CHAPTER 2

REVIEW OF LITERATURE
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To meet the objectives of the present study and to develop a better understanding and insight of the research questions, an intensive and extensive review of relevant literature was undertaken. A detailed scan of various journals, magazines, newspapers, books, proceedings of conferences and the internet was undertaken to bring out previous studies and researches that would be of help to build an understanding of mutual funds. Some of the relevant studies that impacted the understanding of the present subject of mutual funds and its performance in the financial sector have been presented below:

**Friend, et al., (1962)** made an extensive and systematic study of 152 mutual funds found that mutual fund schemes earned an average annual return of 12.4 percent, while their composite benchmark earned a return of 12.6 percent. Their alpha was negative with 20 basis points. Overall results did not suggest widespread inefficiency in the industry. Comparison of fund returns with turnover and expense categories did not reveal a strong relationship.

**Irwin, Brown et.al, (1965)** analyzed issues relating to investment policy, portfolio turnover rate, performance of mutual funds and its impact on the stock markets. The schoolwork identified that mutual funds had a significant impact on the price movement in the stock market. The cram concludes that, on an average, funds did not perform better than the composite markets and there was no persistent relationship between portfolio turnover and fund performance.

**Treynor (1965)** used ‘characteristic line’ for relating expected rate of return of a fund to the rate of return of a suitable market average. He coined a fund performance measure taking investment risk into account. Further, to deal with a portfolio, ‘portfolio-possibility line’ was used to relate expected return to the portfolio owner’s risk preference.

**Sharpe (1966)** attempted to analyse the bearings on the measurement and prediction of mutual fund performance. It has been shown that performance can be evaluated with a simple yet theoretically meaningful measure that considers both average return and risk.
Sharpe and William (1966) developed a composite measure of return and risk. He evaluated 34 open-end mutual funds for the period 1944-63. Reward to variability ratio for each scheme was significantly less than DJIA and ranged from 0.43 to 0.78. Expense ratio was inversely related with the fund performance, as correlation coefficient was 0.0505. The results depicted that good performance was associated with low expense ratio and not with the size. Sample schemes showed consistency in risk measure.

Treynor and Mazuy (1966) evaluated the performance of 57 fund managers in terms of their market timing abilities and found that, fund managers had not successfully outguessed the market. The results suggested that, investors were completely dependent on fluctuations in the market. Improvement in the rates of return was due to the fund managers’ ability to identify under-priced industries and companies. The study adopted Treynor’s (1965) methodology for reviewing the performance of mutual funds.

Jensen (1967) reported that on an average the funds apparently were not quite successful enough in their trading activities to recoup even their brokerage expenses. Funds on average have done an excellent job of minimizing the “insurable” risk born by their shareholders. Thus the results reported here should not be construed as indicating the mutual funds are not providing a socially desirable service to investors; that question has not been addressed here. The evidence does indicate, however, a pressing need on the part of the funds themselves to evaluate much more closely both the costs and the benefits of their research and trading activities in order to provide investors with maximum possible returns for the level of risk undertaken.

Jensen (1968) developed a composite portfolio evaluation technique concerning risk-adjusted returns. He evaluated the ability of 115 fund managers in selecting securities during the period 1945-66. Analysis of net returns indicated that, 39 funds had above average returns, while 76 funds yielded abnormally poor returns. Using gross returns, 48 funds showed above average results and 67 funds below average results Jensen concluded that, there was very little evidence that funds were able to perform significantly better than expected as fund managers were not able to forecast securities price movements.
Smith and Tito (1969) examined the inter-relationships between the three widely used composite measures of investment performance and suggested a fourth alternative, identifying some aspects of differentiation in the process. While ranking the funds on the basis of ex-post performance, alternative measures produced little differences. However, conclusions differed widely when performance were compared with the market. In view of this, they suggested modified Jensen’s measure based on estimating equation and slope coefficient.

Fama (1972) developed methods to distinguish observed return due to the ability to pick up the best securities at a given level of risk from that of predictions of price movements in the market. He introduced a multi-period model allowing evaluation on a period-by-period and on a cumulative basis. He branded that, return on a portfolio constitutes of return for security selection and return for bearing risk. His contributions combined the concepts from modern theories of portfolio selection and capital market equilibrium with more traditional concepts of good portfolio management.

McDonald and John (1974) examined 123 mutual funds and identified the existence of positive relationship between objectives and risk. The study identified the existence of positive relationship between return and risk. The relationship between objective and risk-adjusted performance indicated that, more aggressive funds experienced better results.

Gupta (1989) evaluated fund performance in India comparing the returns earned by schemes of similar risk and similar constraints. An explicit risk-return relationship was developed to make comparison across funds with different risk levels. His study decomposed total return into return from investors risk, return from managers’ risk and target risk. Mutual fund return due to selectivity was decomposed into return due to selection of securities and timing of investment in a particular class of securities.

Ippolito (1989) findings were consistent with the theory of efficiency of informed investors. The estimation that risk-adjusted return for the mutual fund industry was greater than zero and attributed positive alpha before load charges and identified that fund performance was not related to expenses and turnover as predicted by efficiency arguments.
Baur, Sundaram and Smith (1995) outlined the pricing fundamentals of open-end and close-end funds, and described the transaction cost of buying and selling funds. The U.S.A.’s experience of mutual funds described how these institutions could change a country’s capital market and individual investment patterns. The study disclosed that the continuous redemption privilege of open-end funds had vulnerable consequences in the pricing of each type of fund, the assets held by each type of fund and the manner in which the transaction and management fees were collected.

Malkiel (1995) suggested that equity mutual fund managers achieve superior returns and that considerable persistence in performance exists. For Returns from Investing in Equity Mutual Funds 1971 to 1991 a unique data set including returns from all equity mutual funds existing each year. These data enable us more precisely to examine performance and the extent of survivorship bias. In the aggregate, funds have underperformed benchmark portfolios both after management expenses and even gross of expenses. Survivorship bias appears to be more important than other studies have estimated. Moreover, while considerable performance persistence existed during the 1970s, there was no consistency in fund returns during the 1980s.

Conrad and Terry (1996) study identified a negative correlation between asset size of the fund and the expense ratio. The results of the study brought out that, larger funds had lower expense ratios due to economies of scale. Equity funds had spent heavily to acquire information for trading decision and were consistent with the theory of information pricing. The high beta, high expenses and high turnover in the aggressive growth group than in long-term growth funds and income funds suggested higher costs being associated with obtaining and using corporate information in emerging and volatile market.

Dellva, Wilfred and Olson (1998) studied 568 mutual funds without survivorship bias. The results indicate that, informational competency of funds increased the efficiency, reduced expenses and provided for higher risk-adjusted returns. Redemption fees had positive and significant impact on expenses. International funds had higher expense ratios.

Zheng (1999) studied the difference between investors' returns and the average mutual fund returns and reported that investors can do better than the average fund systematically and was related to performance persistence. The smart money effect,
however, was not equivalent to investors chasing past performance. Smart money also display a size effect in that superior returns are earned principally by new money flows into and out of small funds rather than large funds. It will be interesting to explore further the potential reasons for the smart money effect and the size effect.

**Barber, Odean and Zheng (2000)** found that on purchasing mutual funds, investors use a representative heuristic. Investors believe that recent performance is overly representative of a fund’s future prospects. Thus, they predominantly chase past performance; over half of all purchases occur in funds that rank in the top quintile of past annual returns. This behavior may be reasonable, since there was empirical evidence that top-performing mutual funds tend to repeat. However, it has been believed that it is more likely that investors are unrealistically optimistic about the odds that fund performance will persist than it is that they have rationally interpreted the empirical evidence regarding performance persistence. There is a positive relation between past performance and mutual fund sales.

**Bansal Manish (2003)** surveyed 2,819 respondents and revealed that, the percentage of investors holding only UTI schemes reduced over the years. The unit holders’ loyalty seemed to have become a myth as investors were looking for performance. Unit-holders spread their holdings over two or more funds with an urge to diversify increasing competitive mutual fund environment.

**Sapar, Narayane et al., (2003)** examined the performance of Indian mutual funds in a bear market through relative performance index, risk-return analysis, Treynor's ratio, Sharp's ratio, Sharp's measure, Jensen's measure, and Fama's measure with a sample of 269 open ended schemes (out of total schemes of 433). The results of performance measures suggest that most of the mutual fund schemes in the sample of 58 were able to satisfy investor's expectations by giving excess returns over expected returns based on both premium for systematic risk and total risk.

**Teoa and Wooc (2003)** Used stock and mutual fund data, and found strong evidence for reversals at the style level (e.g., large value, small growth, etc.). There are significant excess and risk-adjusted returns for stocks in styles characterized by the worst past returns and net inflows. Also find evidence for momentum and positive feedback trading at the style level. These value and momentum effects are driven
neither by fundamental risk nor by stock-level reversals and momentum. Taken together, the results are consistent with the style-level positive feedback.

Berk and Green (2004) introduced a parsimonious rational model of active portfolio management that reproduced many regularities widely regarded as anomalous. Fund flows rationally respond to past performance in the model even though performance was not persistent and investments with active managers do not outperform passive benchmarks on average. The lack of persistence in returns does not imply that differential ability across managers was nonexistent or unrewarded or that gathering information about performance was socially wasteful. The model can quantitatively reproduce many salient features in the data. The flow-performance relationship was consistent with high average levels of skills and considerable heterogeneity across managers.

Dowen and Mann (2004) studied some aspects of mutual fund behavior and found that over time, the managers of larger funds and larger fund families produce greater returns at lower cost. Much of the difference in performance is related to differences in portfolio objective and may be due to the time period studied. The cost structure in the mutual fund industry to be consistent with the existence of economies of scope, in that cost ratios for individual funds decrease as the number of different types of funds controlled by the asset manager increase.

Jutur Sharath (2004) studied 58 schemes during the bear period (September 1998 to April 2002). He identified that the risk was low for 37 schemes, below average risk for 11 and of average risk for 10 schemes. Risk-return analysis revealed that, average mutual funds were found to be with low unsystematic and high total risk. The return was positive in the case of 46 schemes, with 30 schemes yielding above 5 percent. 32 schemes had positive Treynor ratio, 30 schemes had positive Sharpe ratio, 35 schemes had positive Jensen measure due to the bearish market with low CAPM returns.

Sapp and Tiwari (2004) found that the investors are able to predict mutual fund performance and invest accordingly. Further suggested that the investors do not select funds based on a momentum investing style, but rather simply chase funds that
were recent winners. A common factor in stock returns explains the smart money effect offers no affirmation of investor fund selection ability.

**Gallaher, Kaniel and Starks (2005)** examine that by past record of mutual fund decisions has been taken regarding the supply and demand of mutual fund products. Examined that several strategic decisions has been developed for the effective flow of funds. Establishing the previously documented relation between past return performance and flows into the fund at the individual fund level (on an annual basis) also exists at the mutual fund family level (on a quarterly basis) finding that past returns are a significant predictor of future family flows, but only for extreme relative returns. Overall, it suggest that the fund’s strategic decisions are important mechanisms through which mutual fund family management companies can affect their fund flows and consequent income.

**Kosowski, Timmermann, et.al. (2005)** tested whether the four-factor alphas of "star" mutual fund managers are due to luck or genuine stock picking skills. In particular, we examine the statistical significance of the performance and performance persistence of the "best" and "worst" funds by means of a flexible bootstrap procedure applied to a variety of unconditional and conditional factor models of performance. It indicated that the performance of the best and worst managers was not only due to luck, i.e. it cannot be explained only by sampling variability. Also uncover large differences between the performances of funds with different investment objectives. While there is strong evidence of superior performance and performance persistence among growth-oriented funds, using bootstrap tests for significance, there is no evidence of ability among managers of income-oriented funds.

**Avramov and Wermers (2006)** investigated Mutual Funds when returns were predictable. Open-end U.S. domestic equity Mutual Funds were formed in the presence of predictability (based on business cycle variables) in (a) manager selectivity and benchmark timing skills, (b) Mutual Funds risk loadings, and (c) benchmark returns. The proposed framework was found to be both general and applicable to real investment strategies.

**Muthappan and Damodharan (2006)** evaluated 40 schemes for the period April 1995 to March 2000. The study identified that majority of the schemes earned
returns higher than the market but lower than 91 days Treasury bill rate. The average risk of the schemes was higher than the market. 15 schemes had an above average monthly return. Growth schemes earned average monthly return. The risk and return of the schemes were not always in conformity with their stated investment objectives. The sample schemes were not adequately diversified, as the average unique risk was 7.45 percent with an average diversification of 35.01 percent. 23 schemes outperformed both in terms of total risk and systematic risk. 19 schemes with positive alpha values indicated superior performance. The study concludes that, the Indian Mutual Funds were not properly diversified.

Rao (2006) reported that today a common investor is generally confused regarding his (or her) choice of investing in mutual funds due to innumerable schemes available in the market. Bringing out the fact that the most of the Growth plans are better than Dividend plans in terms of superior returns and in terms of risk Growth plans had lesser risk (approximately 70%) and in terms of risk per return Dividend plans had higher coefficient of variation (approximately 65%) than Growth plans. The nature of returns sought by fund managers to be investment styles such as Growth, Dividend etc, the analysis points to the fact that investment style does matter as performances are driven by investment styles.

Khare (2007) opined that investors could purchase stocks or bonds with much lower trading costs through mutual funds and enjoy the advantages of diversification and lower risk. The researcher identified that, with a higher savings rate of 23 percent, channeling savings into mutual funds sector has been growing rapidly as retail.

Beaumont et.al., (2008) also examine the effects of herding behaviors and excessive trading patterns. Focused on the ways investor sentiment influences the returns and volatility on preferred indices and point out the salient effects of noise trading on financial markets. Employing a generalized autoregressive conditional heteroskedasticity model, the findings indicate that investor sentiment has a profound impact on volatility figures. Volatility rises sharply as investor sentiment becomes bearish. Moreover, there is a positive correlation between stock returns for indices and sentiment-based fund flows.

Frazzini and Lamont (2008) reported generally mutual fund flows is used as a measure of individual investor sentiment for different stocks, and found that high
sentiment predicts low future returns. Fund flows are dumb money—by reallocating across different mutual funds, retail investors reduce their wealth in the long run. This dumb money effect is related to the value effect: high sentiment stocks tend to be growth stocks. High sentiment also is associated with high corporate issuance, interpretable as companies increasing the supply of shares in response to investor demand.

Agrawal and Patidar (2009) empirically studied mutual funds on the basis of fund manager performance and analyzed data at the fund-manager and fund-investor levels. The study revealed that the performance is affected by the saving and investment habits of the people and at the second side the confidence and loyalty of the fund Manager and rewards affects the performance of the mutual fund industry in India.

Duggimpudi, Abdou and Zaki (2010) evaluated the performance of some equity diversified mutual funds in India for the past 10 years and indicated that the funds have outperformed the market in terms of their performance with higher returns for a given unit of risk. Furthermore, as to the ranking of different funds, both Treynor and Jensen techniques have a relatively similar ranking over the study period. Consequently, 18% of the funds have the same ranking for these techniques over the 10 years, 30% of the funds for the 5 years. The majority of the other funds show relatively close rankings under these two techniques. The top five funds have almost kept their positions under these three techniques. Therefore, the best funds are well diversified and give greater returns for a given level of risk.

Gilboa (2010) Observed that according to conventional economics, emotions and other extraneous factors do not influence people when it comes to making economic choices. Homo economicus was seen as rational in the sense that well being, as defined by the personal utility function, was optimized given perceived opportunities. That is, the individual seeks to attain very specific and predetermined goals to the greatest extent with the least possible cost.

Wessel (2010) observed the Great Recession (also referred to as the Lesser Depression, the Long Recession or the global recession of 2009) is a marked global economic decline that began in December 2007 and took a particularly sharp downward turn in September 2008. The active phase of the crisis, which manifested
as a liquidity crisis, can be dated from August 7, 2007 when BNP Paribas terminated withdrawals from three hedge funds citing a complete evaporation of liquidity. The global recession affected the entire world economy, with higher detriment in some countries than others. It is a major global recession characterized by various systemic imbalances and was sparked by the outbreak of the financial crisis of 2007-2008.

Martti, Lenno and Luna (2011) pointed out that some economists have claimed that the ultimate point of origin of the financial crisis of 2007–2010 can be traced back to an extremely indebted US economy. High private debt levels also impact growth by making recessions deeper and the following recovery weaker. In the US total debt now is about 350% of GDP and that number is among the highest ever recorded. Both theoretical and empirical evidence show that recessions are steeper in countries with high levels of private debt and/or credit booms. Found that a higher level of debt before a recession is correlated with smaller economic growth after the economic slowdown has finished.

Saini, Anjum and Saini (2011) outlined that mostly the investors have positive approach towards investing in mutual funds. In order to maintain their confidence in mutual funds they should be provided with timely information relating to different trends in the mutual fund industry. For achieving heights in the financial sector, the mutual fund companies should formulate the strategies in such a way that helps in fulfilling the investors’ expectations. The main task before mutual fund industry is to convert the potential investors into the reality investors. New and more innovative schemes should be launched from time to time so that investor’s confidence should be maintained. All this will lead to the overall growth and development of the mutual fund industry.

Selvam et.al (2011) studied the risk and return relationship of Indian mutual fund schemes. The study found out that out of thirty five sample schemes, eleven showed significant t–values and all other twenty four sample schemes did not prove significant relationship between the risk and return. According to t-alpha values, majority (thirty two) of the sample schemes’ returns were not significantly different from their market returns and very few number of sample schemes’ returns were significantly different from their market returns during the study period.
Shanmugham (2011) reported that investors invest in mutual fund either for risk reduction through diversification or ability of manager to pick the right stock or both. With a galore of mutual funds schemes available, picking the one expected to provide the best return proved to be the investor’s enduring dilemma. One element to look at was evaluating a fund manager’s stock selection strategies. Stock selection was perhaps the commonly used vector by those who followed an active portfolio strategy. Stock selectivity involves micro forecasting ability of the price movement of individual stocks that are under-valued or over-valued relative to the market.

Arora (2012) studied, for evaluating the performance of mutual funds include many parameters such as measuring fund performance, measuring return, measuring risk, risk adjusted return, comparing fund performance with a reference and various other standardized performance system. Comparison of some top equity diversified open ended mutual funds with BSE Sensex. It showed that there was insignificant difference between mutual funds return and Sensex. Though these equity diversified mutual funds are said to actively manage portfolios, but they failed to outperform the market instead of their active management by experienced fund managers.

Bahl and Rani (2012) carried out a comparative analysis of Mutual Fund Schemes in India investigating the performance of some open-ended, growth-oriented equity schemes for the period April 2005 to March 2011 (six years) of transition economy. Monthly NAV of different schemes have been used to calculate the returns from the fund schemes. BSE sensex had been used for market portfolio. The historical performance of the selected schemes were evaluated on the basis of Sharpe, Treynor, and Jenson’s measure whose results were expected to be useful for investors for taking better investment decisions. Results of the study showed that some of the mutual fund schemes had outperformed the benchmark return. The results also showed that some of the schemes had underperformed, these schemes were facing the diversification problem. In the study, the Sharpe ratio was positive for all schemes which showed that funds were providing returns greater than risk free rate.

Blanchett (2012) studied the impact of recent historical performance and fund flows, both independently and jointly, on the performance of domestic equity mutual funds. It has been found that across large-cap, mid-cap and small-cap mutual fund capitalization groups, the cost associated with fund flows, based on a market neutral
flow factor. The result of this analysis suggest there are significant costs associated with domestic equity mutual fund flows that should be considered during the mutual fund purchase and retention decision-making process.

**Goel, Mani and Sharma (2012)** observed that performance of any mutual fund is measured by its NAV. There are different factors that affect NAV of any mutual fund scheme. These factors are also known as performance indicators. Past performance of mutual funds explains how the fund has performed in the past and accordingly one can expect positive or negative performance in the future as well. Majority of studies suggest that the mutual fund companies having high turnover have performed well than companies with lower turnover. Expense ratio affects the performance of mutual funds positively. Mutual fund companies with larger asset base are performing better than lower asset based companies. Out of the total paper reviewed no clear relationship of load fee with performance was found. Literature suggests that the investment style does have an impact on the performance of the mutual funds. Mutual fund managers also do affect the performance of the mutual funds in many ways.

**Hede (2012)** analysed that modern financial economic theory is based on the assumption that the representative market actor in the economy was rational in two ways: the market actor makes decisions according to the axiom of expected utility theory and makes unbiased forecasts about the future. According to the expected utility theory a person is risk averse and the utility function is concave that is the marginal utility of wealth decreases. Assets prices were set by rational investors and, consequently, rationality based market equilibrium is achieved. In this equilibrium securities are priced according to the efficient market hypothesis.

**Prajapati and Patel (2012)** reported that some selected mutual fund companies have positive return during 2007 to 2011. HDFC and Reliance mutual fund have performed well as compared to the Sensex return. ICICI prudential and UTI Mutual fund has lower level of risk compare to HDFC and Reliance mutual fund. Beta is less than one to all selected mutual fund companies which means the funds are less volatile than the Index. Funds with beta close to one, means the fund’s performance closely match the benchmark index. Sharpe’s Index of HDFC Mutual fund is higher than the other, so it shows good performance compared to other funds. Treynor’s
Index result revealed that the HDFC and Reliance mutual fund offers better return in comparison to ICICI Prudential, UTI, and Birla Sun Life Mutual funds for the same level of risk exposure.

Sarish and Jain (2012) argued investment is the allocation of funds to assets and securities after considering their return and risk factors. Investor plans for long horizon after considering the fundamental factors and assumes moderate risk. The main objectives of rational investors are maximizing returns and minimizing risk, safety of the principal, tradability and liquidity are his subsidiary objectives. For the purpose of investment of saving the investor are having options to invest money in mutual funds and other financial instruments like equity shares, debentures, bonds, warrant, bank deposits. A common investor, who invests their savings into the different assets, is not very much aware about the mutual funds. Financial markets are constantly becoming more efficient by providing more promising solutions to the investors. The analysis finding suggest that majority of investor are aware about mutual funds and are willing to invest in mutual fund.

Various studies done on mutual funds shows (a) why investors invest in mutual funds (b) evaluation of performance of mutual fund include many parameters (c) performance of particular categories of mutual fund (d) composite measure of risk and return etc. None of the studies carried out so far, throws light on impact of recession on mutual fund, giving justification to the present research work.