CHAPTER 2

REVIEW OF LITERATURE

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CHAPTER 2
REVIEW OF LITERATURE

2.1 Introduction

A critical literature review within a specific field or interest of research is one of the most essential, but also complex activities in the process of research. The purpose is to gain an insight of knowledge and ideas that have been established on a topic. This chapter will draw from such a pool of professionally shared knowledge and will undoubtedly contribute further to the traditional understandings in this field.

In this chapter, the available literature on the different aspects of this study and the host of factors that has contributed to the phenomenal growth of the industry will be reviewed. The objective of this literature review is to understand the following aspects of the study:

- Conceptual awareness
- Regulatory issues
- Associated risk and returns
- Performance evaluation

For better understanding, the review of literature has been further divided under two broad classifications. They are:

- Review of Literature on Mutual Funds in India
- Review of Literature on Mutual Funds in Other Countries
In order to understand the journey of mutual fund industry in India and in other countries, the researcher has attempted in this chapter to review the available literature in the following paragraphs with regard to the different aspects of mutual funds.

2.2 Review of Literature on Mutual Funds in India

The number of researches in this area is low in India as compared to other developed nations. Since 1986, a number of articles and brief studies have been published in financial dailies, periodicals, professional and research journals, explaining the basic concept of Mutual Funds and highlight their importance in the Indian capital market environment. They touch upon varied aspects like Regulation of Mutual Funds, Investor expectations, Investor protection, Trend in growth of Mutual Funds and some are critical views on the performance and functioning of Mutual Funds. The literature review begins with the books that are available in India in this aspect of the study.

Sadhak H.\textsuperscript{12} in his book discusses in detail the growth of Indian mutual fund industry over a period of time. Dr. Sadhak lucidly explains the characteristics of mutual funds, and the benefits/risks of investing in them. In addition, he describes recent changes in regulatory practices, marketing strategies, investment management, products, distribution, and service delivery systems. Several improvements in the strategic and operational practices of mutual funds

are suggested keeping in mind the mechanisms used by fund managers in developed economies. These include:

- Stronger supervisory norms
- Improved standards of disclosure and managerial accountability
- Planning for risk minimisation as also business cycles and liquidity management and investment strategies
- Strategies for product development, market expansion and improvement in service standards
- Measures to improve operational efficiency.

Further, in the context of extreme market volatility, the book discusses the self-regulatory organisation (SRO), corporate governance and related fiduciary responsibilities in mutual funds.

Thus this revised edition provides fund managers and investors a thorough analysis of mutual funds.

Vaid Seema\(^{13}\) in this book has dealt with the conceptual and the regulatory framework and the growth of mutual funds. This book is very comprehensive and it explains the basic concepts in a very simple manner. The regulations and other aspects related to the regulatory framework have been covered extensively. The different types of schemes, their classifications, their characteristics and their relevance have been dealt with by this author in a very precise manner. The growth of mutual funds in India has been examined by the

author very critically. In short this book is a guideline for researchers and readers interested in this area of study.

Raju Venkatapathi\textsuperscript{14} in his book offers detailed description about various kinds of mutual fund products matching to the investor’s expectations and objectives. A comparative picture has been drawn to explain the pros and cons of each instrument so that the investor is able to choose the right one. The book also attempts to provide information to assist the investor to assess their risk-return profile and accordingly choose the right product. The author in this book has put enormous efforts to understand and analyse motivations of the mutual fund investors.

Gupta Amitabh\textsuperscript{15} in his book evaluates in detail the performance of mutual funds during the five-year period from April 1, 1994 to March 31, 1999. The study also investigates the market timing abilities of Indian mutual fund managers. It also examines the structural changes arising in the Indian mutual fund industry during the period 1987 to September 30, 2001. The book also examines the regulatory frame work of mutual funds, the growth of mutual fund industry in India and it also attempts to test the market timing abilities of fund managers. The book, thus, attempts to find whether the risk-return characteristics of mutual fund schemes are in conformity with their stated objectives, whether the Indian mutual funds been able to achieve benefits of

\textsuperscript{14}Raju Venkatapathi, Mutual funds in India-Investor’s perceptions, New Delhi, Quality publishing company, 2000.

\textsuperscript{15}Gupta Amitabh, A Study of Investment Management, New Delhi, Anmol Publications, 2002.
diversification, whether mutual fund managers possess superior stock selection skills, whether the fund managers have been able to beat the market and whether the legal framework within which mutual funds operate is sufficient for the healthy growth of the industry.

Bansal Lalit K.\textsuperscript{16} has portrayed a vivid picture of the concept of mutual funds, the constitution of mutual funds and the regulation of mutual funds. The author has also made an attempt to explain the accounting and disclosure practices followed by the mutual fund schemes. The different mutual fund schemes existing in India have been discussed in a separate chapter and he concludes the book by presenting the challenges of the mutual fund industry.

Gupta L.C and Choudhary Utpal K.\textsuperscript{17} in their book have examined the perception and attitude of investors towards mutual funds. This book gives valuable insight into the functioning of mutual funds in India. It brings out how the investors perceive mutual funds in relation to various types of investments. This study that was undertaken by the Society for Capital Market Research and Development and later published in book form, brings out the fact that competition in the mutual fund industry has grown and become vibrant in India and it also exposes the myth of investors' loyalty and malpractices of mutual funds. The study also highlights the crisis, which UTI, the oldest financial institution, experienced due to substantial net outflows i.e. redemption and


\textsuperscript{17} Gupta L.C and Choudhary Utpal K., How good are mutual funds, New Delhi, Society for Capital Market Research and Development.
repurchases exceeding sales. A remarkable finding of the study is the analysis of the investors' reactions to the US-64 crisis. The bulk of the investors have been the strong-holders of US-64. Only 20 per cent of the US-64 holders sold out their holdings after the news of the crisis. This pattern of behavior suggests that either the investors believed the crisis would blow over with the government's help or they had faith in the inherent strength of the scheme.

**Gupta L.C.** 18 made a Household Investor Survey in April 1992. The main objective of the mutual fund survey was to provide data on the investor preferences on mutual funds and other financial assets. The findings of the study provide a clear picture of the perceptions of the investors and their preferences for different savings instruments with emphasis on safety, risk and return. The findings of the study are more appropriate to the policy makers and mutual funds to design the financial products for the future.

**Bhalla V.K.** 19 in this book has unfolded the topics in to related chapters covering specific areas of Investment environment, Alternative Investment outlets for funds, Security analysis, Portfolio analysis and management, financial derivatives and International financial flows. The book in detail also describes techniques, vehicles and strategies for planning, implementing, and overseeing the optimal allocation of the funds of an investor or an institution in the changing environment.

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Sahadevan and Raju\textsuperscript{20} focused on data presentation on expenses and other related aspects, which are generally covered in annual reports of the mutual funds without going into the details of financial performance evaluation of the funds. The author has very beautifully presented the different forms of expenses incurred by a fund and how the expenses are shown in the company annual reports. A bird’s eye view of financial performance evaluation is given but the author has very carefully ignored the details in this regard. This book will be of great help to readers from accounting and management areas.

Sundar Sankaran\textsuperscript{21} describes the significance of mutual funds as a suitable investment avenue which caters to varied needs of investors. This book gives insights into how mutual funds work the types of mutual funds and their investment strategies and portfolio compositions. The legal structure and the expenses of the mutual fund are discussed in a comprehensive manner. The lesson to the investor given by the author is a very good guide for the investors.

Baid Rachna’s\textsuperscript{22} book is a fine exposition on the mutual fund industry, its products and services. This book covers the topics such as concept, role, formation and organisation of mutual funds, besides touching upon accounting

\textsuperscript{20} Sahadevan and Raju, M.T., Mutual Funds, Data, Interpretation and Analysis’, New Delhi, Prentice Hall of India Pvt. Ltd., 1996.


\textsuperscript{22} Baid Rachna, Mutual Funds Products and Services, New Delhi, TaxMann Publications (P.) Ltd., 2007.
and valuation, investment management, development of model portfolios and the unit holders’ protection. This book provides comprehensive information on a wide range of financial planning areas. This book provides, in a detailed yet concise format, the information that the uninitiated investor requires to enter the world of mutual fund investing and asset allocation recommendations.

Sisodiya Amit Singh\(^23\) highlights the journey of the mutual fund industry in the country, the various phases it went through in its over four decades of existence, and how increased deregulation paved the way for a healthy competition which benefited both the investors and the industry players. This book attempts to offer incisive insights into the Indian mutual fund industry. The book comprises of three sections namely, 'Indian Mutual Fund Industry-An Overview', 'Product Innovation-Enabling Greater Penetration', and, 'Issues and Challenges' which is briefly discussed in the following paragraphs.

Sisodiya Amit Singh, Reddy Aala Santosh and Zaheer Feroz\(^24\), highlights the emergence of the mutual fund industry as a major force in Indian financial markets. The article observes that with the total Assets Under Management (AUM) increasing from Rs.1,01,565cr in January 2000 to Rs.1,75,918cr by July 31,2005, the industry's growth has been nothing but exceptional. Further the article says that a slew of factors have contributed to a surge in the

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industry's growth. According to the author, a buoyant domestic economy coupled with a booming stock market has been one of the major drivers of growth in recent times, particularly in the last five years. Another significant factor facilitating this growth has been a comprehensive regulatory regime. Besides, increased focus on product and distribution innovations has also fuelled the growth of the industry.

Kumar Shishir and Sisodiya Amit Singh\textsuperscript{25} highlights the growing need for a strong distribution network and models for the mutual fund industry in India to serve the huge untapped market in the country. The authors observe that the intensifying competition and the need to attain economies of scale are forcing industry players to increase their reach in non-metro cities and small towns, where the potential is high, but, penetration is low. This is resulting in fund houses exploring innovative distribution channels like Depository and Distributor models along with the traditional ones like Collection Centre model. Further, increasing commoditization and growing needs of the customers are forcing players to shift to solution-based models from the product-based ones. In both the models, the role of the distribution channel remains critical as it helps face competition by maintaining relationships, providing advisory services and customizing need-based solutions.

Jain Abhinav in his article highlights that, in the long run, economies of scale will determine the survival of the players and consolidation is the way to gain that. He adds that the rush to merge has also been necessitated owing to several other factors. For instance, the mutual fund industry has until recently been very sluggish which made existence economically unviable for small players. Besides, some foreign players opted to pull out of the country owing to restructuring and realignment of their focus at the global level (for example, Newton Asset Management) and for some of them the small size of their asset under management simply made it unviable to commit time and investment (for example, Alliance Capital). The author concludes by saying that for many domestic, especially PSU fund houses, the lack of expertise necessitated their exit from the industry.

Rajeshwer and Jutur Sharat, suggests that the introduction of Gold ETFs in India heralds a new era in the market for gold. Historically, gold has been the best hedge against inflation. According to the authors, the purchasing power of gold has remained unchanged since ages and it is said that today by selling an ounce of gold, one can purchase the same quantity of goods as was the case some centuries ago. In the investment landscape, gold has always enjoyed a unique status. It is considered among the liquid forms of investment. Thus, units of GETFs are expected to fare better than gold itself, as they can be traded.

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27 Rajeshwer and Jutur Sharat, "Gold Exchange Traded Funds-Enter India", Mutual Fund Industry in India-An Introduction, ICFAI university press (publication division)
in the stock markets and their liquidity is at-par with equity shares. A single unit of GETF represents 1/10th of an ounce of gold. GETFs' units will be traded on the stock exchanges, just like equity shares. Institutional investors can also look forward to an opportunity of reaping the benefits of asset diversification by deploying a portion of their funds into GETFs. Thus the authors feel that GETFs are going to open a new dimension in the industry.

Kumaraswamy Naidu G. and Sravana Kumar B.\(^{28}\) highlights the risk and benefits of investing in gold. Gold ETFs, like any share, can be traded and bought by the investors through their stockbrokers. They can be used for speculating in the short-term for betting on the price of gold, or it can be used for long-term investing. Gold ETFs, being liquid make investment in gold attractive. Further, the authors feel that Gold ETFs will eliminate counterparty risk and maintenance cost.

Sisodiya Amit Singh and Bala Bharathi Y.\(^{29}\), discusses another new breed of funds called arbitrage funds in India. Arbitrage funds exploit the pricing differences between the cash and futures markets, hence enabling investors to benefit from such opportunities at lower costs than the stock market investors. The idea is that stock prices in cash/spot market always differ from those in the derivatives market. The arbitrageur (in this case, the mutual fund) will


simultaneously purchase and sell the underlying security to gain risk-free profits from the transactions. These funds are effectively insulated from the market fluctuations to provide market neutral returns.

**Bansal Manish**[^30], details an eight-step strategy for the Indian mutual fund industry so as to achieve greater penetration and hence fuel its growth. Some of the major recommendations of the article are -

- Migrate from 'industry' to 'opportunity zone'
- Revisit mutual funds' core competence
- Rebuild investors' confidence
- Manage risks through derivatives
- Treat investors like customers.

**Madhusudhan and Jambodekar V.**[^31] conducted a study to assess the awareness of MFs among investors, to identify the information sources influencing the buying decision and the factors influencing the choice of a particular fund. The study reveals among other things that Income Schemes and Open Ended Schemes are more preferred than Growth Schemes and Close Ended Schemes during the then prevalent market conditions. Investors look for safety of Principal, Liquidity and Capital appreciation in the order of importance;

Newspapers and Magazines are the first source of information through which investors get to know about MFs/Schemes and investor service is a major differentiating factor in the selection of Mutual Fund Schemes.

Sarkar Jaideep and Majumdar Sudip\(^3\) evaluated the performance of five growth oriented schemes for the period February 1991 to August 1993. They have employed the CAPM and Jensen measuring to evaluate the performance. They have also evaluated the boom period performance. They have used the Jensen measure to evaluate the performance of the scheme during the first quarter of 1992 by employing Jensen (adjusted) model. They conclude that the selected mutual fund schemes have not offered superior returns during the study period than the market in general. However, they conclude that in the boom period the funds performed well.

Raychaudhuri Arjun\(^3\) studies about persistence in mutual fund performance in India, from 2001-04. The study uses several tests from the literature to conclude that there is persistence in the mutual fund market. It is found by the author that performance measures that are constructed using large lags of data are better predictors of future performance. In addition, the predictions of performance for longer future periods are superior to predictions made for


short-run future periods. Finally, it is found that auto-regression tests for persistence may fail despite the presence of persistence.

Barua\textsuperscript{34} made a pioneering attempt to evaluate the performance of Master Share, scheme of UTI from the investor point of view with others. They employed the Capital Asset Pricing Model (CAPM), and computed the risk of the ‘master Share’ Scheme (For the period 1987-1991). The risk adjusted performance is measured by using Sharpe, Jensen and Treynor ratios. Here the bench-mark selected is the ‘Economic Times Ordinary Share price Index. He has also highlighted the importance and issues for the regulation of mutual funds, finally, in 1993, SEBI framed regulations for mutual funds. Computation of the Net Asset Value (NAV) and the pricing of mutual fund units are very important as there were no guidelines at all. A few articles published in the financial dailies highlighted the importance of uniform valuation of investments. In January 1996, SEBI committee report on valuation and pricing was released which suggests norms for the valuation and pricing. However, empirical works on relationship between NAV, repurchase price and market price, and reasons for closed-end fund discounts are yet to be attempted in the Indian context. The study concludes that, ‘master Share’ has performed better in systematic risk, but not in terms of total risk.

Shah Ajay and Thomas Susan\textsuperscript{35} chose 11 mutual fund schemes and studied the performance evaluation of these schemes, on the basis of market price data. The returns were computed for these schemes on weekly basis since their commencement. Jensen and Sharpe measures were used to evaluate the performance of the schemes. They concluded that except UGS 2000 of UTI, none of the schemes earned superior returns than the market in general. The risk of these schemes was very high and funds might be inadequately diversified.

Sujit Sikidar and Amrit Pal Singh\textsuperscript{36} carried out a survey with an objective to understand the behavioural aspects of the investors of the North Eastern region towards equity and mutual funds investment portfolio. The survey revealed that the salaried and self employed formed the major investors in mutual fund primarily due to tax concessions. UTI and SBI schemes were popular in that part of the country then and other funds had not proved to be a big hit during the time when survey was done.

\textsuperscript{35} Shah Ajay and Susan Thomas, "Performance Evaluation of Professional Portfolio Management in India", A paper prepared by CMIE, 10 April, 1994.

Sunder Syama\textsuperscript{37} conducted a survey to get an insight into the mutual fund operations of private institutions with special reference to Kothari Pioneer. The survey revealed that awareness about Mutual Fund concept was poor during that time in small cities like Visakapatnam. Agents play a vital role in spreading the Mutual Fund culture; open-end schemes were much preferred then; age and income are the two important determinants in the selection of the fund/scheme; brand image and return are the prime considerations while investing in any Mutual Fund.

Kaura and Jayadev\textsuperscript{38}(1995) evaluated the performance of five growth oriented schemes in the year 1993-94, by employing the Sharpe, Treynor and Jensen measures. According to them, ‘Mastergain 91’, Can bonus’ and ‘IndSagar’ have performed better than the market in terms of systematic but not in terms of total risk. However, the methodology would have been more appropriate had the study period been longer.


Shukla Sharad,39 Mulraj, J40 and Vikraman, Shaji41 in their articles that appeared in the Financial dailies (The Economic Times, Financial Express, Business Standard) and the periodicals (Dalal Street, Business Toady, etc.) have discussed in their articles about the evaluation of mutual fund schemes by comparing the changes in NAV indices. However, these analyses were purely for a short period and ignored the concept of risk.

Sarkar J. and Majumdar S.42 evaluated financial performance of five close-ended growth funds for the period February 1991 to August 1993 and concluded that the performance was below average in terms of alpha values (all negative and statistically not significant) and funds possessed high risk. No reference was provided about the timing parameters in their study. The criterion used for the selection of these five close ended schemes by the author has not been clearly depicted. But the results of the analysis indicate the performance of the close ended schemes on a generic basis has been found to be inconsistent.

Gupta and Sehgal\textsuperscript{43} evaluated mutual fund performance over a four year period, 1992-96. The sample consisted of 80 mutual fund schemes. They concluded that mutual fund industry performed well during the period of study. The performance was evaluated in terms of benchmark comparison, performance from one period to the next and their risk-return characteristics. This study is very interesting because when it comes to performance evaluation, there are different techniques of performance evaluation. The authors have selected the method of benchmark comparison and the sample schemes selected for the purpose of study.

Sondhi\textsuperscript{44} studied the financial performance evaluation of equity oriented mutual funds on the basis of type, size and ownership of mutual funds using the measures of absolute rate of return, comparison with benchmarks (BSE100) and the return on 364 days T-bills and risk adjusted performance measures (Sharpe, Treynor, Jensen’s Alpha and Fama). This method of performance evaluation is more appropriate and the researcher has very beautifully presented the facts and figures. The methodology adopted in this study is very systematic and the results are shown as per the different methods according to the required parameters.


Jayadev M.\textsuperscript{45} evaluated the performance of 62 mutual funds schemes using NAV data for varying period between 1987 and 1995. He reported superior performance for bulk (30 out of 44) of the sample schemes when total risk was considered. However, in terms of systematic risk only 24 out of 44 schemes outperformed the benchmark portfolio. He also found that Indian mutual funds were not properly diversified. Further, in terms of Fama's measure, he did not find selectivity ability of the fund manager.

Dave S.A.\textsuperscript{46} in his paper discusses the performance of mutual fund industry and has reviewed the performance of individual funds. According to him, the Indian economy has shown an unparalled performance. The GDP growth rate has been very good, the savings rate has increased and the corporate earnings have improved during the period of study. But he feels that the mutual fund industry's performance has not been very satisfactory inspite of the improved fundamentals. He has also mentioned that wrong investments and agency conflicts are responsible for the poor performance of the industry. He feels that the mutual fund industry must try to restore its image as early as possible by individual and collective acts to restore the faith of investors in the mutual fund industry.


Thomas Susan\textsuperscript{47} in her paper has examined the performance of Indian mutual funds. According to her performance evaluation of fund manager consists of asking whether he has significantly added value as compared with a passive benchmark which replicate his level of risk. She also discusses how to measure risk and has examined the concept of performance evaluation using Jensen’s measure and Sharpe’s measure for Mastershare and MSGF for the period 1994-95 using market prices and NAV respectively. Her results are very interesting. The results show a slight difference in alpha. This statistical imprecision is the major weakness of performance evaluation procedures when they are applied with short data series and the length of the series steadily grows as time passes thus enhancing the value of performance evaluation.

Kulkarni Vivek\textsuperscript{48}, in his article provided basic answers to the questions related to the performance evaluation. The article explains framework for good performance evaluation, criteria for selection of benchmark, methodology of CRISIL’s in measuring risk in evaluating portfolio performance and influence of fund management fees in a performance evaluation etc. According to him, the benchmark must facilitate a fair comparison in a risk return frame work. He has very vividly explained how CRISIL measures risk in evaluating fund performance. He also feels that the fund managers do not have access to liquid


and cheap sources of funds because our repo market is too small in contrast to the US market. Some of the other factors according to him which is very important are the services that the investor gets from the mutual funds, the repurchase facility and redemption schemes.

Hudson Julie\textsuperscript{49}, the article provides idea about selection of benchmark, using Sharpe and Treynor's measure for evaluation of portfolio performance, method of calculation of tracking Error etc. The study concludes that the most important need for the progress of the mutual fund industry in India is a well-established reporting standard. The author feels that fund holder who takes the risk and pays the fund management fees has the right to basic information which allows a reasonable assessment of risk and return. The author further concludes by saying that the progress of the mutual fund industry in India is a well established reporting standard.

Chakrabarti and Harsha Rungta\textsuperscript{50} in their study attempts to identify and evaluate the performance of mutual funds with focus on private sector equity funds. The authors study the risk-return characteristics of selected major equity based private mutual funds companies. The inference of the study reveals that


there is no one-to-one correspondence between performance by return and performance by risk-adjusted returns.

Gupta Amitab\(^{51}\) in their study evaluated the selected schemes with respect to the broad based BSE National Index to find out whether the schemes were able to beat the market. The author also examined whether the returns were commensurate with the risk undertaken by the fund managers. He used three risk adjusted performance. The study also tested the market timing abilities of the fund managers. The results indicate that 38 schemes (52 per cent) earned higher returns in comparison to the market return while the remaining 35 schemes (48 per cent) generated lower returns than that of the market. The results pertaining to market timing abilities of fund managers in terms of both the two models, Treynor and Mazuy and Henriksson and Merton do not lend support to the hypothesis that the India fund managers are able to time the market correctly.

Narasimhan M.S. and Vijayalakshmi S.\(^{52}\), made an empirical evaluation of diversification and timing performance of 76 mutual fund schemes of around 25 fund houses. The study employed two alternative methods to examine this issue. In the first case, the portfolio return and risk and correlation between the


stocks in the portfolio of each scheme can be computed and compared with each other. The second methodology is to examine the correlation between the frequently appearing stocks in the portfolio. The study then compared the average returns, standard deviation and co-efficient of variation of these stocks, it is found that in almost all cases the risk level is high compared to the returns. The study also examines the fund managers ability to identify and invest in stocks that are expected to perform both currently as well as in near future. These portfolios of funds are compared with the top 100 performers of the relevant period for this purpose. The results show that there is a general shift in the investment strategy of holding a diversified portfolio and in optimizing the risk-return of investments to investing in predictive winners of the period.

Turan M.S., Bodla B.S., and Mehta Sushil Kumar analyzed the performance of 54 listed schemes of mutual funds on the basis of weekly data on NAVs. For this purpose, besides risk and return analysis, the risk adjusted performance measures have been employed. The study consisted sample schemes from different sectors and the measure of risk was calculated. The study reveals that a considerably low level of risk is associated with the selected schemes, irrespective of the sector concerned.

Biswa
dep Mishra\textsuperscript{54} in his research paper attempts to evaluate the timing and selectivity skills of mutual funds. It also tries to test the non-stationary of mutual fund betas and finds out the causes of non-stationary beta. The study utilizes the Chen and Stockum (1986) model that uses a generalized varying parameters regression procedure to examine mutual fund's selectivity, beta instability, and timing skills simultaneously. Since the model removes the limitations of traditionally utilized Jensen's measure, it has been applied to Indian mutual funds to find out beta instability and their selectivity and timing skills. It was concluded that the selected mutual fund schemes had no timing ability, even though at individual level some of the schemes had timing skills. The generalized varying parameter (GVP) estimates also revealed that the systematic risk of Indian mutual funds did not remain stable over time.

Ramesh Chander\textsuperscript{55}, in his study appraised the performance of mutual funds in India as suggested by Sharpe, Treynor and Jenson. The study also examined the portfolio management practices of mutual fund managers with respect to portfolio construction, portfolio management, portfolio evaluation and disclosure. This study is very comprehensive and interesting as it covers all important areas of constructing a portfolio and management. The evaluation procedure and the disclosure methods are very clearly explained.


Social Audit Committee\textsuperscript{56} was constituted by UTI in 1984 under the chairmanship of Justice M.H. Kania (former Chief Justice of India). The social audit committee evaluated the performance of UTI from various dimensions, such as return, investor services and satisfaction of employees and agents of UTI. The main findings of the committee report are as follows:

- Unit Scheme 64 (US64) and various other monthly Income schemes have consistently yielded more than interest rate on bank deposits. The 'Mastershare' scheme has higher return than the BSE SENSEX and National Index during 1988 to 1991. However, after 1922, the performance was poor and the units were quoted much below their NAV in the market.

- From the investor's point of view, UTI is regarded as a progressive financial institution managing the funds most efficiently with low expense ratio. However, some of the investors have deteriorated. Further, UTI does not have enough transparency in respect of its investments, particularly regarding the US’64 as neither the NAV of that scheme nor its full investment list is made public.

From the above review, it can be stated that research covering large number of funds for a long-term, has not yet commenced. There are some important areas where research is necessary.

\textsuperscript{56}Report of the Social Audit Committee, Unit Trust of India, 1998.
Value Research India Pvt. Ltd\textsuperscript{57} carried a survey during the period June 30, 2000 to 31 December, 2001. The mutual fund schemes were examined and the study reveals out of 83 schemes 15 schemes gave negative returns. Out of these 15 schemes 13 were growth schemes. One important observation of the study was none of the income or income-cum-growth schemes gave returns above 20 per cent. The risk adjusted returns of these schemes outperformed the index even in bear phase. The study concluded that on the whole Indian mutual funds are safe on the whole for investment purpose.

Fernandes Kshama,\textsuperscript{58} evaluated index fund implementation in India. In this paper, tracking error of index funds in India is measured. The consistency and level of tracking errors obtained by some well-run index fund suggests that it is possible to attain low levels of tracking error under Indian conditions. At the same time, there do seem to be periods where certain index funds appear to depart from the discipline of indexation.

Ranganathan Kavitha\textsuperscript{59} has about the behavioural finance. The realization that this is a serious subject is, however, barely dawning. Analysts seem to treat financial markets as an aggregate of statistical observations, technical and fundamental analysis. A rich view of research waits this sophisticated

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understanding of how financial markets are also affected by the 'financial behaviour' of investors. With the reforms of industrial policy, public sector, financial sector and the many developments in the Indian money market and capital market, Mutual Funds which has become an important portal for the small investors, is also influenced by their financial behaviour. Thus the author in this study has made an attempt to examine the related aspects of the fund selection behaviour of individual investors towards Mutual funds, in the city of Mumbai. From the researchers and academicians point of view, such a study will help in developing and expanding knowledge in this field.

Roy Bijan, conducted an empirical study on conditional performance of Indian Mutual funds. This paper uses a technique called conditional performance evaluation on a sample of eighty-nine Indian mutual fund schemes. This paper measures the performance of various mutual funds 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 is examined in the Indian context. The results suggest that the use of conditioning lagged information variables improves the performance of mutual fund schemes, causing alphas to shift towards right and reducing the number of negative timing coefficients.

Sehgal Sanjay and Manoj Jhanwar in their article examine if there is any short-term persistence in mutual funds performance in the Indian context. It is found that no evidence confirms persistence using monthly data. Using daily data, it has been observed by the researchers that for fund schemes sorted on prior period four-factor abnormal returns, the winner’s portfolio does provide gross abnormal returns of 10 per cent per annum on post-formation basis. The economic feasibility of zero-investment trading strategies that involve buying past winners and selling past losers is however in doubt. This is owing to the fact that these strategies generate low gross returns and that the winner’s portfolios involve higher investment costs than losers portfolios, thus destroying a major portion of extra-normal returns. The empirical findings are consistent with the efficient market hypothesis and have implications for hedge funds and other managed portfolios that rely on innovative investment styles, including the fund of funds trading strategies that implicitly assume short-term persistence.

Panwar Sharad and Madhumathi R. in their study used sample of public-sector sponsored & private-sector sponsored mutual funds of varied net assets to investigate the differences in characteristics of assets held, portfolio diversification, and variable effects of diversification on investment

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performance for the period May, 2002 to May, 2005. The study found that public-sector sponsored funds do not differ significantly from private-sector sponsored funds in terms of mean returns per cent. However, there was a significant difference between public-sector sponsored mutual funds and private-sector sponsored mutual funds in terms of average standard deviation, average variance and average coefficient of variation (COV). The study also found that there was a statistical difference between sponsorship classes in terms of excess standard deviation adjusted returns (eSDAR) as a performance measure. When residual variance (RV) is used as the measure of mutual fund portfolio diversification characteristic, there is a statistical difference between public-sector sponsored mutual funds and private-sector sponsored mutual funds for the study period. The model built on testing the impact of diversification on fund performance and found a statistical difference among sponsorship classes when residual variance is used as a measure of portfolio diversification and excess standard deviation adjusted returns as a performance measure.

Ferruz Luis and Ortiz Cristina\textsuperscript{63} in their article investigate the mutual fund market in India and verify whether or not the fund classification obtained from the name given to identify them corresponds to that which would be obtained were prior management to be taken into account. This industry has undergone spectacular growth in recent years, making this study one of extreme interest.

\textsuperscript{63} Ferruz Luis and Ortiz Cristina, "Does Mutual Fund Management in India Correspond to It's Investment Objective Classification?". WWW.SSRN.com
not least because institutional control could be less in times of expansion. The methodologies employed in the study were factor analysis and cluster analysis. The former determines that risk would clearly identify two groups of funds in the same manner as public classification of the funds; cluster analysis, on the other hand, identifies funds that are, in fact, very close to one another, when for the bulk of investors they are not.

2.3 Review of literature on Mutual funds in Other Countries

In the US, the Mutual Funds have a long history of more than 50 years. The advanced research of mutual fund performance evaluation contributed a lot to the wealth of knowledge, a brief review of which follows.

Sharpe W.F\textsuperscript{64} has done pioneering work on the performance evaluation of mutual funds and has developed a composite measure that considers return and risk- which is popularly known as Sharpe’s reward to variability ratio that considers both risk and return. He evaluated the performance of 34 open-ended mutual funds during the period 1944-63 by the measures developed by him. He concluded that the average mutual fund performance was distinctly inferior to an investment in the DJIA. It was also revealed in his study that good performance was associated with low expense ratio and only low relationship was discovered between fund size and performance.

Sharpe in his article classified the range of mutual fund investment styles into two broad categories:

1. The characteristics-based style analysis (such as value, growth, small-cap, large-cap, income, balanced etc.), which is based on portfolio’s and benchmark’s current and/or historical holdings and its security weights and is considered to be the most powerful and comprehensive approach.

2. The returns-based style analysis is a statistical technique that was originally proposed by William F. Sharpe under the name of effective asset mix and attribution analysis. The approach is based on a multi-index model, which suggests that a portfolio’s return is related linearly to the return on a series of factors.

Treynor J.L. and Mazuy K.K. in their study developed a model that tested the mutual funds historical success while anticipating returns. They also tested this model on 57 open ended funds during the ten year period and found no statistical evidence that investment manager of 57 funds were not able to guess the market movements in advance. This study suggests that an investor in mutual funds was totally dependent on fluctuations in the general market. The study revealed that the improvement in rate of return was due to the fund managers’ ability to identify under priced shares in the market.

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Jensen M.C.\textsuperscript{67} developed an absolute measure of performance that is based on CAPM. In this model the excess returns of the fund were regressed upon the excess returns of the market to estimate the characteristic line of regression. He also evaluated the ability of the fund managers in selecting the undervalued securities. He concludes that for the sample 115 mutual funds, the fund managers were not able to forecast security prices well enough to recover research expenses and fees.

E. Fama\textsuperscript{68} developed a methodology for evaluating investment performance of managed portfolios. He suggested that the overall performance of managed portfolios could be broken down into several components. He argued that the observed return of a fund could be due to ability of fund managers to pick up the best securities at a given level of risk (their selectivity ability). Some portion of this return could also arise due to the prediction of general market price movements (their timing ability). Fama suggested that return on a portfolio could be subdivided into two parts. The return for security selection and return for bearing risk. Various finer subdivisions of both selectivity and risk were also suggested. The model developed by him combined concepts


from modern theories of portfolio selection and capital market equilibrium with those of traditional concepts of what constitute good portfolio management.

**McDonald J.G.** evaluated performance in terms of Sharpe and Treynor's index as also in terms of Jensen's alpha. The study revealed that 54 per cent of the funds had positive alphas. Mean alpha for the sample was found to be 0.052. Statistical significance was not reported in his study.

**Kon S.F.** evaluated performance in terms of selectivity and timing parameters over a period, January 1960 to June 1976. The sample had 37 funds. The study concluded that individually few funds have shown positive selectivity and timing skills but collectively mutual funds failed to perform satisfactorily.

**Henriksson R.D.** evaluated performance in terms of market timing abilities with sample of 116 open-ended investment schemes during the period, February 1968 – June 1980. The empirical results obtained indicated unsatisfactory timing skills of the fund managers.

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Chang, et al\textsuperscript{72} tested stock selectivity abilities and market timing abilities of 67 mutual funds over a performance period January 1971 to December 1979. They used parametric statistical tool to test the presence of either of the two skills in these mutual funds. They concluded that the fund managers are unable to outperform a passive investment strategy.

Blake, Elton, and Gruber\textsuperscript{73} have examined two samples of bond funds--one sample designed to eliminate survivorship bias and a second much larger sample using linear and nonlinear models. Overall and for subcategories of bond funds, they find that bond funds under perform relevant indexes post expenses. The authors' results are robust across a wide choice of models. They find that, on average, a percentage-point increase in expenses leads to a percentage-point decrease in performance. The nonlinear model weights closely match actual composition weights. The authors find no evidence of predictability using past performance to predict future performance for their unbiased sample.

Malkiel\textsuperscript{74} in his article has analysed several studies which suggest that equity mutual fund managers achieve superior returns and that considerable persistence in performance exists. His study utilises a unique data set including


\textsuperscript{74} Malkiel, "Returns from Investing in Equity Mutual Funds 1971 to 1991", Journal of Finance 1995.
returns from all equity mutual funds existing each year. These data enable the reader more precisely to examine performance and the extent of survivorship bias.

Jain and Wu\textsuperscript{75} examines a sample of 294 mutual funds that are advertised in Barron's and Money magazine and they found out that the pre advertisement performance of these funds is significantly higher than that of the benchmarks. They also tested whether the sponsors select funds to signal continued superior performance or they use the past superior performance to attract more money into the funds. Their analysis shows that there is no superior performance in the post advertisement period. Thus, the results do not support the signalling hypothesis. On the other hand, they also found out that the advertised funds attract significantly more money in comparison with a group of control funds.

Wermers\textsuperscript{76} used a new database to perform a comprehensive analysis of the mutual fund industry. They found that funds hold stocks that outperform the market by 1.3 percent per year, but their net returns under perform by one percent. Of the 2.3 percent difference between these results, 0.7 percent is due to the underperformance of non stock holdings, whereas 1.6 percent is due to expenses and transactions costs. Thus, funds pick stocks well enough to cover

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their costs. Also, high-turnover funds beat the Vanguard Index 500 fund on a net return basis. Their evidence supports the value of active mutual fund management.

In this study Zheng\textsuperscript{77} has used a large sample of equity funds, to find evidence that funds that receive more money subsequently perform significantly better than those that lose money. This effect is short-lived and is largely but not completely explained by a strategy of betting on winners. In the aggregate, there is no significant evidence that funds that receive more money subsequently beat the market.

Statman\textsuperscript{78} in his article tries to separate facts from beliefs because he feels that conversations about socially responsible investing are difficult because they combine facts with beliefs. Proponents of socially responsible investing believe that combining social goals with investments do good. Opponents believe that such combinations are unwise or even illegitimate. After careful examination he reports that the Domini Social Index, an index of socially responsible stocks, did better than the S&P 500 Index and those socially responsible mutual funds did better than conventional mutual funds over the 1990-98 period but the


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differences between their risk-adjusted returns are not statistically significant. Both groups of mutual funds trailed the S&P 500 Index.

**Chalmers, Edelen and Kadlec**\(^79\) estimated trading costs for a sample of equity mutual funds and found that these costs average 0.78 per cent of fund assets per year. They also found that the cross-sectional variation in trading costs is greater than that implied by turnover, and trading costs have more explanatory power for fund returns and they concluded by saying that turnover is an important factor in assessing mutual fund trading costs.

**Malhotra and McLeod**\(^80\) in their paper conduct an empirical analysis of mutual fund expenses. The results of their analysis of equity funds suggest that expense-conscious investors should look at the fund size, age, turnover ratio, and cash ratio as key determinants of expenses. Their analysis of bond funds suggests that the key factors are the fund's sales charge, weighted average maturity and size.

**Grinblatt, Titman, Wermers and Daniel**\(^81\) develops and applies new measures of portfolio performance which use benchmarks based on the

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characteristics of stocks held by the portfolios that are evaluated. Specifically, the benchmarks are constructed from the returns of 125 passive portfolios that are matched with stocks held in the evaluated portfolio on the basis of the market capitalization, book-to-market, and prior-year return characteristics of those stocks. Based on these benchmarks, "Characteristic Timing" and "Characteristic Selectivity" measures are developed that detect, respectively, whether portfolio managers successfully time their portfolio weightings on these characteristics and whether managers can select stocks that outperform the average stock having the same characteristics. The authors apply these measures to a new database of mutual fund holdings covering over 2500 equity funds from 1975 to 1994. Their results show that mutual funds, particularly aggressive-growth funds, exhibit some selectivity ability, but that funds exhibit no characteristic timing ability.

Chevalier and Ellison\textsuperscript{82} examine whether mutual fund performance is related to characteristics of fund managers that may indicate ability, knowledge, or effort. In particular, they study the relationship between performance and the manager's age, the average composite SAT score at the manager's undergraduate institution, and whether the manager has an MBA. Although the raw data suggest striking return differences between managers with different characteristics, most of these can be explained by behavioural differences

between managers and by selection biases. After adjusting for these, some performance differences remain. In particular, managers who attended higher-SAT undergraduate institutions have systematically higher risk-adjusted excess returns.

Blake, Elton and Gruber\textsuperscript{83} examines predictability for stock mutual funds using risk-adjusted returns. They find that past performance is predictive of future risk-adjusted performance. Applying modern portfolio theory techniques to past data improves selection and allows the authors to construct a portfolio of funds that significantly outperforms a rule based on past rank alone. In addition, they can form a combination of actively managed portfolios with the same risk as a portfolio of index funds but with higher mean return. The portfolios selected have small but statistically significant positive risk-adjusted returns during a period where mutual funds in general had negative risk-adjusted returns.

Markowitz\textsuperscript{84} in this paper first considers the view that the investor does (or should) maximize discounted expected, or anticipated, returns. This rule is rejected both as a hypothesis to explain, and as a maximum to guide investment behaviour. He next considers the rule that the investor does (or should)


\textsuperscript{84} Markowitz, "Portfolio Selection", Journal of Finance, 1952.
consider expected return a desirable thing and variance of return an undesirable thing. This rule has many sound points, both as a maxim for, and hypothesis about, investment behaviour. He also illustrates geometrical relations between beliefs and choice of portfolio according to the "expected returns - variance of returns" rule.

David Logan Scott\footnote{David Logan Scott, "David Scott's Guide to Investing in Mutual Funds", Houghton Mifflin, 2004.} analyzes the role that mutual funds play in achieving a balanced portfolio. In addition to explaining how shares in mutual funds are bought and sold, this book guides the investors how to assess a fund’s investment objective in light of their own goals, how to choose from among stock, bond, and money market funds, how to evaluate the three different kinds of income associated with mutual funds, dividends, capital gains, and market appreciation and how to save on fees when buying and redeeming mutual fund shares.

Rowland Mary\footnote{Rowland Mary, The new commonsense guide to mutual funds, New Delhi, Vision Books.} in her book gives details of various funds, schemes, fund managers and also the views of well-known investment advisers in America. The author explains that every investor should set specific goals for investment and choose the right type of funds to achieve the goal. The author also lays lot of importance on the role of fund managers. In parts two, three and four she explains and elucidates the concepts and principles of investment.
Philip Davis E. and Benn Steil\textsuperscript{87} in their book provides a comprehensive economic assessment of institutional investment. It charts the development and performance of the asset management industry and analyzes the implications of rising institutionalized saving for the development of the securities trading industry, the financial sector as a whole, and the wider economy. The book draws extensively on international experience, particularly in the United States, Western Europe, and Japan.

Graciela Kaminsky L., Richard Lyons K. and Sergio Schmukler L.\textsuperscript{88} in their article provides an overview of mutual fund activity in emerging markets. It describes their size, asset allocation, and country allocation and then focuses on their behaviour during crises in emerging markets in the 1990s. It analyzes data at both the fund-manager and fund-investor levels. Due to large redemptions and injections, funds' flows are not stable. Withdrawals from emerging markets during recent crises were large, which is consistent with the evidence on financial contagion.

\textsuperscript{87} Philip Davis E. and Benn Steil, "Institutional Investors", MIT Press, 2001.

Michael C. Jensen\textsuperscript{89} derived a risk-adjusted measure of portfolio performance (Jensen's alpha) that estimates how much a manager's forecasting ability contributes to fund's returns.

Wenchi Kao G., Louis Cheng T. W., Kam Chan C.\textsuperscript{90} in their article examines the selectivity and market-timing ability of international mutual fund managers. Ninety-seven international mutual funds with a minimum of five-year return history selected from the Morningstar database have been analyzed. The findings of this study suggest that managers of international mutual funds possess good selectivity and overall performance. This study also finds weak evidence of poor market-timing ability. Consistent with prior findings from domestic mutual funds, there is a negative correlation between the international fund managers' selection ability and market-timing ability. Finally, this study concludes saying that managers for European funds show poorer performance than those managing the other three international fund groups.

Russ Wermers\textsuperscript{91} analyses the trading activity of the mutual fund industry from 1975 through 1994 to determine whether funds "herd" when they trade stocks and to investigate the impact of herding on stock prices. Although the authors


find little herding by mutual funds in the average stock, they find much higher levels in trades of small stocks and in trading by growth-oriented funds. Stocks that herds buy outperform stocks that they sell by 4 percent during the following six months; this return difference is much more pronounced among small stocks. Their results are consistent with mutual fund herding speeding the price-adjustment process.

Haslem John A.\(^2\) provides summaries of existing research with practical guidelines for mutual fund analysis. The book cover a broad range of topics, including understanding the advantages and disadvantages of mutual funds and long and short-term investing, evaluating stock/bond allocations within fund portfolios, assessing fund diversification risk, measuring fund returns and risk, and making fund buy/sell decisions.

Ronald Rutherford K.\(^3\) uniquely in his book covers the statistical and non-statistical issues involved in selecting and managing a balanced portfolio of mutual funds. He explains investment policy development techniques, explores all asset classes of mutual funds, and covers the critical issues of style analysis, data interpretation and style management.


Seth Anderson C and Parvez Ahmed have designed their book for the academic researchers interested in the various issues surrounding mutual funds and for the practitioners interested in funds for investment purposes. The author briefly trace the historical evolution of funds, presents important aspects of the Investment Company Act of 1940, and then summarises a substantial portion of the academic literature which has been written over the past five decades.

Baks, Klaas, Metrick, Andrew, Wachter and Jessica analyses mutual-fund performance from an investor's perspective. The portfolio-choice problem for a mean-variance investor choosing among a risk-free asset, index funds, and actively managed mutual funds has been analyzed. To solve this problem, the authors have employed a Bayesian method of performance evaluation; a key innovation in this approach is the development of a flexible set of prior beliefs about managerial skill. The researchers have then applied this methodology to a sample of 1,437 mutual funds and have found out some extremely skeptical prior beliefs nevertheless lead to economically significant allocations to active managers. To conclude, the literature survey reveals that, on an average mutual fund managers are not able to offer higher returns than the unmanaged portfolios. Further, their ability in stock selection and market

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timing is also poor. The recent works indicate that fund managers are able to earn higher returns, but they offset the expenses. Further, in the short periods fund managers are able to offer the superior returns. The implication of these studies is that the markets are reasonably efficient.

**Pendaraki K.** 96 studied construction of mutual fund portfolios, developed a multi-criteria methodology and applied it to the Greek market of equity mutual funds. The methodology is based on the combination of discrete and continuous multi-criteria decision aid methods for mutual fund selection and composition. UTADIS multi-criteria decision aid method is employed in order to develop mutual fund’s performance models. Goal programming model is employed to determine proportion of selected mutual funds in the final portfolios.

**Zakri Bello Y.** 97 matched a sample of socially responsible stock mutual funds matched to randomly select conventional funds of similar net assets to investigate differences in characteristics of assets held, degree of portfolio diversification and variable effects of diversification on investment performance. The study found that socially responsible funds do not differ significantly from conventional funds in terms of any of these attributes.

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Moreover, the effect of diversification on investment performance is not different between the two groups. Both groups underperformed the Domini 400 Social Index and S & P 500 during the study period.

2.4 Conclusion

From the above review it can be inferred that mutual fund as an investment vehicle is capturing the attention of various segments of the society, like academicians, industrialists, financial intermediaries, investors and regulators for varied reasons and deserves an in depth study. The authors of traditional reviews, who may be experts in their field, have used informal, unsystematic and subjective methods for collecting and interpreting information. An advantage of these reviews is that they are often conducted by experts who have a thorough knowledge of the research field; however, a disadvantage lies in the authors possibly having preconceived notions or biases leading them to overestimate the value of some studies. Even though some of the studies conducted so far are subject to some criticisms on the ground that relatively small sample size, short time period, scope limited to either open ended or closed ended or listed schemes, the literature survey reveals that there is still further scope for advanced research in this area.