CHAPTER 2
REVIEW OF LITERATURE

This chapter attempts to review the work done by other researchers in the field of mutual funds. This is likely to provide an insight into the problems facing the industry and methodologies adopted by earlier researchers to study the various aspects relating to mutual funds. A brief description of such studies has been given as under:

Obaidullah and Sridhar (1991) in their research paper evaluated two major growth oriented funds- the Mastershare (launched by the Unit Trust of India), and the Canshare (launched by a bank subsidiary- Canbank Mutual Fund). Firstly they made comparison of Raw Return with the benchmark indices- Bombay Stock Exchange National Index and the Bombay Stock Exchange Sensitive Index. The results revealed that Mastershare outperformed the market indices by a larger margin than Canshare but when compared against each other without reference to appreciation in indices, the latter outperformed the former. In case of Mastershare, both the Sharpe & Treynor measures were observed to be higher than the indices but for Canshare, Sharpe measures were observed to be smaller than the indices while the opposite was true for Treynor measures. The Jensen’s measure was positive for both the funds in all cases. The above analysis revealed that the two mutual funds provided abnormal returns, the Mastershare on a total risk-adjusted basis and the Canshare on a market risk-adjusted basis.

Bogle (1992) in his paper made an effort to select the top twenty equity funds in two periods i.e. 1971-80 and 1981-90. The study showed that top fund’s performance in one year had no systematic relationship to its ranking in the subsequent year. The study suggested the selection of better performers rather than top performer by using “Honor Rolls” which took into account their total return, their relative performance and the continuity of their portfolio management over at least seven years. The study also suggested that passive strategy was helpful for picking a winner as passive managers operated at far lower fees than active managers and because of lower portfolio turnover rates incurred lower transaction costs. The study recommended the use of Morningstar system for selecting the better performing funds and avoiding the
worse performing. The study concluded that through thorough research and careful analysis one could choose winning fund easily.

**Panigrahi (1996)** studied the growth of the mutual fund industry from 1991-92 to 1994-95 by using various components like rate of return, standard deviation, coefficient of multiple determination and risk free rate of return and showed that both UTI and other mutual funds grew enormously during the post liberalization period in terms of investible funds, number of investors and number of schemes. The study showed that non UTI mutual funds launched many schemes but their growth in terms of investors and number of schemes was not impressive. Industry growth rate of investible funds for the entire period was on the higher side due to high growth rate of 46.86 per cent experienced by non UTI public sector mutual funds. At the end of March 1995, there were 21 mutual funds including UTI out of which 11 were in the private sector, seven in the banking sector and two in the insurance sector. The study revealed that UTI concentrated mainly on income schemes while private and banking sector focused their attention on growth schemes and income cum growth schemes.

An analysis of scheme wise distribution of outstanding capital of all public sector mutual funds revealed a shift in popularity from the income schemes to schemes providing growth with liquidity. Mutual fund collections as a proportion of aggregate bank deposits constantly rose from a meager 8.78 per cent in 1991-92 to 15.91 per cent in 1994-95. Expenses as a portion of income generated also increased from 2.27 per cent to 4.25 per cent during the period of study. The study emphasized that money market mutual funds, bond market mutual funds, sector specific funds and index funds should be developed to cater to the specific needs of the investors.

**Jayadev (1996)** in his paper made a study of two growth oriented mutual funds namely ‘Mastergain 1991’ of UTI and ‘Magnum Express’ of SBI mutual fund for the period of 21 months from (June 1992 to March 1994) with the help of monthly net asset values. Firstly, he tried to investigate whether the growth oriented mutual funds were earning higher returns than the benchmark returns by using Jensen, Treynor and Sharpe method. Secondly, he tried to test whether such funds were offering the advantages of diversification, market timing and selectivity of securities to their investors. The results showed that in term of returns and performance Mastergain
had average return of 2.89 per cent as against market earning of 2.84 per cent and positive alpha indicating superior performance while Magnum Express had negative alpha and could not earn higher return than market portfolio. But in terms of total risk, both the funds were inferior to their benchmark returns. Magnum Express was found to be highly diversified with high coefficient of determination i.e. .71 (.35 for Master Gain) which resulted in reduction of total risk. Further the fund managers of two funds were poor in terms of their ability of market timing and selectivity.

**Yadav & Mishra (1996)** in their paper evaluated the performance of 14 growth schemes using monthly data in India for the period April 1992 to March 1995. Each scheme was evaluated with respect to the broad based BSE National Index to find out whether the scheme was able to beat the market. It also examined whether the returns were commensurate with the risk undertaken by the fund managers. The study used three risk–adjusted performance measures namely Sharpe Index, Treynor Index and Jensen Measure and one non risk adjusted measure namely average returns. The analysis showed that the funds as a whole performed well in terms of non-risk adjusted measure of average return. In terms of risk adjusted performance, mutual funds in aggregate had a higher Sharpe Index which implied that mutual funds performed well in terms of diversification and total variability of returns. The results showed lower Treynor Index which meant that sampled funds failed to provide adequate risk premium per unit of systematic risk. Though Jensen’s alpha was not significantly different from zero, a majority (57 per cent) of the schemes had positive alpha signifying superior performance in terms of selectivity/timing ability of fund managers. The results indicated that fund managers of these growth schemes adopted a conservative investment policy and maintained a low portfolio beta and were successful in limiting losses in a rapidly falling stock market.

**Singh (1999)** in his study analysed the income, growth and balanced schemes of mutual funds from 1994-95 to 1997-98 by using various measures such as composite rate of return, Sharpe’s performance measure and Treynor’s performance measure.

The study revealed that out of the various categories of mutual fund schemes the income and balanced schemes performed better whereas the growth schemes did not perform well. The income schemes were the best performers out of all the categories of schemes. The composite rate of return showed that the mutual funds performed
well during 1994-95 and 1997-98. The performance of the open ended schemes was adjudged better than that of listed schemes.

**Chawla and Batra (2000)** in their study analysed the position of SBI mutual fund vis-à-vis other competitors (UTI, public sector, private sector) and investors’ perceptions toward mutual funds as a mode of investment. The study was based on both primary and secondary data collected from the selected towns of Punjab. A sample of 100 investors was drawn at random after stratification.

The study indicated that SBI mutual funds were not favorably placed in relation to other competitors. The main reasons for poor performance were large exposure of B-2 group scripts and high cost of initial investment. The competitors were better placed because of aggressive marketing, better product mix and prompt delivery in case of redemption. The study indicated that majority of respondents opted mutual funds for tax benefits (53%) followed by easy liquidity (27%), safety of investment (12%), and higher return (8%). The study highlighted the need for awareness programmes and innovative funds like pension funds and venture capital funds.

**Singh and Singla (2000)** in their study evaluated the investment performance of 12 growth oriented mutual funds on a monthly basis from 1992 to 1996 by applying mean return, Sharpe, Treynor and Jensen measures. The BSE National Index was used as the proxy for market index.

The study highlighted that average monthly return for the sample schemes was -.0766 as against monthly market return of .0027. On the basis of Sharpe index the average value of 12 mutual funds was -0.142 and the same was -0.926 in case of market index. Low Treynor ratio showed that investors did not receive adequate returns. Further Jensen measure showed that average value of alpha was -0.002 which indicated that mutual funds earned less with the given level of systematic risk and were not able to forecast future security price.

**Gupta (2000)** in his study examined the growth and development of the mutual fund industry in India during the period 1987 to September 1999. The study revealed that mutual fund industry witnessed major growth in terms of investible funds, number of mutual fund schemes, investor base and range of products offered to the investors.
The total assets under management of the industry stood at 85,487 crore as on September 30, 1999 of which UTI alone accounted for Rs. 63,113 crore (74%) while the share of public sector funds was Rs. 8,831 crore (10.2%). As on September 30, 1999, the total number of schemes offered were 311 of which 169 were close-ended and the remaining 142 were open-ended. Several schemes were designed to suit the needs of different investors. The study showed that investors reposed their confidence in terms of resource mobilisation by the industry. The study concluded that the Indian fund managers were not able to time the market correctly and risk and return characteristics of the Indian mutual fund schemes were not in conformity with their stated objectives.

Chakarabarti and Rungta (2000) in their study 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 and scheme selection.

Singh and Chander (2000) in their paper analysed mutual funds on the basis of parameters like growth in net resources mobilised by mutual funds in India since their inception, trend in fund mobilisation by UTI, private sector and public sector mutual funds, net resource mobilisation by different mutual funds within the private sector and scheme-wise break up of resources mobilised etc. The study showed that income/debt schemes outnumbered the growth and balanced schemes. Further the number of open-ended schemes was more than close-ended schemes. The study also found that performance was independent of corpus size and the performance of debt funds was better than equity funds. The study proposed that strict adherence to SEBI guidelines must be ensured to thoroughly protect the investors.

Chander (2000) in his study analysed investment performance of 34 mutual fund schemes from 1994 to 1997 in relation to three fund characteristics, nature (Open and close ended), sponsorship (UTI, banks, other financial institutions) and investment objectives (Growth, income, balanced funds) by using Sharpe, Treynor and Jensen measures. BSE-Sensex was used as benchmark portfolio. The Sharpe measure revealed that open ended mutual fund outperformed close-ended mutual funds in term of superior returns. Bank sponsored followed by UTI sponsored fund schemes did fairly well in relation to sponsorship. Income funds outsmarted both growth and
balanced funds. As per Treynor and Jensen’s measure majority of fund schemes exhibited poor performance in terms of time-weighted return. The study revealed that market timing of mutual fund investments had resulted in negative performance ranging between 11.9 per cent and 14.1 per cent. The study suggested that frequent buying and selling was the best investment strategy in view of greater element of volatility in Indian security market.

Turan and Bodla (2001) in their study examined the growth of both public and private sector mutual funds in India in terms of resource mobilisation, promotion of various schemes and their investment pattern for a period 1995 to 1998. The study used secondary as well as primary data. To carry out return and risk analysis and evaluate performance of mutual funds according to Sharpe’s, Treynor’s and Jensen’s Model a large sample of mutual fund schemes consisting of 70 schemes in 1995, 79 schemes in 1996, 88 schemes in 1997 and 81 schemes in 1998 was taken on judgment basis. The primary data was collected from 325 investors from Haryana, Delhi and Chandigarh. The analysis showed that a large majority of both listed and open-ended schemes incurred losses during the reference period. The poor performance might be due to the fact that most of the fund managers adopted defensive investment strategies. The study suggested that in order to make mutual funds an attractive investment product differentiation and innovations should be introduced.

Rajeswari & Ramamoorthy (2001) attempted to measure the awareness of retail investors about the concept and functioning of mutual funds in Bombay, Bangalore and Hyderabad. The study collected data through a survey from 92 potential investors (67 men and 25 women) and 101 present investors (72 men and 29 women) from the three cities during May 2000. The study revealed that 56.7 per cent of men and 52.0 per cent of women among potential investors had poor/inadequate awareness about mutual funds. Among present investors, 33.3 per cent of men and 65.5 per cent women had poor/inadequate awareness. On good awareness regarding concept and functioning of mutual funds, only 18.1 per cent of men and none of women from present investors scored above 85. The study suggested proper publicity about various schemes. Another disturbing finding of the survey was that majority of men and women among potential investors and majority of women among present investors had no knowledge of AMFI (Association of Mutual funds in India), thereby revealing
their ignorance regarding role and objective of AMFI. Even though the sample size was small, the findings of the survey were significant as it showed state of affairs in cities like Bombay, Bangalore and Hyderabad. So AMFI should take steps to create awareness among the investing public about its existence and role and should gear up its investors’ education programme specially tailored to suit the regional needs to tap the vast market segment existing in rural areas.

**Gupta (2001)** in his research paper examined the performance of 73 mutual fund schemes both from the public as well as private sector and tested market timing abilities of the mutual fund managers for a period (1994-1999) in terms of seven performance measures (a) Rate of Return (b) Sharpe ratio (c) Treynor ratio (d) Jensen differential return measure (e) Sharpe’s differential return (f) Appraisal ratio (g) Components of Investment performance measure using weekly NAV. Two benchmarks portfolio (a) Market Index (b) Set of fundexes (based on average of Sharpe ratio with similar objectives) was used for this purpose. Weekly yield on 91 day Treasury Bills (T-bills) was used as a proxy for risk free return. Two Measures Treynor and Mazuy & Henriksson were used to test market timing abilities of fund managers.

The study highlighted that average return earned by selected schemes was 0.35 per cent per week whereas average risk free return and average market return were 0.38 per cent and 0.0062 per cent which implies that sample schemes performed poorer than the risk free assets but better than market. Further, out of 73 schemes 54.8 per cent outperformed the relevant benchmark in Sharpe ratio but this ratio was 36.98 per cent in case of Treynor. The results pertaining to Sharpe and Treynor ratios reflected some conflicts in the ranking of schemes. In case of Jensen and Sharpe differential measures, mutual fund schemes did not generate even the expected return.

**Panda and Tripathy (2001)** examined the customer orientation in designing mutual fund products by taking 252 mutual fund schemes including 103 income schemes, 94 growth schemes and 55 hybrid schemes. The researchers studied various need expectations of small investors from different types of mutual funds available in the Indian market and identified their risk return perception. The study was based on a survey of 350 respondents through a questionnaire covering different group of investors. Researchers used factor analysis for identification of the key features
preferred by the respondents in a mutual fund product. Twenty four statements regarding key product variables ranging from awareness of product to brand name were generated for measuring respondent’s opinion on a 7 point scale on the purchase preference for mutual fund. SPSS version 10 was used for data analysis. The mutual fund product was explained through five factors namely F1:-Core Expectation, F2:-Tangible Product (Market Performance), F3:-Augment Product (Service Behavior), F4:-Persuasive Communication and F5:-Confidence Factor. The researchers felt that a prudent product design by adding the features expected by investors and spelt out in the research would make the new mutual fund products attractive for the Indian investors. The factors identified in the study provided key information inputs regarding investor’s preferences and priorities for guiding future mutual fund product managers in designing attractive mutual fund product for the Indian market.

Thenmozhi and Jama (2002) in their paper examined the competitive advantage for players in mutual funds based on the perception of mutual funds. The factors providing competitive advantages to the mutual funds were identified as brand name, asset mobilised, professional expertise, market share, experience in the industry, modernization in service, innovation in schemes, differentiation in schemes, customer service, brand loyalty, research strength, quality in investment portfolio, risk management, wide range of schemes and alliance with MNCs. The factors providing competitive advantage were primarily identified with the help of various research papers and then were authenticated with the help of the response from the industry, which was collected through a questionnaire. A questionnaire was prepared using a five point Likert Scale ranging from vital to least important. The respondents to the questionnaire were CEOs/Chief Investment Officer/Vice-president/Fund Managers. Ten companies out of thirty four mutual funds responded to the questionnaire as such the response rate was 29.41 per cent. The data was analysed using weighted average mean analysis. The study suggested on based of perception of mutual fund showed top five factors that give competitive advantage over their rival firms were Risk management- 4.89, Customer Service- 4.78, Professional Expertise- 4.67, Quality of Investment in Portfolio- 4.55, Brand Name- 4.11. The study concluded that mutual funds should focus on their competitive advantage factors to survive and grow in the highly competitive market apart from focusing on returns and market share.
Singh and Vanita in their paper (2002) studied the basic objectives, investors’ investment experience, investors’ perception in term of risk, return, safety, and diversification and investors’ preferences among various types of financial assets. The study was based on 150 respondents from Delhi.

The results revealed that irrespective of occupation and age-wise analysis mostly respondents invested in private mutual funds with open ended schemes (Equity Linked Saving Schemes) to avail tax benefits. Regarding criteria followed for mutual fund investment decisions, promoter’s name followed by the past performance of the mutual fund got the highest ranking. Repurchase, schemes type and after sale service also affected the judgment of mutual fund investors. Further, most of the respondents surveyed experienced unsatisfactory performance of UTI and public sector banks with regard to growth schemes. However, most of them considered mutual fund investments as reasonably safe, highly liquid but providing inadequate return. Among the various financial instruments available to investors, Mutual Fund were ranked below NSCs, PPF and LIC policies. The study highlighted the need for innovative schemes of mutual funds along with efforts for investors’ education.

Gilkar (2002) in his study examined the empirical evidence with regard to perceptions of 86 mutual fund investors (1995-2000) from Jammu and Srinagar with the help of structured questionnaire covering 24 statements. For the analysis of data t test was used. Among the various options ( Provident fund, insurance fund, bank deposit, mutual fund) mutual funds emerged as the last choice of the investors. Further, growth products were rated highest whereas income products had the least preference for investors. Recommendation of friends and relatives played major role in investment decisions. Investors expected tax relief, better returns from their investment in mutual fund product. Lack of awareness and poor investor services were considered as the main obstacles hindering the growth of mutual funds.

Chalam (2003) in his paper attempted to examine investment pattern of the investors and identified the variables influencing the investment behaviour of investors. An attempt was specifically made to know the factors responsible for specific attraction towards the different schemes of mutual funds. He also suggested some measures for enhancement of the popularity of mutual fund schemes in the public. The study
covered the period from 1997 to 2002. For collection of primary data, a sample of about 200 investors belonging to different occupations was chosen.

The study highlighted that a majority of investors preferred real estate investments, followed by mutual fund schemes, gold and other precious metals. The category-wise analysis showed that employees invested more in real estate followed by household sector which invested equally in real estate and gold ornaments. The investors’ preferences on securities revealed that most of them liked to invest in debt instruments owing to their assured and risk free return. The majority of the investors were interested to invest in growth schemes to take reinvestment benefit rather than the regular dividend. Among the various influencing factors that induced investment in mutual funds, return and tax saving formed more determinant factors. The study suggested transparency of investments, underwriting of mutual funds, efficient branch network, product innovations, better customer service and better regulatory framework to improve the popularity of mutual fund schemes in the public.

**Singh and Chander (2003)** studied the expectation of investors towards mutual funds. The study was based on 260 respondents from Punjab, Delhi, and Mumbai. The researcher’s made occupation-wise and age-wise analysis of data by using weighted average score (WAS) and ANOVA. Convenience and purposive sampling were used to select the respondents.

Irrespective of occupation-wise and age-wise categories past record of organization and growth prospect were found the most important factors for mutual fund investment decisions. From various options, repurchase facility got the highest ranking followed by prompt service, information adequacy and easy transferability. Further, most of the respondents gave highest ranking to return factors while appraising performance of mutual funds. However in all the cases age-wise and occupation-wise differences were visible and behaviour of retired people as slightly different from other age-wise categories.

**Mehru (2004)** in his study analysed the problems of mutual funds in India. The study highlighted several problems such as lack of awareness among investors, poor after sale services, non-disclosure of portfolio by mutual funds, inter-scheme transfer of funds and lack of professional fund managers. The author felt that mutual funds were
wrongly promoted as an alternative to equity investing and created very high expectations in the minds of the investors. The author suggested that greater transparency, increased innovations, better services to the investors, liquidity and higher returns could make mutual fund schemes more popular and investor friendly in India.

Elango (2004) in his study analysed 30 open ended mutual funds schemes comprising 15 public sector and 15 private/foreign schemes from (1999-2002) to identify best sector registering highest increase in NAV and to analyse whether past performance had any influence with future NAV by using statistical tools like mean, range, regression analysis and t-test.

The study highlighted that private/foreign funds registered a very consistent performance as compared to public sector schemes. In terms of range, private/foreign funds performed much better than public funds. In terms of association between previous year and current year NAV, results of regression analysis indicated that both public and private funds showed highly significant association at 1 per cent level of significance. The result of t-test indicated a highly significant difference between the NAV of public and private/foreign funds. The author suggested that aggressive and risk seeking investors must opt private sector schemes as they yielded higher returns based on the NAV performance.

Gupta and Gupta (2004) in their paper evaluated the performance of 57 equity mutual funds (including 10 tax planning funds) from 1999 to 2003 by applying five measures i.e. Rate of Return, Sharpe’s Ratio, Treynor’s Ratio, Jensen’s Differential return measures and Fama’s Component of investment performance. The researchers used weekly Net Asset Values (NAVs) for performance evaluation, S&P CNX Nifty as benchmark and weekly yield on 91 day Treasury bills (T-bills) as a surrogate for risk free rate of return.

Risk and return analysis of sample schemes showed that schemes on an average performed poorer than the risk free assets. The average return earned by the selected funds was 0.041 per cent per week whereas average risk free return was 0.15 per cent. The average return of the market was 0.038 per cent. The survey indicated that sample schemes were not adequately diversified as reflected by their coefficient of
determination. There was conflict in performance ranking pertaining to Sharpe and Treynor ratios. In terms of Jensen’s measures 20 funds (35%) had positive alpha values indicating superior performance, but only 3 of them were statistically significant at 5 per cent level of significance. For Sharpe Differential Measure, 30 funds showed superior performance. In terms of Fama’s component of investment performance, all the funds suffered negative performance on account of risk bearing activity of their fund managers.

Bansal (2004) in his paper concentrated on the analysis of some issues and ideas on how to pave the way for the fundamental and unprecedented growth in the opportunity zone. The study stressed that fund managers must migrate from industry mindset to opportunity zone mindset to look at the different spectrum of opportunities and should reposition themselves in a bigger canvas as the providers of collective investment schemes. The study suggested that market participants should use strategic product differentiation as a tool to create competitive advantage by using index warrant and basket warrant, apply the fundamental principles of corporate governance, be disciplined, have greater sense of fiduciary responsibility towards their investors, use derivative products for managing their risks, leverage on each other’s competencies, offer the investors with a wide range of quality products to choose from and serve them with outstanding services. He argued that a universal shop for mutual funds across the rural area and creating wide distribution network across the economy could help them in furthering their growth.

Jain (2005) in her study analysed the equity and balanced schemes of 12 sponsors from 1993-94 to 2003-04. The study was based on both primary and secondary data. A sample of 200 investors was drawn from the selected cities of Punjab. The study evaluated the performance according to Sharpe, Treynor and Jensen models.

The study revealed that the open ended schemes under all categories increased considerably whereas close ended schemes depicted the reverse trend. The Investors’ showed their inclination towards private sector as compared to public sector. The investment pattern of selected schemes showed that majority of equity schemes had more than 35 per cent of their investment in equity shares and exposure to equity was more in case of private sector schemes than public sector schemes. The results of primary data analysis revealed that mutual funds were the most preferred assets
followed by LIC Policy and Bank Deposits. Majority of the investors relied upon prospectus/newsletter while making investment in mutual funds. While making investment in mutual funds schemes, past performance of the scheme got the first rank followed by promoter’s name and sector where the investment will be made. Further, investors expressed positive opinion about future prospects of mutual funds. The study highlighted that majority of the schemes underperformed benchmark indices (S&P CNX Nifty, BSE Sensex and BSE 100) on the basis of Sharpe, Treynor and Jensen measures upto 1997-98. The number of schemes of underperforming as per Sharpe measure was less than the number of schemes underperforming as per Treynor measure.

Sondhi & Jain (2005) in their research paper evaluated financial performance of 36 equity mutual funds schemes (including 25 open ended and 11 close ended) from twenty one asset management companies belonging to private and public sector by using monthly NAV after making adjustment for dividend, bonus and right issues. 364 day T-bill was surrogated measure for risk free return. The researchers used two main statistical methods mainly mean and median. The study covered the period, which was divided into two-sub periods i.e. 1993-98, 1998-2002.

The monthly return in percentage were computed for 36 mutual funds and 364 day T-bills for sample period (1993-2002) on an aggregate basis, and for period (1993-98) and (1998-2002) on disaggregate basis. The study showed that mean as well as median returns for the aggregate period as well as for two sub periods were higher in case of 364 T-bills. The study showed that only one fourth of selected funds i.e. 9 out of 36 funds earned higher than T-bills for period 1993-2002. The study also highlighted that open ended equity mutual funds and equity mutual fund sponsored by private corporate enterprise performed better than close ended and PSU sponsored equity mutual funds. The poor choice of stocks and market timing were mainly responsible for poor performance of funds.

Sarma, Jain and Karthik (2005) analysed the growth and performance of mutual fund industry in India in terms of number of players, assets under management, number of schemes available and the returns they offered. The study was related to the period from 1964 to 2003 and covered top equity, balanced and debt funds for a period of 3 to 5 years depending upon maturity of various schemes.
The study highlighted that the debt and income funds had wider reach in term of asset under management as they offered a fixed return with less risk suitable to conservative investors. Huge differences were found between returns yielded by public sectors funds and private sector funds. Number of schemes offered in debt category was less than that of equity category but surprisingly more funds were collected through debt funds. The study suggested investors’ awareness programmes, better regulatory framework, launching of pension products, professional management, use of information technology and transparency in fund utilization and asset management to improve the working of mutual funds.

**Raju (2006)** in his paper analysed the mutual fund investments on the basis of investment priorities, factors considered before investing, investment objectives, expected returns, awareness level of mutual funds, sources of awareness and willingness of investors to invest in mutual funds. The study was based on a sample size of 200 respondents and covered the period from April 2005 to August 2005.

The study highlighted that the mutual funds were the least preferred investment as compared to bank deposits, post office schemes and real estate. The respondents gave highest ranking to safety factor before investing. The main objective of making investment in mutual fund was tax saving through ELSS. The majority of the respondents expected 5 to 10 per cent returns and they received information regarding mutual funds from marketing persons and they were not interested to invest their limited funds in the mutual funds. The study suggested that innovative marketing techniques like investor’s education, investor’s meets and approaching the investor through e-mail, SMS could make mutual fund schemes more popular. He further opined that introduction of new funds like derivative funds and real estate funds accompanied with more transparency could make mutual fund investments a preferred choice rather than an induced one.

**Raju and Rao (2008)** in their paper evaluated the performance of selected Indian mutual fund schemes in terms of five performance measures (a) Sharpe ratio (b) Treynor ratio (c) Jensen measure (d) Sharpe differential return measure (e) Fama’s components of investment performance using adjusted monthly NAV of 60 schemes from 10 mutual funds for the five year period, that is, from April 2000 to March 2005. Two Benchmark Portfolios (a) Market Index (b) Set of Fundexes was used for
this purpose. Monthly yield on 91-days Treasury Bills was used as a surrogate for risk-free rate of return. An analysis of risk and return characteristics for the selected mutual fund schemes revealed that they were not in conformity with the risk involved in them and their stated objectives. Growth schemes earned on an average, a return of 2.072 per cent per month with an average risk of 14.86 per cent, whereas the income schemes earned an average return of 0.697 per cent per month with an average risk of 3.52 per cent. The study indicated that performance of income schemes was much better than that of growth schemes. While comparing performance of schemes with systematic risk measured in terms of beta it was evident that as many as 54 schemes were defensive (including growth schemes). The average diversification was 29.77 per cent which implied that sample schemes were not adequately diversified. A comparison of the results pertaining to Sharpe and Treynor ratios revealed some conflicting results due to the fact that Sharpe ratio takes into account the total risk of the portfolio whereas the Treynor’s ratio considers only market risk. In terms of Jensen’s measure, 39 schemes had positive alpha values indicating superior performance. Results of Sharpe differential returns indicated that 37 schemes showed negative differential returns indicating that these could not generate return commensurate with the risk assumed due to their poor diversification. As per Fama’s component of performance definite relationship could be observed between schemes betas and their returns. The authors suggested that manager of the schemes should redesign the investment pattern by identifying the likely phases in the market well in advance and emerging stocks on a continuous basis. They should adopt an active approach to portfolio construction rather than a passive approach.

Deb (2008) studied return-based style analysis of equity mutual funds in India and analysed their relative performance with respect to style benchmark. The study was based on 96 schemes belonging two group-ELSS Group (23 Schemes) and Growth Group (73 Schemes). It covered the period from January 2000 to June 2005. The results revealed that Indian equity fund managers were not able to beat their style benchmark on the average. Though all the funds in the sample were equity schemes, the fixed income assets class was an important component of their style exposure. Most important components of style exposure were the mid-cap stocks.
Mittal and Gupta (2008) in their paper examined the awareness of the investors about mutual funds and various factors affecting the investment decision in the mutual funds. The study revealed that mutual funds had comparative advantage over other options due to high return, high safety, high liquidity and high convenience with moderate volatility. When compared to other investment options, it ranked third most preferred option, Insurance and government bonds having first and second positions. The overwhelming majority (85%) of the respondents were aware of the mutual fund product and risk associated with it and most of them were satisfied with the service provided by mutual fund. In brand acceptance analysis, SBI mutual fund had the highest acceptability.

Chavali and Jain (2009) in their study analysed the performance of 16 equity linked saving schemes by using Sharpe ratio, Standard deviation, Beta, Alpha, R-Squared Cluster analysis and Multi-Variate analysis. They also studied the awareness level of investors based on survey of 75 salaried class respondents in Delhi. The results revealed all the equity linked saving schemes had different risk and return parameters. On the basis of comparison of selected funds, the researcher recommended investment in SBI Magnum Tax Gain Scheme. The study further revealed that 85 percent of the respondents were aware of mutual funds. Surprisingly a large number of investors investing in equity linked saving schemes were not aware about benefits attached with the schemes.

Raju and Rao (2009) in their study analysed the market timing ability of selected Indian mutual fund managers. Market timing ability of selected managers was analysed from April 1, 2000 to March 31, 2005. The study covered 60 schemes chosen both from public and private sector. They used two important models, namely, Treynor and Mazuy and Henriksson and Merton with the BSE Sensex and NSE Nifty as market proxies. The results indicated that majority of the selected mutual fund scheme managers were not seriously engaged in any market timing activities and were relying namely on stock selection skill. With NSE Nifty as market proxy, it was observed that 29 schemes had positive market timing and 20 schemes exhibited positive values. As per Henriksson and Merton model 23 schemes exhibited positive gamma values with BSE Sensex as market surrogate. The market timing ability of the
managers of growth schemes was better than the managers of balanced and income schemes. Further, fund managers of private sector exhibited better market timing.

**Viramgami (2009)** in his study of resources mobilization by Indian mutual fund industry concluded that Income schemes, Liquid/MM schemes, Growth schemes showed growth between March 2000 to March 2007. In terms of resources mobilisation, liquid/money market, Growth, ELSS and Income funds emerged as the most popular schemes among investors and these three accounted for more than 70 per cent of the resources. Among various sectors operating in mutual fund industry, private sector mutual funds were the most prominent players in the industry.

**Miglani (2010)** in his study examined the growth and development of mutual fund industry in India and evaluated the performance of selected mutual fund schemes. He also tested the market timing abilities of mutual fund managers. The study was based on 98 mutual fund schemes both from public and private sector covering period from 1 April 1999 to March 31, 2004. For evaluating the performance of mutual fund schemes, data was analysed by using Rate of Return, Sharpe measure, Treynor measure, Jensen differential return measure, Sharpe differential return measure and appraisal measure. To check the market timing, Treynor and Mazuy measure and Henriksson and Merton measure were used. The results revealed that out of the total resources mobilised by all the mutual funds, UTI had the maximum share. The number of schemes increased from 116 to 441 during the period 1992 to 2004. As per risk and return analysis, majority of the fund managers invested in risky assets for getting maximum return. Beta value showed that only tax planning schemes were invested according to their systematic risk. Overall results of all the performance measures showed that most of the schemes were performing very well. Market timing models indicated that fund managers generated superior performance due to their involvement in security selection but they failed in timing the market correctly.

**Gupta (2011)** in her paper explained the current state of mutual fund industry based on following aspects: assets under management growth, asset under management to GDP ratio, share of mutual fund in household financial savings in India, products, industry structure and problems associated with mutual funds. The study revealed that low customer awareness levels and financial literacy posed the biggest challenge in channelizing household savings into mutual funds. Further, fund house showed
limited focus on increasing retail penetration. The researcher viewed that mutual fund industry was largely product-led and not customer focused. She suggested strong regulatory framework, transparency and disclosure policies, customer involvement, wider approach to cover Tier 2 and Tier 3 cities, upgradation of technology, innovation in products and customer satisfaction for survival of mutual funds in competitive environment.

Vyas and Moonat (2012) studied the perception and behaviour of mutual fund investors in Indore, Madhya Pradesh. The study was based on 363 mutual fund investors. The results revealed that most of the respondents invested in equity options with a time span of one to three years. Though 73 per cent of the investors were aware about the risk associated with mutual funds yet only 53 per cent investors analysed the risk. Lump sum investment was the most preferred mode followed by SIP. Gold was the most important option among investors and mutual funds ranked 6th in this regard. Further mutual funds got an average score on all parameters like safety, liquidity, reliability, tax benefits and high returns.

Vijayakumar, Muruganandan and Rao (2012) in their study examined the relationship between fund performance and fund characteristics using 14 open-ended funds of fund from 2004 to 2008. The fund performance was measured by fund returns computed on the basis of daily NAV. The fund characteristics variables employed as explanatory variable in the estimation included standard deviation as a measure of risk, turnover ratio, income ratio, fund size measured by average net assets and expenses ratio. Three methods of panel data model, namely, common constant method, FEM and REM were used. The study found a strong positive relationship between fund performance and fund riskiness proxies by standard deviation of return, fund size and expenses ratio. There was negative relationship between fund performance and turnover ratio. It was observed that fund manager effectively managed large-size funds.

Gill and Arshdeep (2012) in their study investigated the selectivity and market timing ability of mutual fund managers in India by using the Jensen, Treynor and Mazuy and Henriksson and Merton models for the period 2002-06. The study was based on a sample of 97 open-ended mutual fund schemes consisting of 56 growth schemes and 41 schemes of dividend option. The empirical evidence revealed that
fund managers of some of the selected mutual fund schemes were engaged in micro forecasting or stock selection, as the value of alpha in case of 31 scheme of growth option and 17 schemes of the dividend option in terms of Jensen measure; 34 schemes of the growth option and 22 schemes of the dividend option in case of TM model; and 33 schemes of the growth option and 24 schemes of the dividend option in terms of HM model, were positive and statistically significant. However, none of the fund managers of the selected schemes were successful in exhibiting significantly positive value of gamma estimates indicating that fund managers lacked market timing skills. The results suggested that mutual fund managers in India were not seriously engaged in any market timing activities and relied only on stock selection skills. In addition, managers of a few schemes were timing the market but in wrong direction. The results reported in the study were consistent with that of prior research studies on mutual funds.

The above studies have highlighted the differences in the performance of public sector and private sector mutual funds. Further, many a times funds could not make proper selection of securities or time their investments resulting into low returns. Awareness of investors about mutual funds is low and many of them are not aware about their asset management company. As a result, mutual funds rank lower in choice as an investment alternative when compared with other investment option available.