CHAPTER 1

INTRODUCTION

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CHAPTER 1

INTRODUCTION

1.1 GENERAL INTRODUCTION

Generally people having sufficient savings with them search for avenues of investment. ‘Investment implies pooling of funds in real assets or financial assets but it involves risk as well as return. The idea behind investing fund is to earn more return and minimize risk of investment’ (Donald & Ronald, 1994). In the present competitive financial environment searching the suitable investment avenues are of great relevance as there are a wide variety of investment avenues. An investor having sufficient skills of investment may choose the right and profitable avenue of investment. In fact, the investment activity may be successful and profitable if the investors possess knowledge and ability to invest the right amount, in the right avenue of investment and at the right time.

Investors may invest in real assets or financial assets. As compared to financial assets, real assets are less liquid and returns on real assets are more difficult to measure accurately due to lack of ready and active market. On the other hand, there are many options before the investor to invest money in a wide variety of financial assets. Of course, all financial assets are risky, but the degree of risk and return differs. It is the skill, experience and ability of the investor to choose the right type of investment.

The Indian financial system comprises of financial institutions, financial services, financial instruments and financial markets (Bhatia & Batra, 2008). All the four elements are closely related and work complementary to each other. They are playing a significant role for the mobilization and allocation of funds. The Indian financial system aims at developing an active capital market. There has been remarkable growth of Indian capital market since the first generation reform started in 1991 with the concept of LPG (Liberalization, Privatization and Globalization). The second generation reform started in 1997 with the package of financial sector reforms, fiscal policy reforms, industrial policy reforms, public sector policy reforms, foreign investment policy reforms etc. have accelerated the pace of development of the Indian financial sector as well as of the capital market. Accordingly, new financial institutions and instruments were developed with the objective of modernizing the
financial sector. ‘Mutual Funds, Discount and Finance House of India, Money Market Mutual Funds, Certificate of Deposit, Commercial Paper, Factoring, Venture Capital, Treasury Bills etc. are serving the needs of individuals, institutions and companies’ (Narasimham, 1992). A country’s financial services sector has a great role to play in the process of its economic development. A financial service signifies the various types of services and functions provided by different financial institutions. Leasing Companies, Mutual Funds, Merchant Bankers, Issue Managers, Portfolio Managers, Discount and Acceptance Houses etc. are the well known financial service providers in different countries. During recent years, the Indian financial sector has undergone revolutionary changes and has become broad based with size and resources so as to meet diverse needs of the economy. In fact, the spread of the banking system is noteworthy in promoting financial intermediation in the economy as well as the notable growth of financial savings. However, due to lack of professional expertise and knowledge about capital market and also pros and cons of investment, the small investors hesitate to invest their hard earned money in corporate securities. This type of common investors may rely on mutual funds as such funds are managed by professional experts who are able to minimize the risk of investment and help earning a steady return.

1.2. STATEMENT OF THE PROBLEM

The mutual fund industry is a fast growing sector of the Indian capital market. Mutual funds entered the Indian capital market in 1964 with a view to provide the retail investors the benefit of diversification of risk, assured returns, professional management etc. (Singh & Singh, 2001). Since then they have grown phenomenally in terms of number, size of operations, investors’ base and scope. Also the liberalization, privatization and globalization (LPG) measures have stimulated its growth in India.

Mutual fund industry in India had its origin with the establishment of Unit Trust of India (UTI) in 1964. Public Sector Banks and Financial Institutions began to establish mutual funds in 1987. The Private Sector and Foreign Institutions were allowed to set
up mutual funds in 1993. ‘The Indian mutual fund industry has grown tremendously in the last decade and it is a very important and dynamic sector in India’s capital market’ (Singh, 2000). The industry has become one of the fastest growing sectors in the countries capital and financial markets. They offer some unique benefits to investors. They offer instantaneous liquidity, they offer professional management and they offer a diversified portfolio. They also provide tax benefits to investors. The popularity of funds has soared so have their diversity and complexity. Moreover, in the era of globalization, competition has emerged and so the various mutual funds are expected to perform better not only in terms of better return but also better services. ‘In recent years, mutual funds are considered as ideal investment vehicle particularly for small investors who are lacking professional expertise and knowledge about investing today’s complex capital market’ (Bansal, 1996). Mutual funds are expected to serve those investors who have the willingness to invest but lack the skill, expertise and ability to diversify the investment risks. In fact the Indian Mutual Fund Industry has gained momentum in 1993 when the industry is opened for private sector. Also the SEBI (Mutual Funds) Regulations 1996, provides a boost to the development of mutual funds in India.

The need of Mutual Funds as a financial intermediary emerges as a result of increase in the gross domestic savings. Table 1.1 shows the sector-wise growth in gross domestic savings in India.
**TABLE 1.1**

Sector-wise Growth in Gross Domestic Savings (₹ Billion)

<table>
<thead>
<tr>
<th>Year</th>
<th>Household Sector (%)</th>
<th>Private Sector (%)</th>
<th>Public Sector (%)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001-02</td>
<td>5453 (93.14)</td>
<td>769 (13.13)</td>
<td>-368 (-6.27)</td>
<td>5854 (100)</td>
</tr>
<tr>
<td>2002-03</td>
<td>5642 (85.96)</td>
<td>992 (15.12)</td>
<td>-71 (-1.08)</td>
<td>6563 (100)</td>
</tr>
<tr>
<td>2003-04</td>
<td>6576 (79.83)</td>
<td>1298 (15.76)</td>
<td>363 (4.41)</td>
<td>8237 (100)</td>
</tr>
<tr>
<td>2004-05</td>
<td>7637 (72.68)</td>
<td>2125 (20.22)</td>
<td>745 (7.10)</td>
<td>10507 (100)</td>
</tr>
<tr>
<td>2005-06</td>
<td>8690 (70.35)</td>
<td>2772 (22.44)</td>
<td>890 (7.21)</td>
<td>12352 (100)</td>
</tr>
<tr>
<td>2006-07</td>
<td>9944 (66.92)</td>
<td>3386 (22.79)</td>
<td>1529 (10.29)</td>
<td>14859 (100)</td>
</tr>
<tr>
<td>2007-08</td>
<td>11183 (60.90)</td>
<td>4690 (25.54)</td>
<td>2490 (13.56)</td>
<td>18363 (100)</td>
</tr>
<tr>
<td>2008-09</td>
<td>13309 (73.83)</td>
<td>4175 (23.16)</td>
<td>543 (3.01)</td>
<td>18027 (100)</td>
</tr>
<tr>
<td>2009-10</td>
<td>16308 (74.73)</td>
<td>5410 (24.79)</td>
<td>106 (0.48)</td>
<td>21824 (100)</td>
</tr>
<tr>
<td>2010-11</td>
<td>18329 (69.14)</td>
<td>6194 (23.36)</td>
<td>1997 (7.50)</td>
<td>26510 (100)</td>
</tr>
<tr>
<td>Total</td>
<td>103071 (72.03)</td>
<td>31811 (22.23)</td>
<td>8224 (5.75)</td>
<td>143096 (100)</td>
</tr>
</tbody>
</table>

Source: Compiled from www.rbi.org.in (Handbook of Statistics on Indian Economy)

Note: Data for 2010-11 are provisional. Rupees = ₹
Table 1.1 and Exhibit 1.1 clearly show the share of household sector, private sector and public sector in gross domestic savings during different time periods. It is seen that the share of household sector in gross domestic savings has increased during the study period. Out of the total gross domestic savings of ₹ 143096 Billion during the study period, the Household Sector alone shares 72.03 %, Private Sector shares 22.23 % and Public Sector shares only 5.75 %. It is also seen that the share of Household Sector in gross domestic savings was the highest throughout the period. This necessitated the need to mobilize savings of household sector into productive lines through financial markets. In fact, for rapid economic development, creation of savings is not sufficient but its channelization into productive investments becomes necessary. Here emerges the role of mutual funds which may help the small investors to pool their small savings and to invest the same in capital market ensuring safety of their hard earned money. As investment in equity shares are too risky and deposits
with the banks lost its importance with the growth of capital markets, mutual funds are expected to play active role in mobilization and allocation of resources.

In India during the last two decades, a large number of mutual fund companies have been set up both in the public as well as in the private sector. More than 1000 schemes have been launched by various mutual fund companies. There has been significant progress in Gross Resource Mobilization and Assets under Management (AUM). By the end of March, 2011, the gross resource mobilized by the mutual fund industry stood at ₹ 7,38,087 crores and AUM stood at ₹ 5,92,250 crores.

In the meantime the Reserve Bank of India, the Ministry of Finance of Government of India and the Securities and Exchange Board of India (SEBI) issued various guidelines for regulating the business of mutual funds in India. These guidelines aimed at ensuring transparent services by mutual funds, providing investors’ protection, providing better return, providing better disclosure, improving performance, gaining investors’ confidence and so on.

Thus in the context of the increasing significance of mutual funds in Indian economy, it becomes imperative to assess and analyze the performance of mutual funds and various schemes offered by mutual funds and hence the problem is selected here to study.

1.3. REVIEW OF LITERATURE

A number of studies have been made by different academicians and professionals on the concept, importance, trend, growth and performance of mutual funds in India and abroad.

The study of Friend, et al (1962) on 152 mutual funds was a pioneering work on mutual funds in USA. The study revealed that comparison of fund return with turnover and expense ratios did not reveal a strong relationship.

Sharpe (1966) evaluated 34 open ended mutual funds for the period 1944-63. The study concluded that low expense ratio is the factor responsible for good performance and size of fund matters little. To him there is inverse relationship between expense ratio and fund performance.
Treynor and Mazuy (1966)\(^9\) studied the performance of 57 fund managers about their market forecasting abilities and found that the fund managers are incapable of estimating the market trend. The study suggests that the fund managers should take care of the stock selection and market timing abilities.

The study of Jensen (1968)\(^10\) was related to risk-adjusted returns. He evaluated the ability of 115 fund managers in respect of stock selection. He concludes that the performance of mutual funds was not satisfactory due to inefficiency of fund managers in respect of stock selection.

Fama (1972)\(^11\) identified four components of portfolio return viz. risk free return, compensation for systematic risk, compensation for inadequate diversification, ability of selectivity. He stated that by altering systematic and unique risk, a portfolio can be reshuffled to get desired level of return. A portfolio manager can earn superior returns by identifying the undervalued securities through constant research and professional acumen.

McDonald and John (1974)\(^12\) stressed on the existence of positive relationship between fund’s objective and risk. The study indicates that more aggressive funds experienced better results.

Gupta (1974)\(^13\) used the Sharpe, Treynor and Jensen measure in order to analyze the performance of mutual fund industry for the period 1962-71. He found that all funds out-performed the market. He concluded that higher the fund’s volatility, better the performance.

Vidyashankar (1990)\(^14\) found that investors preferred mutual funds to bank or company deposits as it provides better investor protection because of SEBI interference. He opined that mutual funds will have a dominant role to play in the Indian capital market in near future.

An important study was made for evaluating the performance of ‘Master Share’ scheme of UTI from the investor point of view by employing Capital Asset Pricing Model (CAPM). The study concludes that the ‘Master share’ has performed better than ‘Can Share’. Barua (1991)\(^15\).
Bansal (1991) accepted the role of mutual funds as an important intermediary between the investors and the capital market. Mutual funds are gaining popularity as they are providing the benefits of liquidity, safety and earning steady returns.

Sarkar (1991) examined the Sharpe and Treynor index as mutual funds performance evaluation measures. He pointed out that the Sharpe and Treynor indexes could be used for performance evaluation of mutual funds at different level of risk.

Barua and Varma (1991) studied the performance of Master share scheme of UTI during the period 1987-1990. The study concluded that the Master share scheme outperformed the market but it failed to attract small investors. Only large investors were benefited.

Gupta (1991) considers interest rate on bank fixed deposits as the risk-free rate in analyzing the performance of mutual funds. He stated that bank fixed deposits are absolutely safe as perceived by the investors.

Gangadhar (1992) opined that investors like mutual funds investments because of its assured return, low risk and liquidity. He pointed out that open ended mutual fund schemes attract investor’s attention because of the feature of its flexibility and liquidity.

Another study was related to the evaluation of the performance of five growth oriented schemes for the period February 1991 to August 1993. The researchers employed the CAPM and Jensen measure for this purpose. The conclusion was that the selected mutual fund schemes have not offered superior returns during the study period than the market in general. Sarkar and Mazumder (1994).

Kaura & Jayadev (1995) evaluated the performance of five growth oriented schemes for the period 1993-94, by the use of Sharpe, Treynor and Jensen measures. The study concludes that ‘Master Gain 91’, ‘Can Bonus’ and ‘IndSagar’ have performed better than the market in terms of systematic but not in terms of total risk.

Mathur (1996) concluded that the concept of mutual funds is gaining practical relevance in India and as a result of which a large number of funds have been floated on the recent past.
Kaptain (1996) explained the origin, types and growth of mutual funds in India and concluded that the mutual fund schemes gained ground in India, but it is yet to gain the requisite confidence of investors and brokers.

Bansal (1996) highlighted on the constitution and management of mutual funds and analyzed the challenges of mutual funds in India. The study concluded that the future of mutual funds to a great extent depends on the response of regulatory agencies on the demands and expectations of small investors. Greater transparency, increased innovations, better services, liquidity and higher returns in future will make mutual funds more investor friendly.

Tripathy (1996) pointed out that in the globalised era, the role of capital market has expanded tremendously. Mutual funds should devise newer products and policies in order to mobilize more resources from the investors thereby gaining investors confidence. Mutual funds should give emphasis on transparency in operation, better disclosure and introducing schemes in order to meet varied needs of investors.

Krishnamurthi (1997) pointed out that especially for small and medium investors with limited resources and skill to invest in capital markets, mutual funds are the ideal investment vehicle. Mutual funds with its professional skill, capability to select right portfolio, ability to diversify risks etc. are able to allocate the investors’ fund in right direction so as to earn steady return.

Sahadevan and Thiripalraju (1997) compared the performance of public sector and private sector mutual funds for the period 1995-96 using the BSE Natex as the market index. The study concluded that the private sector mutual funds outperformed the public sector mutual funds.

Sehgal (1997) analyzed the importance of Capital Asset Pricing Model (CAPM) in Indian capital market using three parameters such as mean returns, risk and skewness. He used 80 securities included in BSE national index and the study covers a period from April 1984 to March 1993. The study revealed that CAPM is not a suitable model of asset pricing in case of Indian capital market.

Another study revealed that mutual funds seem to have not lived up to the expectations of the investors. It was claimed that mutual funds did not formulate the
policies in the areas of investment valuation, pricing and disclosure which are very necessary to keep alive the interest of the investors. Jayadev (1998)\textsuperscript{30}.

Rao and Venkateswarlu (1998)\textsuperscript{31} in their study used the Treynor-Mazuy and Hendrickson- Merton measures for the purpose of evaluating the performance of UTI fund manager in respect of market timing abilities. The study concluded that fund managers of listed schemes of UTI are poor in forecasting the market and making necessary adjustments with change in market conditions.

The study of Katerina (1998)\textsuperscript{32} deals with selecting an appropriate benchmark for comparison and matching a fund’s return with risk. The study concludes that fund managers could help investors make more informed decisions by providing estimates of expected future asset allocations for their funds.

Avadhani (1999)\textsuperscript{33} critically examines the role of mutual funds, guidelines of MMMFs, RBI guidelines on mutual funds and regulation of mutual funds in India.

Ramesh Chander (2000)\textsuperscript{34} conducted a study on performance appraisal of 34 mutual fund schemes taking BSE SENSEX as benchmark. He pointed out that open ended schemes outperformed the market than close ended schemes. He also pointed out that income funds are able to earn a steady return than the growth and balanced funds. He suggested that mutual funds should improve the market timing ability of fund investment.

Singh (2001)\textsuperscript{35} showed several inconsistencies in mutual funds working and concluded that mutual funds could not perform well during the past couple of years because of these inconsistencies.

The study of Gupta (2001)\textsuperscript{36} relating to performance of 73 selected mutual fund schemes (close-end and open-end schemes) revealed that the fund manager’s were not able to diversify the risk properly, there was mismatch of risk and return with investment objective and there was absence of market timing abilities of making investment.

The study relating to investors’ perceptions and preferences reveals that investors in general do not perceive the risk inherent in mutual funds investment and use it primarily as a tax saving instrument. They pointed out that tax benefits associated
with mutual funds is the basic driving force behind mutual fund investment. Investors prefer to invest in private mutual funds, open ended schemes and balanced funds. It is also pointed out that most of the investors are not aware of the risk inherent in mutual fund investment. They suggested for providing more investor education and awareness through workshops and seminars by SEBI. Singh and Vanita (2002)\textsuperscript{37}.

Studies are also made in respect of the importance of mutual funds in developing countries. It is pointed out that mutual funds play a very significant role in economic development. Jatana and Bosire (2003)\textsuperscript{38}.

In another study it is pointed out that there should be comprehensive legislation to control the operations of mutual funds. It is also suggested that investor’s confidence can be inspired by rendering their activity more transparent and providing better services. Srivastava (2003)\textsuperscript{39}.

Singh (2003)\textsuperscript{40} concluded that a few equity based mutual funds have rewarded well to the investors before the US-IRAQ war.

Saha (2003)\textsuperscript{41} pointed out that for the success of a mutual fund, the lead role is to be played by the fund manager. The fund manager’s efficiency and ability to read the market conditions is the key of better performance. He suggested that the AMCs should give the maximum emphasis on increasing the fund manager’s ability and skill.

Singh and Chander (2003)\textsuperscript{42} argued that past performance has significant impact on the choice of mutual funds and schemes. Investor expected transparent service, repurchase facility, adequate information from mutual funds. Investors rely on such funds whose track record was good.

It is also explained in some studies that, a fund’s performance when viewed on the basis of returns alone would not give a true picture about the risk the fund would have taken. Hence a comparison of risk-adjusted return should be the criteria for analysis. Sisodiya(2004)\textsuperscript{43}.

Sondhi and Jain (2005)\textsuperscript{44} evaluated 17 public and private sector mutual fund equity schemes covering the period April, 1993 to March, 2002. They concluded that the
performance of private sector mutual funds is better than public sector mutual funds because of their efficiency in stock selection and market timing skills.

Rao and Satyasekhar (2006)\textsuperscript{45} showed that laggards may become leaders and vice versa during the long run. They conclude that performance in the short run may not give the same result, in the long run.

Singh (2006)\textsuperscript{46} analyzed the perceptions of investors towards mutual funds and concluded that various factors influence choice of a mutual fund, viz. past record of the organization, growth prospects, credit rating, market speculation, disclosure of adequate information etc.

Vanniarajan & Gurunathan (2007)\textsuperscript{47} pointed out that the important factors influencing Investment in mutual funds is monetary, core product, fund strength, promotional measures, customer expectation and service quality. The study concluded that mutual funds should prepare a suitable product strategy to meet customer needs. As majority of the investors are risk averters, mutual funds should concentrate on fund strength, customer expectation and service quality apart from monetary factors.

Sharan (2007)\textsuperscript{48} analyzed the various guidelines and policy measures issued by the Securities Exchange Board of India (SEBI) and their impact on mutual funds. He viewed that the various forms of regulation combined with organizational restructuring, liberalized investment policy and other incentives have led to far greater mobilization of resources and financial strength of the mutual funds as well as to greater investment of funds in the money and capital markets.

Khan (2007)\textsuperscript{49} analyzed different issues on mutual funds in detail and concluded that mutual funds are vital instruments of fund mobilization in the economy in the post-liberalization era.

Tripathy (2007)\textsuperscript{50} highlighted the various facets of mutual funds. The study identified the various challenges to be encountered by mutual funds in future and concluded that the key to the success of mutual fund industry is the perceived confidence of the investors in the organization in total.

Another study reported poor performance of many selected schemes and suggests that the managers of the schemes have to redesign and change the investment pattern
by identifying the likely phases in the market (bullish / bearish) well in advance and emerging stocks on a continuous basis. **Raju and Rao (2008)**

**Pathak (2008)** mentioned that the number of different types of mutual fund schemes has increased from 394 in 2000-01 to 788 in 2006-07 and concluded that the mutual fund industry is slowly catching the fancy of retail investors in India.

**Sankaran (2008)** studied the growth and future prospects of mutual fund industry in India. The study also examined the regulatory framework of mutual funds in India and pointed out that regulations should be strengthened for ensuring better service to the investors.

**SatyaSwaroop (2009)** evaluated the performance of 23 equity based mutual funds during the period April 1996 to March 2009. He used the Sharpe ratio, Treynor ratio and Jensen measure in his study and concluded that in the public sector UTI mutual fund schemes and in the private sector Franklin Templeton schemes out-performed the market.

**Joshi (2010)** analyzed the various issues on risk management in mutual funds and suggested methods of effective risk management in mutual funds.

**Khurana & Panjwani (2010)** used the Sharpe, Treynor and Jensen measure in order to evaluate the performance of fifteen (15) open ended hybrid mutual fund schemes. The study finds that all the schemes have out-performed the market in terms of most of the measures used in the study except ICICI Prudential Balanced Fund-G and Principal Balanced Fund-G.

**Raju and Rao (2011)** evaluated the risk adjusted performance of selected mutual fund schemes in India during January 2008 to December 2010. He used Treynor ratio, Sharp ratio, Jensen measure and Fama’s components of performance. The study reveals that many schemes of infrastructure sector funds and index funds failed to out-perform the market; there is low average beta, mismatch of the risk and return relationship in some schemes and negative net selectivity in more number of schemes.

**Pourmina S, Shenvi Dhume and B. Ramesh (2011)** studied the performance of sectoral mutual funds in India during April 2008 to March 2011. The study aimed at evaluating the performance of five sectors viz. banking sector, FMCG sector,
infrastructure sector, pharma sector and technology sector. They used Sharpe ratio, Treynor ratio, Jensen measures, information ratio and M-squared for evaluating the performance. The study reveals that all the sector funds have outperformed the market according to the Sharpe and Treynor ratio except infrastructure sector funds. FMCG sector is the lowest volatility sector with low standard deviation and beta value having lower risk whereas banking and infrastructure sector shows highest volatility subject to high risk among all the sectors considered together.

**Rao and Daita (2011)**[^59] analyzed the influence of fundamental factors such as economy, industry and company on the performance of mutual funds. With the help of correlation matrix, Augmented Dicky-Fuller (ADF) test and Granger casualty test, they tried to find out the relationship between real economic variables and their impact on the performance of mutual funds. The study concluded that the real economic variables are not significantly influencing the investment in mutual funds. The industry analysis revealed that the entire mutual fund industry was dominated by a few players with big chunk of their AUM. The company analysis revealed that the P/B Ratio and P/E ratio have great impact on the returns earned by a fund followed by fund size and market capitalization.

**Bal and Paul (2012)**[^60] stated that the growth of mutual fund industry was hit several times. He stated that the fiscal year 2008-09 was a challenging year for mutual fund industry in India as it passed through the financial Tsunami caused by world economy meltdown. But the study shows that the industry witnessed a robust growth in the fiscal year 2009-10 and thereafter due to strong governmental effort and SEBIs supportive regulations.

**Singh (2012)**[^61] analyzed the role of SEBI in regulating mutual funds in India and concluded that the existing sets of regulations should be further strengthened in order to make the functioning of mutual funds more transparent, to win investors confidence and better performance of the funds.

**Jain (2012)**[^62] made a study of 45 equity based mutual fund schemes offered by 2 public sector companies and 2 private sector companies in India during the period April 1997 to April 2012 on the basis of risk-return analysis. The study concluded that the private sector mutual funds performed better than the public sector mutual funds during the study period.

The study of Thakkar (2012)\textsuperscript{63} pointed out that during the period 2006-2012, the growth of Gold ETFs schemes was noticeable and the private sector mutual funds dominated the industry and UTI Mutual Fund was the least preferred ones.

Zaheeruddin, Sivakumar & Reddy (2013)\textsuperscript{64} analyzed the performance of three mutual funds from the financial services sector. They considered HDFC Mutual Fund, Birla Sunlife Mutual Fund and ICICI Prudential Mutual Fund for the purpose during the period July 2009 to April 2012. They concluded that ICICI Prudential Mutual Fund performed better under Sharpe, Treynor and Jensen measures than HDFC and Birla Sunlife Mutual Fund.

It is evident from all the theoretical and empirical studies that mutual funds in India have a great role to play in order to strengthen the Indian capital market. As a result of its growing importance, the evaluation of mutual funds is of great concern among the researchers, academicians, fund managers and financial analysts in India at present. Different studies used different parameters and measures in order to evaluate the performance. It is also found that in one time some funds became leaders and in other times they were laggards. The reason for this inconsistency is not explained clearly in earlier studies. Also some studies were related to only a leading mutual fund company, some studies were related to a few public sector and private sector mutual funds and some studies were related to only a few schemes, sometimes only growth schemes, sometimes only income schemes and sometimes only balanced schemes. All theses created a gap in earlier studies.

The present study is an attempt to evaluate the performance of different types of schemes at a time using various risk-adjusted performance measures such as the Sharpe, Treynor and Jensen measures and etc. Moreover, fund managers as well as investors seek for superior performance. The present study attempts to draw out the ways and means of better performance of mutual funds in India.
1.4. OBJECTIVES OF THE STUDY

1. To analyze the growth of mutual fund industry in India.
2. To study the accounting and disclosure practices of mutual funds in India.
3. To evaluate the financial performance of selected mutual funds in India.

Research Questions:

The study seeks to find answers of the following questions:

1. Is there any significant growth found in Indian mutual fund industry during the period of study?
2. Is the Indian mutual fund industry making a consistent growth?
3. Is there any particular accounting practice existing for mutual funds?
4. Are mutual funds disclosing their Net Asset Values (NAVs) regularly?
5. How is the performance of open ended mutual fund schemes in India?
6. Are mutual funds able to out-perform the market in terms of risk-adjusted performance?

1.5. METHODOLOGY OF THE STUDY

Sources of data

The study is based on secondary data. Necessary data have been collected from books, investment periodicals such as capital market bulletin, RBI bulletin, newspapers like Economic Times, Financial Express and other financial magazines. Data have also been collected from various websites such as websites of SEBI, AMFI, RBI, ICRA online, SMC online and respective websites of the selected mutual funds. For the purpose of performance evaluation of sample schemes, Net Asset Value (NAV) data during April 2001 to March 2011 were collected from websites of AMFI, ICRA online and SMC trade online.
Period of Study

The performance evaluation of selected mutual funds covers a period of 10 years i.e. the study covers the period from April 2001 to March 2011.

Sampling Frame

The present study analyzed the performance of thirty (30) schemes of five (5) selected mutual funds.

The sample of five (5) mutual funds has been taken from a population of 28 mutual funds through systematic random sampling. For this purpose the study considers only SEBI registered mutual funds in India and those mutual funds are selected which were registered before 2001. The reason for this is that 10 years data might be collected and analyzed for performance evaluation.

There was 47 SEBI registered mutual funds as on March 31, 2011. Out of these 47 mutual funds, 28 mutual funds were registered before 2001. Out of these 28 mutual funds 5 mutual funds have been selected. Thus the sample consists of about 18% of the mutual funds. For this purpose all the 28 mutual funds were arranged alphabetically putting serial number 1 to 28 and then taking the 5th number at random, the next 5th numbers were selected. Thus the sample includes the following mutual funds:

- DSP Black Rock Mutual Fund
- ICICI Prudential Mutual Fund
- Kotak Mahindra Mutual Fund
- Reliance Mutual Fund
- Tata Mutual Fund

Regarding schemes, the study considers only open ended schemes because of their wide acceptability. The schemes of the selected mutual funds have been chosen on the basis of their existence during the period April 2001 to March 2011, availability of data and annual return schemes.

During the period, a total of fifty nine (59) open ended schemes of varied nature of these five selected mutual funds were existing. Out of these fifty nine (59) schemes,
thirty (30) schemes (50.85 %) were considered for the purpose of the study on the basis of their existence during the period, data availability and annual return schemes, irrespective of the nature of the schemes. The other schemes were ignored as they failed to satisfy the selection criteria. Thus, the selected schemes included the income, growth, balanced and liquid schemes which were open ended and were existing on 1st April 2001 and continuing during the study period. Thus the following schemes were selected for performance evaluation purpose:

1. DSP Black Rock Equity Fund –D
2. DSP Black Rock Opportunities Fund – D
3. DSP Black Rock Bond Fund – D
4. DSP Black Rock Bond Fund – G
5. DSP Black Rock Balanced Fund – D
6. DSP Black Rock Balanced Fund – G
7. ICICI Prudential FMCG –D
8. ICICI Prudential FMCG –G
9. ICICI Prudential Income Fund –D
10. ICICI Prudential Income Fund –G
11. ICICI Prudential Balance Fund –D
12. ICICI Prudential Balance Fund –G
13. Kotak 50 – D
14. Kotak 50 – G
15. Kotak Bond Deposit – G
16. Kotak Gilt Investment – G
17. Kotak Liquid Regular –G
18. Kotak Balance
19. Reliance Growth –D
20. Reliance Growth –G
21. Reliance Vision – Bonus
22. Reliance Income Fund – D
23. Reliance Income Fund – G
24. Reliance Liquid Fund-G
25. Tata Equity Opportunities Fund – D
26. Tata Equity Opportunities Fund – G
Tools used for Performance Analysis

The performance evaluation of selected mutual fund schemes has been done by analyzing the important parameters like risk, return, asset under management (AUM), resource mobilized and transactions done by mutual fund in the stock market. MS-Excel has been used for statistical calculation. A brief description of the various satisfied tools and performance evaluation measures used in analysis of data is given below:

1. Return

Monthly adjusted Net Asset Value (NAV) data are used in order to calculate return of the schemes. The formula used for this purpose is as follows:

\[ R_p = \frac{NAV_t - NAV_{t-1}}{NAV_{t-1}} \]

\[ R_p = \text{Portfolio Return} \]

\[ NAV_t = \text{Net Asset Value at the end of the period} \]

\[ NAV_{t-1} = \text{Net Asset Value at the beginning} \]

2. Market Return

It is the difference between the market indices of the two consecutive periods divided by market index for the beginning period. In this study BSE 100 index has been used as benchmark as it is a broad based index consisting of 100 shares representing more than 70% of the total market capitalization. Though several indices are available at present, but BSE 100 has data availability from 1983-84 onwards and it is widely accepted. So, BSE 100 is expected to provide better performance benchmark. For FMCG schemes, separate index was not used as the study was not related to sector
mutual funds. Also, specific indices for the schemes were not existing covering the entire study period. Hence, common index was used. Market return is calculated as follows:

\[ R_m = \frac{M_{\text{Ind}_t} - M_{\text{Ind}_{t-1}}}{M_{\text{Ind}_{t-1}}} \]

\[ R_m = \text{Market Return} \]

\[ M_{\text{Ind}_t} = \text{Market index at the end} \]

\[ M_{\text{Ind}_{t-1}} = \text{Market index at the beginning} \]

3. Risk Free Return (Rf)
It is the rate of return generated on risk-free instruments like bank deposits, government bonds and treasury bills. Bank fixed deposit rate has been taken as the risk free rate of return. Hence the risk free rate is taken as 9% p.a. as the public sector banks in India was providing it on fixed deposits on an average during the period under the study.

4. Risk
Risk is the potential for variability in returns. It means the possibility of incurring a loss in a financial transaction. In an investment, total risk consists of:

\[ \text{Total risk} = \text{Systematic risk} + \text{Unsystematic risk} \]

Systematic risk is market related and non-diversifiable. It arises due to economic, political and social changes. It is not unique risk and therefore unavoidable. Systematic risk is measured by Beta (\( \beta \)) which indicates the sensitivity of a scheme’s return in relation to market return.

Unsystematic risk is unique peculiar to a company or industry and it is diversifiable. It is firm specific and it consists of business risk and financial risk. Standard deviation has been used to measure risk in the present study.

5. Standard Deviation(\( \sigma \))
It measures the variation in returns of a mutual fund scheme from its average expected return over a certain period of time. It evaluates the volatility of the fund. Higher SD indicates higher volatility and higher risk of the schemes.
6. Beta ($\beta$)

Beta measures the volatility of returns from an investment in response to its market return (systematic risk). It is calculated by relating the return of a portfolio with return for the market.

$$\beta = \frac{r_{pm} \cdot \sigma_p}{\sigma_m}$$

A beta of more than 1 indicates that the investment is more volatile than the benchmark index. It is an aggressive fund. If beta is less than 1, it indicates that the investment is less risky, than the market. It is defensive. If beta is 1, it indicates that the fund will move in same direction as that of benchmark index. A negative beta means that the stock moves in opposite direction to the market. If the market return is negative, the stock return is positive. A zero beta means that stock returns have no relation to the market. This is rare.

7. Correlation Co-efficient ($r$)

It measures the extent of relationship between mutual funds scheme’s return and the market return. It ranges between -1 and +1. If the correlation coefficient is +1, it implies that there is perfect positive correlation i.e. as one security moves, either up or down, the other security will also move in the same direction. Perfect negative correlation (coefficient -1) implies that securities are moving in opposite direction. If correlation is 0, it means that the movement of the securities has no relation at all.

8. Co-efficient of Determination ($R^2$)

R-squared measures the correlation between beta and its benchmark index. It is the square of the correlation co-efficient and is an indication of the degree of diversification. $R^2$ ranges between 0 and 1, where 0 represents no correlation and 1 represents full correlation. If $R^2$ value lies between 0.75 and 1, the beta of the fund should be trusted. Again if $R^2$ value is less than 0.75, it indicates that beta is not particularly useful and fund will not give similar returns to their benchmark index. The lower the R-squared, the less reliable is the beta and vice versa.
9. Compound Annual Growth Rate (CAGR)

CAGR helps in comparing performance across different funds and schemes of the same fund. It reduces the effect of volatility on fund’s NAV. It assumes that the investment is growing at a steady rate. It is applicable if the holding period is more than one year.

\[
CAGR = \left( \frac{LV}{IV} \right)^{\frac{1}{n}} - 1
\]

- \(LV\) = Later Value of units
- \(IV\) = Initial Value of units
- \(n\) = Number of years

10. Sharpe Ratio (SR)

Sharpe ratio or the reward to variability ratio was developed by William Sharpe. It is a measure of risk adjusted return on a portfolio. It is the ratio of effective/expected return to standard deviation of the portfolio.

Effective return is the difference between the return of a portfolio and return of risk free investment. The higher the Sharpe ratio, the better a fund’s return relative to the amount of risk taken. In other words higher Sharpe ratio is better because it implies that the fund has generated higher returns for every unit of risk taken. Again a negative Sharpe ratio is an indicator of low return generated by a portfolio.

\[
\text{Sharpe Ratio (SR)} = \frac{\text{Effective Return}}{\text{Standard Deviation}} = \frac{\text{Portfolio Return} - \text{Risk Free Return}}{\text{Standard Deviation}} = \frac{R_p - R_f}{SD}
\]

11. Treynor Ratio (TR)

Treynor ratio also called the Reward to Volatility ratio was developed by Jack Treynor. It is the ratio of a fund’s average excess return to the fund’s beta. It evaluates the performance of a portfolio based on the systematic risk of a fund. This is similar to Sharpe ratio, but the difference is that Sharpe ratio considers the total risk while
Treynor ratio considers only the systematic risk. A high and positive Treynor ratio indicates a better risk adjusted performance of a fund while a low and negative Treynor ratio indicates a poor performance

\[ \text{Treynor Ratio (TR)} = \frac{\text{Portfolio Return} - \text{Risk Free Rate of Return}}{\text{Portfolio Beta} \times \text{Risk Free Return}} \]

\[ TR = \frac{Rp - Rf}{Bp} \]

12. Jensen Measure (\( \infty \))

It is a measure of absolute performance on a risk-adjusted basis. This measure is developed by Michael Jensen and popularly known as Jensen’s Alpha. This measures the differential between the actual return of portfolio and its expected return given the level of risk i.e. beta. It measures the ability of active management. A positive alpha indicates that the funds have earned a better return due to superior management skills. A negative alpha indicates that the fund is not performing well. When alpha is equal to zero (0), it indicates neutral performance.

Jensen’s Alpha (Differential Return) = Actual Return – Expected Return

\[ = \text{Actual Return} - \left( \text{Risk Free Return + Beta} \right) \times \left( \text{Market Return} – \text{Risk Free Return} \right) \]

\[ = Rp - \left( Rf + \beta (Rm - Rf) \right) \]

13. Sharpe’s Differential Return (SDR)

It measures fund managers skill and ability in selection of securities and diversification. Differential Return is the difference between the portfolio return and expected return relating portfolio risk with market risk. A smaller SDR indicates that portfolio is not well diversified and there is poor performance.

\[ \text{SDR = Rp – } \left( \text{Rf} + \frac{(Rm - Rf) \sigma_p}{\sigma_m} \right) \]
14. Fama’s Decomposition of Performance

Eugene Fama developed an analytical framework taking into consideration the various components of performance, popularly known as Fama’s Decomposition of Total return. He developed the equation as given below:

Total Return = Risk Free Return + Excess Return

Excess Return = Risk Premium + Return from stock selection

Risk Premium = Return for bearing systematic risk + Return for bearing unsystematic risk

\[ \text{Return on portfolio} = \text{Riskless rate} + \text{Return from market risk} \]
\[ + \text{Return from unsystematic risk} + \text{Return from pure Selectivity} \]

Accordingly,

Fama’s Net Selectivity = Rp – [Rf + \frac{\sigma_p}{\sigma_m} (Rm – Rf)]

Rp = Actual Return on Portfolio

Rf = Risk Free rate

Rm=Return on market index

\( \sigma_p \) = Standard deviation of portfolio return

\( \sigma_m \) = Standard deviation on market return

Fama’s decomposition of total return is useful in indentifying the stock selection ability of fund managers. If net selectivity is positive, it indicates that the manager has superior selection ability and if it is negative, it indicates that the fund has not earned better returns due to poor stock selection.

15. M-Squared (M²)

M-squared (M²) is a risk-adjusted performance evaluation measure developed by Franco Modiglianiand Lea Modigliani in 1997. This measure adjusts the risk of a portfolio with the risk of the market portfolio. It is based on the concept that scheme’s
portfolio can be levered or de-levered to reflect a standard deviation that is identical with that of the market. \( M^2 \) is calculated by the following formula:

\[
M^2 = \frac{\text{Standard Deviation of the Market}}{\text{Standard Deviation of the Scheme}} \cdot (\text{Scheme Return} - \text{Risk Free Rate of Return}) + \text{Risk Free Rate of Return}
\]

\[
M^2 = \frac{SDm}{SDp} \cdot (R_p - R_f) + R_f
\]

Higher \( M^2 \) indicates that the scheme has outperformed the market portfolio while lower \( M^2 \) is a sign of underperformance.

1.6. CHAPTER SCHEME

The research work is organized into seven chapters as mentioned below:

**Chapter 1: Introduction** which includes general introduction, statement of the problem, significance of the study, review of literature, objective of the study, methodology of the study and limitations of the study.

**Chapter 2: Concept and History of Mutual Funds** which covers concept of mutual funds, characteristics of mutual funds, advantages of mutual funds, disadvantages of mutual funds, types of mutual funds, history of mutual funds, organization structure of mutual funds in India.

**Chapter 3: Regulatory Framework of Mutual Funds in India.** It focuses on the need and objectives of regulation, guidelines used by RBI, Govt. of India and SEBI and a critical analysis of regulatory framework in India.

**Chapter 4: Growth of Mutual Funds in India.** This chapter contains the trend of growth in assets under management (AUM) sector wise, scheme wise, category wise as well as selected fund wise, trend in net resource mobilisation by mutual funds, trend in transactions on stock exchanges by mutual funds and the growth in respect of number of mutual funds and schemes in operation.

**Chapter 5: Accounting and Disclosure Practices of Mutual Funds in India.** This chapter presents the SEBI (Mutual Funds) Regulations on accounting policies,
disclosure requirements of mutual funds and an analysis of the accounting and disclosure practices of mutual funds in India.

**Chapter 6: Performance of Indian Mutual Funds.** It deals with the profile of the selected mutual funds and schemes and performance analysis of the selected mutual fund schemes.

**Chapter 7: Summary of Findings, Suggestions and Conclusion.**

**1.7. SIGNIFICANCE OF THE STUDY**

Mutual funds play a vital role in the economic development of any country. Particularly in advanced countries they are the key agent of development. However, in developing countries, nowadays, their role is increasing tremendously because of the reform packages introduced and as a result of the LPG measures. They are playing crucial role in respect of resource mobilization, allocation of resources, development of capital markets and the growth of corporate sector. Mutual Funds also ensure stability in stock markets by supplying resources regularly.

Mutual funds are dynamic financial institutions which play a crucial role in an economy by mobilizing savings and investing them in the capital market, thus establishing a link between savings and the capital market.

As in recent years mutual funds are a major participant of Indian capital market, hence it becomes imperative to evaluate their functioning and performance. The study will be relevant for searching out better ways and means for improving the functioning of mutual fund industry. Also this study will highlight the thrust areas where mutual funds should give more emphasis in order to provide awareness to investors and to win investors’ confidence so as to attract more fund from the investors.
1.8. LIMITATIONS OF THE STUDY

This study suffers from the following limitations:

1. The study is based on secondary data which may not be bias free. So the finding of the study is limited to the authenticity and accuracy of secondary data.

2. The study is limited in the sense that entry load, exit load, brokerage commission etc. were not considered.

3. Risk free interest rates are different from period to period. But for the purpose of the study a particular rate is taken as standard which may not be appropriate.

4. In this study BSE-100 is taken as proxy for the market which consists of top 100 companies. Again mutual funds have wide investment opportunities. They can invest largely in small sized companies and IPOs. In this case BSE-100 may not be an ideal benchmark for performance evaluation.

5. The impact of mergers and consolidation of mutual funds and schemes are not taken into consideration in this study.
References:


