which type of schemes do you prefer?

1. Operational Classifications:

☐ Open ended schemes ☐ Close ended schemes ☐ Interval schemes

2. Portfolio Classification:

☐ Equity ☐ Debt ☐ Hybrid/Balance ☐ Money market/Liquid

18. Please tick the type of mutual funds in which you have invested

☐ Gilt funds ☐ Sector funds ☐ Thematic funds ☐ ELSS

☐ Arbitrage funds ☐ Monthly income plan ☐ Capital protected schemes

☐ Gold funds ☐ Exchange traded funds ☐ Income fund

19. Mutual fund investment option preferred by you

☐ New Fund Offer ☐ Lump sum investment ☐ Systematic Investment Plan

☐ Systematic Transfer Plan

20. Which option you prefer

☐ Growth ☐ Dividend

21. Please express your experience regarding the returns received from mutual fund investment

☐ Very high *(above 20%)* ☐ High *(15-20%)* ☐ Average *(10-15%)*

☐ Low *(5-10%)* ☐ Very low *(below 5%)*

22. When do you sell your investment in mutual funds? (*Tick one Option)*

- ☐ Sell mutual fund within a year
- ☐ Keep revising the target as prices increases
- ☐ Not interested in selling
- ☐ Sell when investment objective is achieved
- ☐ When share market goes up & down

23. What are the major problems/limitations you face in mutual fund investment?

Please mark (√) between 1 to 7 for each statement by ticking the suitable column

		Strongly Agree						***Strongly Disagree***
1	Funds not performing	7	6	5	4	3	2	1
2	Lack of portfolio customization	7	6	5	4	3	2	1
3	Overload of schemes	7	6	5	4	3	2	1
4	Too much of scheme variants	7	6	5	4	3	2	1
5	Variation in return	7	6	5	4	3	2	1
6	Major changes in attribute of funds	7	6	5	4	3	2	1
7	High expense ratio for funds	7	6	5	4	3	2	1
8	Fund manager has changed	7	6	5	4	3	2	1
9	Fees by investment adviser/ agent	7	6	5	4	3	2	1
10	Fund risk	7	6	5	4	3	2	1
11	Lack of service standards and disclosures	7	6	5	4	3	2	1
12	Under performance of professional fund managers	7	6	5	4	3	2	1
13	Grievance redressal has not been effective	7	6	5	4	3	2	1

24. What are the factors you consider important while selecting the mutual fund for investment?

Please mark (√) between 1 to 7 for each statement by ticking the suitable column

		Highly Important						***Not at all Important***
1	Scheme Performance and track record of the fund	7	6	5	4	3	2	1
2	Fund managers reputation and tenure	7	6	5	4	3	2	1
3	Management fees & Expense Ratio	7	6	5	4	3	2	1
4	Systematic way of investing (*SIP,STP)*	7	6	5	4	3	2	1
5	Better information accessibility	7	6	5	4	3	2	1
6	Funds rated by rating entity	7	6	5	4	3	2	1
7	Grievance redressal machinery	7	6	5	4	3	2	1
8	Minimal follow up with brokers and companies	7	6	5	4	3	2	1

		Highly Important						***Not at all Important***
9	Reputation of the fund sponsor	7	6	5	4	3	2	1
10	Withdrawal facilities (*SWP, Partial*)	7	6	5	4	3	2	1
11	Products with tax benefits	7	6	5	4	3	2	1
12	AMC has efficient research department	7	6	5	4	3	2	1
13	Minimal initial investment	7	6	5	4	3	2	1
14	Nature of fund (open & close ended fund)	7	6	5	4	3	2	1
15	Past record of AMC	7	6	5	4	3	2	1
16	Relative size of mutual fund companies (AUM)	7	6	5	4	3	2	1
17	Investment objectives	7	6	5	4	3	2	1
18	Service from distribution channels	7	6	5	4	3	2	1
19	Disclosure of risk factors	7	6	5	4	3	2	1
20	Investment options within a scheme *(Dividend Payout , Reinvestment, Growth)*	7	6	5	4	3	2	1
21	Variety of schemes by an AMC	7	6	5	4	3	2	1
22	Fund size	7	6	5	4	3	2	1
23	Fund age	7	6	5	4	3	2	1
24	Lock in period	7	6	5	4	3	2	1
25	Innovativeness of the scheme	7	6	5	4	3	2	1
26	AMC has well developed network	7	6	5	4	3	2	1
27	Experience of the fund management team	7	6	5	4	3	2	1

25. What will you do when your mutual funds under perform?

(Please Tick the Applicable one)

- ☐ Stop investing in that fund and redeem my investment in search of a better mutual fund.
- ☐ Buy better performing funds, but don't sell the current holdings anticipating that fund will catch up with the market
- ☐ Buy under performing funds more aggressively thinking they would benefit from rupee cost averaging.
- ☐ Switch over with other schemes within the same AMC
- ☐ Redeem underperforming funds and prefer to sit outside with a feel that selecting a right mutual fund is too difficult a task.

26. Do you have any plan to opt out of mutual fund

☐ Yes ☐ No

27. If yes, please tick the reasons

☐ Investment in mutual fund is risky ☐ Provides low return ☐ High fund expense

☐ Fund managers have underperformed across the scheme ☐ Grievance redressal has not been effective

28. Please point out the level of satisfaction for the following factors by placing a tick mark in the appropriate box

		Highly Satisfied	Satisfied	Neutral	Dissatisfied	Highly dissatisfied
1	Return	5	4	3	2	1
2	Liquidity (*ease with which an mutual fund can be converted into cash)*	5	4	3	2	1
3	Safety	5	4	3	2	1
4	Marketability (*a measure of the ability of a security to be bought and sold)*	5	4	3	2	1
5	Reliability *(stable and consistent)*	5	4	3	2	1
6	Growth	5	4	3	2	1
7	Information availability	5	4	3	2	1
8	Fees and load structure	5	4	3	2	1

29. Perception of Investors towards Mutual Funds

Please point out your agreement or disagreement for the following statements by placing a tick mark in the appropriate box of choice.

		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	Mutual Fund is an ideal option for individual investors who do not have the time, knowledge & expertise in the stock market	5	4	3	2	1
2	Reputation of AMC, is the important quality I look forward before investing in a fund	5	4	3	2	1
3	Flexibility in investment pattern (*withdrawal facilities, minimum investment, innovative schemes etc*) attracts me.	5	4	3	2	1
4	Mutual fund have failed to provide adequate return in investments to me	5	4	3	2	1
5	The private sector mutual funds have benefited the investors by providing them more option and better services	5	4	3	2	1
6	Day to day disclosure of NAV by the funds is really beneficial for me	5	4	3	2	1
7	SEBI and other controlling bodies are effective in regulating the mutual fund market	5	4	3	2	1
8	Public sector mutual fund players are more secure than private sector players	5	4	3	2	1
9	Loads and taxes reduces the investors return that is earned by the scheme	5	4	3	2	1
10	Mutual funds with large corpus perform better	5	4	3	2	1
11	Investment in mutual funds by AMC's are based own adequate research and after ensuring prudent process	5	4	3	2	1
12	Disclosure norms prescribed by SEBI and AMFI are significant factors in investor services	5	4	3	2	1
13	The Mutual Funds are quite wrongly promoted as an alternative to equity investing and create very high expectations in the minds of the investors.	5	4	3	2	1

14	The mutual funds are investing in the funds as per the investment objectives of each scheme published in the offer document	5	4	3	2	1
15	Mutual fund provides the service of experienced and skilled professionals in fund management	5	4	3	2	1
16	Mutual fund investment helps in diversification and reduction of risk	5	4	3	2	1
17	There is greater dissemination of information for investors regarding mutual funds through various sources of media	5	4	3	2	1
18	Close ended funds have a fixed maturity and can be bought and sold in a stock exchange	5	4	3	2	1
19	Fund managers keep track of investments and changes in market conditions	5	4	3	2	1
20	There is no credit rating for mutual funds, and the rating given to the funds by rating agency has no legal sanctity.	5	4	3	2	1
21	Systematic ways of investing (SIP, STP) are enormously useful in making a disciplined investment and average the cost of investment.	5	4	3	2	1
22	Close end mutual funds are able to give better return	5	4	3	2	1
23	Mutual funds provide a shield against risk of loss than to direct investment in shares	5	4	3	2	1
24	Good structural requirements of mutual fund ensure the investors protection *(Trust, Sponsor, AMC, Custodian etc)*	5	4	3	2	1
25	Higher the dividend and capital gain earned by the scheme, higher would be the NAV	5	4	3	2	1
26	Mutual fund units involve investment risk including the possible loss of principal amount	5	4	3	2	1
27	Past performance of the scheme does not guarantee future performance of scheme	5	4	3	2	1

30. Which of the following statement is true to you?

☐ Willingness to take substantial financial risk ☐ Willingness to take above average financial risk

☐ Willingness to take average financial risk ☐ Not willing to take any financial risk

31. Please point out your agreement or disagreement for the following statements by placing a tick mark in the appropriate box of choice.

		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	Current income is most important to me	5	4	3	2	1
2	I can accept short term losses to maximize the potential to achieve my investment goals	5	4	3	2	1
3	My investment portfolio mostly consist of term deposits, bonds and savings accounts	5	4	3	2	1
4	I am willing to accept large fluctuations in the value of my investments for the expectation of the higher return in future	5	4	3	2	1
5	I highly prefer to invest in Mutual Funds rather than directly investing in shares	5	4	3	2	1
6	Short term losses are more important to me than meeting my investment goals	5	4	3	2	1
7	My potential return will be sought from the combination of capital appreciation and regular return	5	4	3	2	1
8	I enjoy exploring new investment opportunities for my money	5	4	3	2	1
9	My investment is for a longer period and the investment objective is more important	5	4	3	2	1

APPENDIX II

Average Assets under Management for the quarter - January - March 2013

(Rs. in crore)

Sr. No.	Name of the Asset Management Company	Average Assets Under Management for the quarter	Sr. No.	Name of the Asset Management Company	Average Assets Under Management for the quarter
A	**BANK SPONSORED**		**(ii)**	**FOREIGN**	
			1	BNP Paribas Asset Management India Private Limited	3,726
(i)	**JOINT VENTURES - PREDOMINANTLY INDIAN**		2	Daiwa Asset Management (India) Private Limited	266
1	BOI AXA Investment Managers Private Limited	1104	3	Franklin Templeton Asset Management (India) Private Ltd.	41,564
2	Canara Robeco Asset Management Co. Ltd.	8,851	4	Goldman Sachs Asset Management (India) Private Limited	4,800
3	SBI Funds Management Private Ltd.	54,905	5	Mirae Asset Global Investments (India) Private Ltd.	540
4	Union KBC Asset Management Company Pvt. Ltd.	3,118	6	Morgan Stanley Investment Management Private Ltd.	2,660
	TOTAL .....A (i)	**67,978**	7	PineBridge Investments Asset Management Company (India) Pvt. Ltd.	1,099
			8	Pramerica Asset Managers Private Limited	2,592
(ii)	**JOINT VENTURES - PREDOMINANTLY FOREIGN**			**TOTAL..... C (ii)**	**57,247**
1	Baroda Pioneer Asset Management Company Limited	7,303			
	TOTAL .....A (ii)	**7,303**	**(iii)**	**JOINT VENTURES - PREDOMINANTLY INDIAN**	
			1	Axis Asset Management Company Ltd.	12,114
(iii)	**OTHERS**		2	Birla Sun Life Asset Management Co. Ltd.	77,046
1	IDBI Asset Management Ltd.	6,249	3	DSP BlackRock Investment Managers Private Ltd.	32,342
2	UTI Asset Management Company Ltd	69,450	4	HDFC Asset Management Co. Ltd.	101,720
	TOTAL .....A (iii)	**75,699**	5	ICICI Prudential Asset Management Co. Ltd.	87,835
	TOTAL ..... A (i+ii+iii)	**150,980**	6	IDFC Asset Management Company Private Limited	32,886
				TOTAL..... C (iii)	**343,943**
B	**INSTITUTIONS - Joint Ventures - Predominantly Indian**				
1	LIC NOMURA Mutual Fund Asset Management Co. Ltd.	7,185			
	TOTAL .....B	**7,185**	**(iv)**	**JOINT VENTURES - PREDOMINANTLY FOREIGN**	
			1	HSBC Asset Management (India) Private Ltd.	5,230
C	**PRIVATE SECTOR**		2	ING Investment Management (India) Private Ltd.	993
(i)	**INDIAN**		3	JPMorgan Asset Management (India) Private Ltd.	15,856
1	Deutsche Asset Management (India) Private Ltd.	18,114	4	Principal Pnb Asset Management Co.Private Ltd	5,574
2	Edelweiss Asset Management Limited	259		**TOTAL..... C (iv)**	**27,653**
3	Escorts Asset Management Ltd.	255		**TOTAL.....C (i+ii+iii+iv)**	**658,492**
4	India Infoline Asset Management Co. Ltd.	210		**A+B+C**	**816,657**
5	Indiabulls Asset Management Company Ltd.	2,639			
6	J.M. Financial Asset Management Private Ltd.	7,412			
7	Kotak Mahindra Asset Management Co. Ltd.	35,361			
8	L&T Investment Management Limited	11,169			
9	Motilal Oswal Asset Management Co. Ltd.	539			
10	Peerless Funds Management Co. Ltd.	4,875			
11	Quantum Asset Management Co. Private Ltd.	280			
12	Reliance Capital Asset Management Ltd.	94,580			
13	Religare Asset Management Company Private Limited	14,202			
14	Sahara Asset Management Co. Private Ltd.	254			
15	Sundaram Asset Management Company Ltd.	14,871			
16	Tata Asset Management Ltd.	19,897			
17	Taurus Asset Management Co. Ltd.	4,732			
	TOTAL .....C (i)	**229,649**			

AVERAGE ASSETS UNDER MANAGEMENT FOR THE QUARTER ENDED MARCH 2014

(Rs. in Crore)

Sr. No.	Name of the Asset Management Company	Average Assets Under Management for the quarter ended March 2014
A	**BANK SPONSORED**	
(i)	**JOINT VENTURES - PREDOMINANTLY INDIAN**	
1	BOI AXA Investment Managers Private Limited	1,991
2	Canara Robeco Asset Management Co. Ltd.	6,499
3	SBI Funds Management Private Ltd.	65,499
4	Union KBC Asset Management Company Pvt. Ltd.	2,847
	TOTAL ..... A (i)	**76,836**
(ii)	**JOINT VENTURES - PREDOMINANTLY FOREIGN**	
1	Baroda Pioneer Asset Management Company Limited	8,106
	TOTAL ..... A (ii)	**8,106**
(iii)	**OTHERS**	
1	IDBI Asset Management Ltd.	5,929
2	UTI Asset Management Company Ltd	74,233
	TOTAL ..... A (iii)	**80,162**
	TOTAL ..... A (i+ii+iii)	**165,104**
B	**INSTITUTIONS**	
(i)	**INDIAN**	
1	IIFCL Asset Management Co. Ltd.	168
	TOTAL ..... B (i)	**168**
(ii)	**JOINT VENTURES - PREDOMINANTLY INDIAN**	
1	LIC NOMURA Mutual Fund Asset Management Co. Ltd.	10,584
	TOTAL ..... B (ii)	**10,584**
	TOTAL ..... B (i+ii)	**10,752**
C	**PRIVATE SECTOR**	
(i)	**INDIAN**	
1	Deutsche Asset Management (India) Private Ltd.	18,795
2	Edelweiss Asset Management Limited	169
3	Escorts Asset Management Ltd.	269
4	IL&FS Infra Asset Management Limited	415
5	India Infoline Asset Management Co. Ltd.	234
6	Indiabulls Asset Management Company Ltd.	1,097
7	J.M. Financial Asset Management Private Ltd.	6,046
8	Kotak Mahindra Asset Management Co. Ltd.	33,079
9	L&T Investment Management Limited	18,255
10	Motilal Oswal Asset Management Co. Ltd.	489
11	Peerless Funds Management Co. Ltd.	4,046
12	PPFAS Asset Management Pvt. Ltd.	340
13	Quantum Asset Management Co. Private Ltd.	356
14	Reliance Capital Asset Management Ltd.	103,542
15	Sahara Asset Management Co. Private Ltd.	191
16	Shriram Asset Management Co. Ltd.	24
17	Sundaram Asset Management Company Limited	16,422
18	Tata Asset Management Ltd.	21,954
19	Taurus Asset Management Co. Ltd.	3,532
	TOTAL ..... C (i)	**229,255**

(Rs. in Crore)

Sr. No.	Name of the Asset Management Company	Average Assets Under Management for the quarter ended March 2014
(ii)	**FOREIGN**	
1	BNP Paribas Asset Management India Private Limited	3,446
2	Franklin Templeton Asset Management (India) Private Ltd.	45,404
3	Goldman Sachs Asset Management (India) Private Limited	3,764
4	Mirae Asset Global Investments (India) Private Ltd.	692
5	Morgan Stanley Investment Management Private Ltd.	2,572
6	PineBridge Investments Asset Management Company (India) Pvt. Ltd	649
7	Pramerica Asset Managers Private Limited	2,411
	TOTAL ..... C (ii)	**58,938**
(iii)	**JOINT VENTURES - PREDOMINANTLY INDIAN**	
1	Axis Asset Management Company Ltd.	16,154
2	Birla Sun Life Asset Management Co. Ltd.	89,051
3	DSP BlackRock Investment Managers Ltd.	31,631
4	HDFC Asset Management Co. Ltd.	112,963
5	ICICI Prudential Asset Management Co. Ltd.	106,822
6	IDFC Asset Management Company Private Limited	41,349
7	Religare Invesco Asset Management Company Private Limited	14,496
	TOTAL ..... C (iii)	**412,466**
(iv)	**JOINT VENTURES - PREDOMINANTLY FOREIGN**	
1	HSBC Asset Management (India) Private Ltd.	7,659
2	ING Investment Management (India) Private Ltd.	564
3	JP Morgan Asset Management (India) Private Ltd.	16,248
4	Principal Pnb Asset Management Co.Private Ltd	4,134
	TOTAL ..... C (iv)	**28,605**
	TOTAL ..... C (i+ii+iii+iv)	**729,264**
	TOTAL ..... (A+B+C)	**905,120**