CHAPTER 1

INTRODUCTION

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1.1 INTRODUCTION

"Riches do not respond to wishes. They respond only to definite plans, backed by definite desires, through constant persistence." – Napoleon Hill

The importance of Financial Planning couldn't have been summed up better than this. Financial Planning is a tool through which one can chalk out definite plans in order to achieve one's financial goals, ensuring peace of mind at various stages of life cycle.

In today's era of uncertainties, complexities and competition for survival, investment has become a crucial part of everyone's life. The recent economical turmoil has made a large impact no matter rich or poor, big or small. People have realized the importance of savings and right investment. A right investment is one which provides the right rate of return and reduces the risk involved in it.

This chapter provides a brief background of the problem- the importance of investment in the mutual fund, the rate of return, the point in time of investment and the behavioral aspects of the investor. The investment in Mutual Fund is one of the growing areas of concern in the world of Investment Avenue. Basically investment in mutual fund is governed by its rate of return and the type of choice in the schemes provided. Simultaneously the behavioral aspects of the investors can also never be under emphasized. Hence rationale for selection of analysis regarding the returns of various schemes over a specific span has been stated in the chapter. Moreover the contribution of the study and the organization of the study have been discussed in the present chapter.

❖ SAVINGS AND INVESTMENT

It is also observed that in many contexts savings and investment are treated as synonyms, however on deeper thoughts they are totally different from one another and cannot be used interchangeably. Savings are more of unplanned and unconscious act by an individual just to secure oneself against any uncertainties. It may be in any form, ranging from money in deposit accounts, metal jars to systematic savings and investment account.

On the other side of the coin, investment is much more planned, deeply thought and well planned course of action. It is more of conscious decision where one strategically

plans to invest its money. Investing owes risk with a portion of savings. An investor may invest in stocks and bonds or mutual funds with the trust of realizing higher returns in a long run. There are various objectives behind any investment which are Near-term high priority goals, long tern high priority goals, low priority goals, money making goals. There are several limitations behind any investment which are Age factor, Liquidity preference, Risk appetite, Regular income requirement, and Tax liability.

A wise investor should always consider these limitations before making any choice or decision. So saving and investment both are required for an investor and savings originate from the income and financial intermediaries transfer them to investors. Investors then generate capital formation and this in turn generates an income stream a part of which is again saved.

❖ SAVING AND INVESTMENT TREND

In India the rate of saving was underestimated for very long time but later when the potential was realized, the Indian economy generated impressive saving rate. Basically savings are made by households, corporate and government in both physical and financial assets. Indian households generate major portion of country's savings and both corporate and government borrow from household to undertake investment. Table 1.1 presents a comparative view amongst three important sectors of Indian Economy over a particular period of time.

Table 1.1: Comparison of Gross Domestic Savings and Investment (% of GDP) amongst three sectors New Series (Base : 1999-00)

Year	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
Household saving	18.9	20.3	20.9	22.5	22.6	24.3	22.0	22.3	23.8	24.3
Private sector	3.7	3.7	4.2	4.0	3.4	4.1	4.8	8.1	7.8	8.8
Public sector	-1.0	-0.9	-1.7	-2.5	-1.9	-0.3	2.2	2.0	3.2	4.5

Source: www.sebi.gov.in/investment/handbook2009.pdf

Since 1998 till 2008 Household saving has been forming the major lump of the Indian economy's saving and investment amongst the three giant sectors. In India, the saving and investment has been moving hand in hand for both physical and financial assets which is good for the country's economical health.

Table 1.2 :Household saving (% of GDP) from 1998 to 2007 New Series (Base : 1999-00)										
Year	**1998-99**	**1999-00**	**2000-01**	**2001-02**	**2002-03**	**2003-04**	**2004-05**	**2005-06**	**2006-07**	**2007-08**
Financial Assets	10.5	10.8	11.0	11.2	10.3	11.4	10.3	11.7	11.3	11.7
Physical Assets	8.4	9.6	9.9	11.3	12.3	13.0	11.7	10.7	12.5	12.6
Total	18.9	20.4	20.9	22.5	22.6	24.4	22.0	22.4	23.8	24.3
Source: www.sebi.gov.in/investment/handbook2009.pdf										

By Table 1.2, it is depicted that Indians have been investing in physical assets more curiously than in financial assets. The investment trend in physical assets rose from 8.4 percent in 1998-99 to 12.6 in 2007-08. However during 2005-06 physical assets were in less demand in comparison to financial assets. The Table 1.2 also highlights that marginally physical assets have been more liked by Indian Households than financial assets.

The Table 1.3 points the track of investment done under various heads from year 1999-2000 to 2008-09. There are major six heads under which all the investment has been classified.

Currency holds around 6 to 12.5 percent of the total investment and continues to household's choice over period of time

Deposits are the major part and have been increasing from 36.3 percent in 1999-2000 to 58.5 percent in 2008-09. This explains that people are in favor of depositing their money with banks.

Mutual Funds (other than Unit Trust of India) have been increased from 3.4 per cent in year 1999-2000 to 7.9 in 2007-08. The total percent has doubled in a time span of nine years. But in the year 2004-05 and 2008-09, it declines to 0.4 and -1.4 respectively due to extreme volatility in the market and depressed equity market conditions.

Claims on Government has declined over period of years and has fallen to even negative values showing a signal of disinterest by households.

Households have shown a positive interest in this channel of investment with **Life Insurance Funds** holding the limelight. A rise from 12.1 to 20.1 percent is significant achievement showing the significant change of household's interest.

Provident and Pension Funds has not fared too well and the total percent has fallen noticeably from 22.8 per cent to 9.5 per cent.

The above details highlight that though a majority of people invest their maximum savings in deposits but their interest is gradually moving towards financial

investments like MF, Insurance, Shares and Debentures. People appetite for bearing risk and the urge to earn more has grown over time. People at very young age start considering their future security a major concern and aims to save for their better lifetime ahead.

Table 1.3 : Financial Savings of the Household Sector (Gross) (in Per cent)

Item	Per cent to Total Financial Saving									
	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06 P	2006-07	2007-08 P	2008-09#
Financial Saving (Gross)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
a) Currency	8.8	6.3	9.7	8.9	11.2	8.5	8.7	10.2	11.4	12.5
b) Deposits	36.3	41.0	39.4	40.9	38.3	37.0	47.1	49.1	52.2	58.5
i) with banks	30.8	32.5	35.3	35.5	37.4	36.4	46.7	47.8	50.4	54.9
ii) with non-banking companies	1.7	2.9	2.6	2.7	1.0	0.8	0.8	0.2	0.5	1.8
iii) with co-operative banks and societies	4.3	5.6	3.6	2.8	0.0	0.0	0.0	0.0	0.0	0.0
iv) trade debt –net	-0.4	0.1	-2.1	-0.1	0.0	0.0	0.0	1.0	1.3	1.8
c) Shares and debentures	7.7	4.1	2.7	1.7	0.1	1.1	4.9	9.0	12.4	2.6
i) private corporate business	3.4	3.1	1.5	0.8	1.1	1.4	1.3	3.7	4.4	4.2
ii) co-operative banks and societies	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.1
iii) units of UTI	0.8	-0.4	-0.6	-0.5	-2.3	-0.7	-0.1	0.0	0.0	-0.4
iv) bonds of PSUs	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1
v) mutual funds (other than UTI)	3.4	1.3	1.8	1.3	1.2	0.4	3.6	5.3	7.9	-1.4
d) Claims on Government	12.3	15.7	17.9	17.4	23.0	24.4	14.6	3.0	-4.0	-3.1
i) investment in government securities	0.9	1.7	5.8	2.5	7.5	4.9	2.4	0.3	-2.1	-4.5
ii) investment in small savings,etc.	11.3	14.0	12.1	14.9	15.5	19.5	12.2	2.7	-1.9	1.4
e) Insurance Funds	12.1	13.6	14.2	16.1	13.7	16.0	14.2	17.7	18.0	20.1
i) life insurance funds	11.2	12.9	13.5	15.5	13.0	15.1	13.5	17.1	17.4	19.5
ii) postal insurance	0.3	0.2	0.3	0.3	0.3	0.3	0.2	0.3	0.4	0.3
iii) state insurance	0.6	0.5	0.4	0.4	0.5	0.6	0.5	0.3	0.2	0.3
f)Provident and Pension Funds	22.8	19.3	16.1	15.0	13.6	12.9	10.5	11.1	9.9	9.5

Preliminary, P: Provisional.

Source: www.sebi.gov.in/investment/handbook2009.pdf

In the light of above background for changing attitudes towards investment, this chapter presents Conceptual Framework, Rationale of the Study, Objectives of the Study, Contribution of the Study, and Organization of the Study.

1.2 CONCEPTUAL FRAMEWORK

Investment of the savings is an important decision by any saver. Each investor tries to maximize the return. Measuring return it self is science and an art. If one takes a simple instrument of deposit, then also, what is the rate of return? Is it the rate of interest? If it is paid more than once, what is the effective rate of return? If it is cumulative, and compounding is applied, then what is the yield on the same? For the same reason, measuring return on investment in mutual fund had remained a puzzle over a period of time for academicians, practitioners and investors. **Jack L. Treynor (1965)**[1] developed a methodology for performance evaluation of a mutual fund, referred to as *'reward to volatility ratio'*. This is defined as average excess return on the portfolio. **William F. Sharpe (1966)**[2] developed a methodology to measure the performance of the mutual fund known as *'reward to variability ratio'*. The major difference in measure recommended by Treynor and Sharpe was, Sharpe Ratio measures the return of a portfolio in excess of the risk-free rate compared to the total risk of the portfolio whereas Treynor Ratio measures the return of a portfolio in excess of the risk-free rate compared to the Systematic risk of the portfolio. **Michael C. Jensen (1968)**[3] developed a measure of performance based upon the Capital Asset Pricing Model. He examined the performance of 115 open-ended mutual fund schemes over the period of 20 year, 1945-1964. He concluded that on an average the funds apparently were not quite successful enough in their trading activities to recoup even their brokerage expenses. **Eugene F. Fama (1972)**[4] developed a comprehensive mechanism for segregating the observed investment return due to the managers' ability to pick up the best securities at a given level of risk (selectivity) from that resulting from the prediction of general market price movement (timing). This model combined concepts from modern theories of portfolio selection and capital market equilibrium with those of traditional concepts of what constituted good portfolio management. **Treynor and Black (1973)**[5] contributed to the debate regarding ownership of the index. Their question was whether or not a manager should balance under priced long securities positions and under priced short securities positions or should the portfolio be diversified until only market risk remains. **E. Fama and K.**

French (1993)[6] developed a measure which lies at the heart of style investing. They built six distinct portfolios on the basis of size and book-to-market ratios. (S/L, S/M, S/H, B/L, B/M and B/H) For instance, S/L refers to small-cap stocks with low book to market ratios, whereas B/H is defined as large-cap stocks with high book to market ratios. The main findings in their study suggested that stock portfolios built to mimic risk factors linked with size and B/M ratio capture the variation in returns. **F.Modigliani and L. Modigliani (1997)**[7] developed a measure to evaluate the annualized Risk Adjusted Performance (RAP) of a portfolio in relation to the market benchmark, expressed in percentage terms. According to them the portfolio and its benchmark must have the same risk to be compared in terms of basis points of risk-adjusted performance. So they proposed that the portfolio be leveraged or deleveraged using the risk-free asset. They also reported that for a fund with any given risk and return, this measure was equivalent to the return the fund would have achieved if it had the same risk as the market index. The relationship therefore allowed situating the performance of the fund in relation to that of the market. It is noteworthy that the approach followed in performance evaluation generally focused on the fund manager's security selection skills. It is equally possible that fund managers, in addition to using stock selection techniques, might generate superior performance by ***timing the market*** correctly. This would imply that fund managers are capable of assessing correctly the direction of the market, whether bull or bear. Thus, if fund managers were correctly timing the market, then they would be generating superior returns. Several methods have been suggested in the literature to test the market timing ability of fund managers *viz.*, **Treynor and Mazuy (1966)**[8] developed a model for testing the market timing abilities of the fund managers. This model built on the notion that fund managers tried continually to outguess the market by oscillating between two characteristic lines- one with high volatility and other, with low volatility. They examined the performance of 57 open-ended mutual fund schemes during the 10 year period from 1953 to 1962. The study noted the absence of statistical evidence that investment managers had successfully outguessed the market. For the 57 funds examined by them, only one fund revealed a positive and significant value. **Roy D. Henriksson and Robert C. Merton (1981)**[9] developed the statistical framework for both parametric and nonparametric tests of market-timing ability. They assumed that for each period the fund manager will attempt to forecast whether the market will have positive or negative excess returns. If the manager's forecasts were

observable, then the nonparametric test could be used without further assumptions about the distribution of security returns. If the manager's forecasts were not observable, then the parametric test could be used under the assumption of either a capital asset pricing model or a multifactor return structure. This specification permitted identification and separation of the gains of market-timing skills from the gains of micro stock-selection skills. **Grinblatt and Titman (1989b)**[10] presented a decomposition of the Jensen measure in three terms: a term measuring the bias in the beta evaluation, a timing term and a selectivity term. They developed this model to overcome the criticisms of the Jensen measure, the main one being that a negative performance could be attributed to a manager who practices market timing. In order to establish this decomposition, they assumed that there were '**n**' risky assets traded on a frictionless market, i.e. no transaction costs, no taxes and no restrictions on short selling. They also assumed that there are risk-free assets. The assumptions were therefore those of the CAPM. **Ferson and Schadt (1996)**[11] advocated conditional performance evaluation in which the relevant expectations were conditioned on public information variables. They had used the monthly returns for 67 open-end mutual funds from January 1968 to December 1990. They reported that use of conditioning information in performance measurement was both statistically and economically significant.

Various measures have been developed to derive the return on mutual fund schemes. The methodology to examine the market-timing abilities of MF managers has also been developed over a period of time. However, the actual return in the hands of the investor depends on the actual behavior of the investor, his/her aptitudes, risk bearing capacity, perceptions for various mutual fund schemes etc. The studies, to examine this behavioral aspects of investors, with the field of finance, better known as ***Behavioural Finance*** is an integrated approach that combines traditional finance, psychology and sociology. It has focused on the effect of investor biases on the behavior of the financial markets. According to **Tversky and Kahneman (1974)**[12], people overestimate the importance of this categorization when estimating probabilities and consequently people believe they see patterns in data which in reality is truly random. According to **Barber *et al.* (2000)**[13] the representative heuristics amongst investors gives rise to the tendency of forming overly optimistic assumptions about future performance based on recent performance resulting in investors buying past winning funds. In an empirical study performed by **Barber and**

Odean (2001)[14] it was showed that men trade far more actively than women, indicating greater overconfidence amongst men which is in line with psychology literature. According to experiments performed by **Kahneman and Tversky (1981)**[15], an individual's choice is affected by decision–frames. Hence, choices are affected by how different alternatives are presented to them. An individual, who made a rational optimal choice when the information presented to them was transparent, made an irrational choice when the same information was presented in a less obvious format. Individuals are subject to the *status quo* bias if they choose the same option as in earlier decision situations even though this choice is suboptimal. There are several examples indicating that individuals are being subject to status quo bias when forming financial decisions **Kempf and Ruenzi (2006)** [16].

As a result, it can be concluded that to evaluate the superior performance of the mutual fund scheme, one can use different performance measures. But the performance of the scheme is highly dependent on the market timing abilities of the fund manager and to time the market correctly the fund manager has to examine the behavior of the retail investor as it decides the market trend.

Over a period of time various authors have contributed to the development of this area of finance. Hence, the present study first examine the performance evaluation of the selected schemes of mutual fund, second market timing abilities of the fund managers and lastly the investment behavior of the retail investors towards mutual funds.

1.3 RATIONALE OF THE STUDY

In India, though the MF industry has been in existence since 1964, it is very difficult to find a study concerning the investor behavioral aspect with specific reference to MFs, in India. It should be noted that the "expectations" of investors play a vital role in the financial markets. They influence the price of the securities, the volume traded and various other financial operations in actual practice. These 'expectations' of investors are influenced by their "perception" and humans generally relate perception to action. The beliefs and actions of many investors are influenced by the dissonance effect and endowment effect.

However, in the financial literature, there are no clear models, which explain the influence of "perception" and "beliefs" on "expectations" and "decision making". No doubt, reality is so complex that trying to fit individual investor's behavior into a model is impossible. Investor's behavior may change from period to period even if the

other variables influencing the behavior are held constant. However, to a certain extent, one can borrow concepts from social psychology where behavioral patterns, rational and irrational are observed and empirically tested. On the same lines one can develop certain models to identify the financial behavior, to the extent of the availability of the explanatory variables. Such models can help to understand the "why" and "how?" aspect of investor behavior, which can have managerial implications for policy makers.

Mutual Funds have attracted a lot of attention and interest of both academicians and practitioners. Bulks of the past studies have been conducted on evaluation of the performance of mutual funds, on the market timing and stock selection skills of the fund manager and on investment behavior of the retail investors in the developed markets like US and UK. Some of the studies are:

STUDIES ABROAD:

ON PERFORMANCE EVALUATION:

Robert S. Carlson (1970)[17] examined the performance of mutual funds during the period 1948-1967. He used different indices as a proxy for the market over different time periods. It was found that fund performance relative to the market varied depending upon which index was used for the market. The study concluded that there was consistency over time when risk and return were taken in isolation but there was no consistency in the risk adjusted performance measures. The study also examined performance relative to size, expense ratio and a new funds factor and the results indicated that there was no relationship with size or expense ratio, but there was a relationship between performance and a measure of new funds factors. **John G. McDonald (1974)**[18] analyzed the performance of 123 mutual funds in relation to the stated objectives of each fund. He found that there was a positive relationship between fund objectives and risk measures and a positive relationship between return and risk. The relationship between fund objective and risk-adjusted performance indicated that funds that are more aggressive experienced better returns, while only one third of the funds did better than the aggregate market. **Robert E. Cumby and Jack D. Glen (1990)**[19] evaluated the performance of 15 US based internationally diversified mutual funds during the period 1982 to 1988. They used Jensen and Grinblatt & Titman's measures for evaluating the performance. They did not find any evidence that the funds, either individually or as a whole, provided investors with performance that

surpassed that of a broad international equity index over the study period. **J. Fletcher (1997)**[20] examined performance persistence of a sample of 101 UK unit trusts. He considered five portfolios based on a ranking of five-year risk-adjusted performance windows. He then repeated this examining a two-year performance window. Survivorship bias was partly allowed for by the continuation of funds through name changes or changes in management groups, though mergers were treated as terminations. He did not report any evidence of persistence of performance.

ON MARKET TIMING:

Cheng-Few Lee and Shafiqur Rahman (1990)[21] examined the market timing and selectivity performance of 93 mutual funds during January 1977 to March 1984. They used a very simple regression technique to separate stock selection ability from timing ability. This technique, first suggested by Treynor and Mazuy and later refined by Bhattacharya and Pfleiderer, used a modified security-market line approach to produce individual measures of timing and stock selection ability. The inputs to the model were only the returns earned on the fund and those earned on the market portfolio. The empirical results indicated that at the individual fund level there was some evidence of superior micro- and macro forecasting ability on the part of the fund manager. **J. Fletcher (1995)**[22] examined the selectivity and timing abilities of 120 UK trusts with Growth, General or Income Objectives as detailed in the Unit Trust Year Book for 1980. **Wilfred L. Dellva *et al.* (2001)**[23] tested the selectivity and timing performance of the Fidelity sector mutual funds during the 1989-1998 time periods. They used the S&P 500, the Dow Jones Industry Group Total Return Indexes, and the Dow Jones Subgroup Total Return Indexes as benchmarks. **Nicolas P. B. Bollen *et al.* (2005)**[24] estimated parameters of standard stock selection and market timing models using daily returns of 230 mutual funds during the period from January 2, 1985 through December 29, 1995 and quarterly measurement periods. They ranked funds quarterly by abnormal return and measure the performance of each fund the following quarter.

ON INVESTMENT BEHAVIOR:

Noel Capon *et al.* (1996)[25] investigated the manner in which consumers made investment decisions for mutual funds. Investors reported that they consider many nonperformance related variables. When investors were grouped by similarity of investment decision process, a single small group appeared to be highly knowledgeable about its investments. However, most investors appeared to be

inexperienced, having little knowledge of the investment strategies or financial details of their investments. **Gordon J. Alexander *et al.* (2001)**[26] examined the responses from a survey of investors in U.S. who purchased mutual funds from banks and elsewhere. Using a treatment-effects econometric model, they also found that purchasing only through banks actually raised the knowledge level of these investors. This result suggested that the increased focus on disclosure at banks had a positive effect on investor financial literacy, and that disclosure requirements in the Gramm-Leach-Bliley Act of 1999 were likely to be beneficial. They suggested that investor financial literacy still needs improvement. **Peggy D Dwyer *et al.* (2002)**[27] conducted a study to examine whether the risk taking behavior of mutual fund investors is correlated with gender by using data from a national survey of nearly 2000 mutual fund investors. **Warren Bailey *et al.* (2010)**[28] examined the effect of behavioral biases on the mutual fund choices of a large sample of U.S. discount brokerage investors using new measures of attention to news, tax awareness, and fund-level familiarity bias, in addition to behavioral and demographic characteristics of earlier studies. They used primary database of a six-year i.e. from January 1991 to November 1996 panel of trades and monthly portfolio positions of individual investors with accounts at a major U.S. discount broker. They found that behaviorally-biased investors typically made poor decisions about fund style and expenses, trading frequency, and timing and resulted in poor performance.

As far as India is concerned, it is only in recent years that some efforts have been made to evaluate the performance of mutual funds, to examine the market timing abilities of the fund manager and to empirically examine the investment behavior of the retail investors.

INDIAN STUDIES:

ON PERFORMANCE EVALUATION:

Samir K Barua and Jayanth R Varma (1991)[29] evaluated empirical evidence of equity mutual fund performance in India. They studied the investment performance of India's first 7-year close-end equity mutual fund, Mastershare. They concluded that the fund had outperformed the market and performed satisfactory for large investor in terms of rate of return. **L.C.Gupta (1994)**[30] examined the performance of 83 mutual fund schemes from 30 June 1994 to 31 December 1995. **Amitabh Gupta (2003)**[31] examined the performance of 73 mutual fund schemes during the period of April 1,

1994 to March 31, 1999. The results indicated a mixed performance of sample schemes. **Ramesh Chander (2006)**[32] measured the performance of 80 mutual fund schemes for the study period of five years i.e. January 1998 to December 2002. The study found evidence supporting parameter stationarity and the identical persistence of investment performance across all the measurement criteria.

ON MARKET TIMING:

Bijan Roy and Saikat Sovan Deb (2003)[33] conducted an empirical study to measures the performance of 89 Indian mutual fund schemes over the period of Jan, 1999 to July, 2003, with both unconditional and conditional form of CAPM, Treynor- Mazuy model and Henriksson-Merton model. The effect of incorporating lagged information variables into the evaluation of mutual fund managers' performance was examined in the Indian context. **Nalini Prava Tripathy (2006)**[34] evaluated the market timing abilities of Indian fund managers of thirty-one tax planning schemes in India over the period from December, 1995 to January, 2004 by using Treynor & Mazuy Model and Henriksson and Merton model. **Ramesh Chander (2006)**[35] examined the market timing ability of the Indian mutual fund manager for the study period of five years i.e. January 1998 to December 2002 with 80 mutual fund schemes using Treynor & Mazuy Model and Henriksson and Merton model. He found that the negative incidence of market timing performance, usually, points to the unsuccessful market timing abilities of investment managers in India. Fund managers were unable to successfully time the markets and this prevailed uniformly across measurement criteria. **Deb, Banerjee and Chakrabarti (2007)**[36] attempted to find the stock selection and market timing abilities of the Indian mutual fund managers using unconditional as well as conditional approaches. The study used a sample of 96 Indian mutual fund schemes with monthly as well as weekly data during the period of January 2000 to June 2005.

ON INVESTMENT BEHAVIOR:

Madhusudhan V. Jambodekar (1996)[37] conducted a study to assess the awareness of MFs among investors, to identify the information sources influencing the buyer decision and the factors influencing the choice of a particular fund. The study revealed that income schemes and open-ended schemes were preferred over growth schemes and close-ended schemes during the prevalent market conditions. Investors looked for Safety of Principal, Liquidity and Capital Appreciation in order of importance; Newspapers and Magazines were the first source of information through

which investors get to know about MFs / Schemes and the investor service was the major differentiating factor in the selection of MFs. **R. Shanmugham (2000)**[38] conducted a survey of 201 individual investors to study the information sourcing by investors, their perceptions of various investment strategy dimensions and the factors motivating share investment decisions. **Kavitha Ranganathan (2006)**[39] conducted a survey to examine the fund selection behavior of individual investors towards Mutual funds, in the city of Mumbai during September-October 2004 with 100 individual investors. Factor Analysis was applied using Principal Component Analysis to identify investors' underlying Fund/Scheme selection criteria, so as to group them into specific factors, which would further identify Investor types, to enable the designing of appropriate marketing strategies. **B. B. S. Parihar *et al.* (2009)**[40] analyzed the impact of different demographic variables on the attitude of investors towards mutual funds. They surveyed 200 respondents of Agra region, having different demographic profiles.

The Indian mutual fund industry is currently in the phase of consolidation and growth stage of the product life cycle. Despite the impressive growth of the mutual fund industry in India over the last decade, till date, it is difficult to find an empirical study, which examines all the three aspects for a given set of data of the MF schemes i.e. Performance evaluation, Market timing of fund manager and Investment behavior of the retail investors. In this study, the researcher has used the study period from January 2000 to December 2009 i.e. ten year with sample size of 137 open ended mutual fund schemes. **The present study has used nine different measures to evaluate the performance of the selected schemes of mutual fund viz. (1) Rate of Return Measure, (2) Treynor's Ratio, (3) Sharpe's Ratio , (4) Jensen Differential Measure, (5) Sharpe Differential Measure, (6) Fama's Components of Investment Performance, (7) Appraisal Ratio , (8) Information Ratio , (9) M^2 measure: Modigliani and Modigliani.** Again here it may be noted that it was very difficult to trace a study where there are so many performance measures are applied simultaneously.

To examine the market timing abilities of the manager two models have been used: 1) Treynor and Mazuy Model and 2) Henriksson and Merton Model. It is observed that in India, less work has been done in the area of market timing abilities of the fund managers, in comparison to the studies based on performance measures. **The present study examines the market timing abilities of the fund manager with 137 open**

ended schemes with respect to BSE30 and Nifty50 benchmark indexes. It is also very difficult to find an empirical study which examines the market timing abilities of the fund managers with 137 schemes and two benchmark indexes.

This study has also intends to analyze the investment behavior of retail investors in the selected cities of Gujarat state *viz.* Ahmedabad, Baroda and Surat by taking the sample size of 400 investors. Many studies have been carried out on investment behavior but it is very difficult to find an empirical study which covers the reasons for selection of mutual fund/schemes and the reasons for withdrawing investment from mutual fund/schemes both together in the state of Gujarat. **The rationale of the study is that, the study has covered all the three aspects together. Although many studies have been carried out using these performance measures and market timing models, none of them have included a large number of schemes and a long period of data. Here the researcher intends to examine the significant differences if any in the results by having different study periods.** Thus, this study is topical and proposes to bridge the gap. In a nut shell this research would try and focus on the following aspects of the mutual funds in India:

1) Performance evaluation of the 137 mutual fund schemes during the period of ten years i.e. January 2000 to December 2009.
2) Market timing abilities of the fund manager with 137 mutual fund schemes during the period of ten years i.e. January 2000 to December 2009.
3) Investment behavior of the retail investors in the selected cities of Gujarat state viz. Ahmedabad, Baroda and Surat with the sample size of 400.

1.4 OBJECTIVES OF THE STUDY

As the study intends to examine **(I)** the performance of various mutual fund schemes, **(II)** the market timing abilities of Mutual Fund managers and **(III)** the Behavior of investors, precisely the objectives of the present study can be laid out as follows.

I. PERFORMANCE OF MUTUAL FUND SCHEMES:

1. The study intends to evaluate the investment performance of select mutual fund schemes during the period January 2000 to December 2009 across the nine different measurement criteria.
2. To perform the comparative analysis of the performance of various mutual fund schemes.

3. To examine whether the Mutual Fund Schemes are earning higher returns than the benchmark returns (or Market Portfolio/Index Returns) in terms of risk.
4. To examine whether the mutual fund schemes bear risk and return in conformity with their stated objectives.
5. To examine based on sponsorship of the mutual fund, whether Bank sponsored, Institutions or Private sector perform better.
6. To study whether the Mutual Funds Schemes are offering the advantages of Diversification to their investors.
7. In view of the fact that every measurement criterion has its own mechanism to rate investment performance, performance variability is obvious across the measurement criteria. The present study intends to study the parameter stationary of investment performance obtained for different measurement and evaluation criteria.
8. As benchmarks differ in their composition and constituents, the performance ranking of investment portfolios is also expected to vary. The present study intends to study evenness/consistency of investment performance for different benchmarks.

II. MARKET TIMING ABILITIES:

1. To examine the Market timing abilities of the Indian mutual fund managers with respect to Treynor & Mazuy model and Henriksson & Merton model and also with respect to BSE 30 and Nifty 50 benchmark portfolio.
2. To examine the parameter stationary of results obtained from both the models.
3. To examine the parameter stationary of results obtained for different benchmarks.

III. BEHAVIORAL ASPECTS OF THE INVESTORS:

1. To know the investments objectives among individual investors.
2. To identify the preferred investments avenue among individual investors.
3. To understand the preferential feature in the investments instrument among individual investors.
4. To identify the attitude of investors towards Financial Instruments.
5. To know sources from which the investors come to know about the mutual funds.
6. To know the period of investment in mutual funds.
7. To know investment preference in future.

8. To evaluate the fund/scheme preference of investors.
9. To evaluate the fund/scheme preference by operation by investors.
10. To understand the preferential feature in mutual fund among individual investors.
11. To perceive the preferred communication mode of investors.
12. To identify the most popular Mutual Funds among individual investors.
13. To evaluate mutual fund conceptual awareness among present investors.
14. To identify the information sources influencing the scheme selection decision of investors.
15. To assess the influence of demographic variables on the mutual fund conceptual awareness level of individual investors.
16. To establish a relationship between types of investors and MF qualities that influence MF/Scheme selection.
17. To evaluate fund qualities that would affect the selection of Mutual Funds/Schemes.
18. To understand the fund sponsor qualities influencing the selection of Mutual Funds/Schemes.
19. To evaluate investor's related services that affect the selection of Mutual Funds/Schemes.
20. To evaluate the reasons for withdrawing investment from mutual funds.

1.5 CONTRIBUTION OF THE STUDY

At present, more and more AMCs are entering the industry and their survival depends on strategic marketing choices, to endure and succeed in this highly promising industry, in the face of such cutthroat competition.

In this study, the researcher has covered the three aspects *i.e.* **(I)** Performance evaluation of the selected schemes of mutual fund, **(II)** Market timing abilities of the fund managers and **(III)** Investment behavior of the retail investors towards mutual funds. In India, it is difficult to lay hands on any empirical study, which examines all the three aspects together. Thus, this study is topical and proposes to bridge the gap. This study would help the existing and prospective AMCs, institutional and individual investors, researchers and policy makers to get an idea of the status of performance of the mutual funds, market timing abilities of fund managers and investment behavior of the retail investor. This will have broader implications to institutional and individual investors to select appropriate scheme for investment, to existing and

prospective AMCs for developing competitive strategies, becoming more investor oriented, and developing appropriate policies encouraging the healthy growth of Indian Mutual Funds. From an academic perspective, the goal of identifying superior fund managers is interesting as it encourages development and application of new models and theories thus making significant contribution to the body of knowledge of investment management.

1.6 ORGANIZATION OF THE STUDY

The study is divided into Eight Chapters as outlined here:

The **Chapter One, "Introduction"** presents Conceptual Framework, Rationale of the Study, Objectives of the Study, Contribution of the Study, and Organization of the Study.

The **Chapter Two, "Mutual Fund Industry in India"** discusses Some Basic Concepts about Mutual Funds, History and Development of Mutual Fund, Regulatory Framework of Mutual Funds: as given by the Securities and Exchange Board of India (SEBI) and The Association of Mutual Funds in India (AMFI), and a birds-eye-view of Growth and Performance of Mutual Funds in India over a period of time.

The **Chapter Three, "Review of Literature"** presents the review of the major studies carried out by Academicians, Practitioners and Researchers in India and in foreign countries covering the various aspects of performance evaluation of the mutual fund schemes, market timing abilities of fund managers and investment behavior of the retail investors. This chapter is divided into four parts. Section 1 deals with review of various theories of Performance Measures, the empirical studies testing performance measures theories in India and abroad and concluding remarks on the same. Section 2 deals with review of theories of Market Timing, the empirical studies testing market timing theories in India and abroad and concluding remarks thereon. Section 3 deals with review of various theories of Behavioral Finance, the empirical studies on investment behavior of retail investors in India and abroad and concluding remark on the same. Section 4 presents review of General Studies on mutual funds in India and abroad and concluding remark on the same.

The **Chapter Four** presents the **"Research Methodology".** This chapter is divided into two sections: Section 1 presents the research methodology for Analysis of Secondary Data. Section 2 presents the research methodology for Analysis of Primary Data. The researcher has made an attempt to cover various aspects of research

methodology. In Section 1 it presents: Data source and Sample: The study Period, The Sample Schemes, Data source and Choice of frequency to evaluate performance-Monthly, Hypotheses, Methodology Adopted: For calculating return, risk, Performance of mutual fund schemes, Market timing ability of the fund managers & Statistical tools and Limitations of the study with reference to secondary data. Section 2 dealing with analysis of primary data covers Scope and coverage of the research study, Research Design of the research study, Collection of primary data, Sampling Decision, A brief about Structured Questionnaire, Hypotheses, Methodology Adopted and Limitations of the study.

The **Chapter Five, "Investment Performance of Indian Mutual Fund Schemes"** presents the empirical results pertaining to the overall performance of Indian mutual funds during the period January 2000 to December 2009. The sample consisted of 137 open ended mutual fund schemes both from public as well as private sectors. The performance of sample mutual fund schemes has been evaluated using the following nine performance evaluation measures: (a) Rate of Return Measure, (b) Treynor Ratio, (c) Sharpe Ratio, (d) Jensen Measure, (e) Sharpe Differential Measure, (f) Fama's Components of Investment performance measure, (g) Appraisal ratio, (h) Information Ratio, and (i) M^2 Measure. Based on the performance evaluation a further attempt is made to examine the consistency of outcome, across various measures, as well as across different benchmarks. An attempt is also made to examine impact of sponsorship on the performance. Further the consistency of performance is also examined with reference to the objectives of the schemes.

The **Chapter Six, "Market Timing Abilities of Fund Managers"** presents the empirical results pertaining to the Market Timing Abilities of Fund Managers in terms of two models, one proposed by Treynor & Mazuy and the other by Henriksson & Merton. Using the same data set as was used for performance evaluation.

The **Chapter Seven, "Investment Behavior of Retail Investors towards Mutual Funds"** deals with Analysis and Interpretation of the collected primary data from those respondents who has currently (i.e., as on June-September 2010) invested in any Mutual Fund Scheme/Schemes and respondents were screened and inclusion was purely on the basis of their knowledge about Financial Markets, Mutual Funds in particular. It has included information on Profiles of respondents, sources of information regarding mutual fund investment schemes, from how many years they are investing in mutual fund and whether they continue their investment in mutual

fund or not, the preference of mutual fund schemes category and type, reasons for preference of investment in mutual funds, importance given by the investor to different qualities for selection of mutual funds/schemes, reasons for withdrawal from mutual funds, the preferred communication mode of investors and the most popular Mutual Funds among individual investors as well as, questions relating to the views of investors towards mutual funds.

The **Chapter Eight** presents the **"Conclusions and Suggestions".** These are based on results received in the form of an outcome of application of the various Statistical Tools and Tests of Significance applied to test various statistical hypotheses in this research study.

Finally thesis has been supported with Selected **Bibliography, Webliography and Appendices.**

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