

73

ISSN No.0973-9564



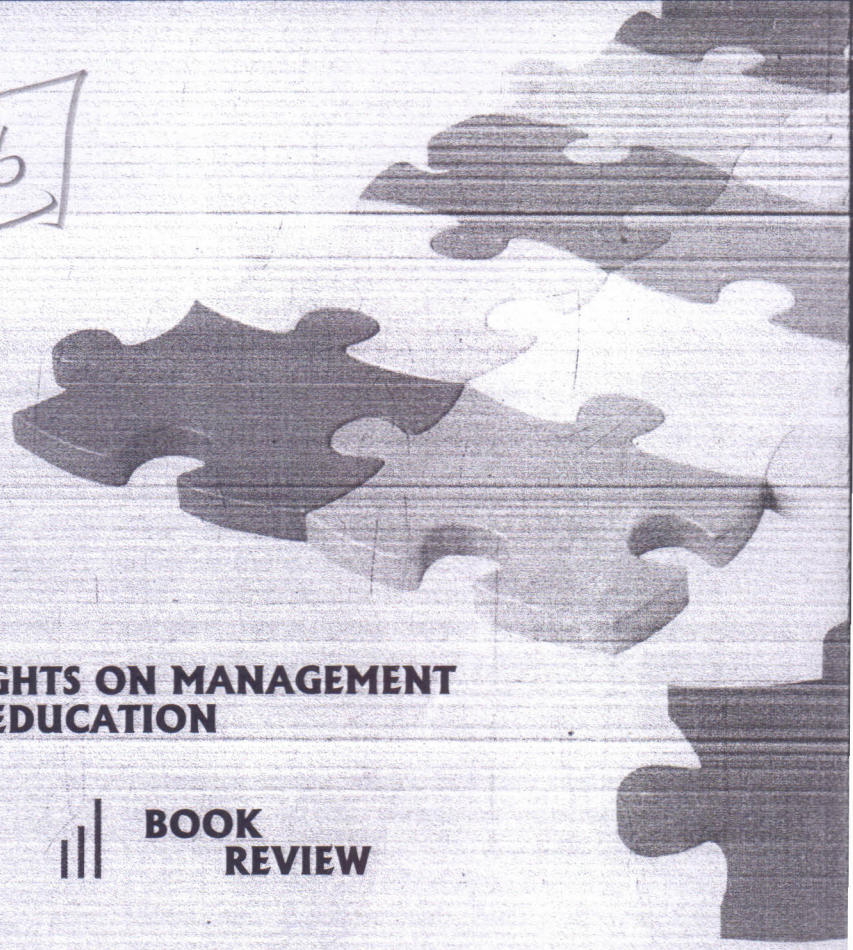
DOMAIN

THE JOURNAL OF MANAGEMENT RESEARCH

Vol 2 Issue 1

Jul-Dec 2009

56



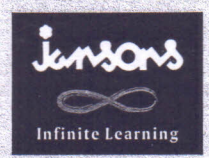
||| START-UPS

||| RESEARCH ARTICLES

||| THOUGHTS ON MANAGEMENT & EDUCATION

||| BOOK REVIEW

2009



THE B SCHOOL

JANSONS SCHOOL OF BUSINESS

PERFORMANCE ANALYSIS OF INDIAN MUTUAL FUND INDUSTRY: A Study with Special Reference to Sector Funds

P. Bhuvaneshwari, Ph.D., Research Scholar, Department of Commerce and Financial Studies, Bharathidasan University, Tiruchirappalli-620 024, Tamil Nadu.
E-Mail: maha_ebe@rediffmail.com

Dr. M.Selvam, Reader and Head, Department of Commerce and Financial Studies, Bharathidasan University, Tiruchirappalli-620 024, Tamil Nadu. E-Mail: drmselvam@yahoo.co.in

G. Indhumathi, Ph.D., Research Scholar, Department of Commerce and Financial Studies, Bharathidasan University, Tiruchirappalli-620 024, Tamil Nadu.
E-Mail: indhu_nila@rediffmail.com

Abstract

The capital market has exhibited remarkable development with innovative instruments and institutions by playing an efficient role of financial intermediation. An economy is divided into smaller groups of closely related industries known as sectors. Mutual funds that specialize in these industries or economic sectors are known as Sector Funds. Different studies have shown different outcomes regarding the abilities of fund managers to produce performance superior to the benchmark portfolios. In this study, an attempt has been made to analyse the performance of Sector Funds in Indian Mutual Fund Industry by using performance measures like Sharpe Ratio, Treynor Ratio, Jensen Differential Returns Measure and Fama's Components of Net Selectivity. The analysis is made with the sample of 56 sector funds, drawn from 11 asset management companies belonging to 11 sectors. The study found that the Infrastructure, Information Technology and Power Sector Funds have earned superior returns.

Introduction

In the globalised era, there is evidence for increased domestic savings and improvement in investments through financial markets. The Mutual Funds Industry has gained prime importance in recent years. The Indian Mutual Fund Industry offers plethora of schemes and serves broadly all types of investors. The mutual fund companies invest their collection of public money in diversified portfolio avenues. These investments are classified on the basis of their nature, objectives, and types. The investment objective is mainly based on the type of financial instruments.

The sector funds or theme funds are basically funds which have specific investment mandates and its stock investments are restricted to certain sectors like FMCG, Pharmacy, Technology, Banking, Power, Media and Entertainment, Auto, Service, Life Science and Technology and Information Technology. These are the sector funds that are available in the market nowadays.

Review of Literature

A large number of studies on the growth and financial performance of mutual funds have been conducted in Mutual Funds Industry. This study has reviewed a selected study in the following pages to understand the research gap.

Amitabh Gupta(2000), in his study entitled "Investment Performance of Indian Mutual Fund: an Empirical Study", has empirically examined the

performance of Indian Mutual Funds by using Sharpe Ratio, Treynor Ratio, Jensen Differential Returns Measure, Sharpe Differential Returns Measure and Fama's Components of Investment Performance during the period of 1994 to 1999.

A study entitled "Implication of Arbitrage Strategies on Performance Persistence on Evidence on Tunisian Mutual Funds" by Hellara Slaheddine and Snoussimen (2000) evaluated performance of monthly returns on all existing Tunisian mutual funds over the six year period from 1994 to 1999. This study analyzed the implications by using the multi-factorial model of Carhart.

Ramesh Chander (2002), in his study entitled "An Evolution of Portfolio Performance Components across Fund Characteristics", attempted to assess the nature and adequacy of portfolio performance by analyzing the various activities carried out by portfolio managers such as market timing, stock selectivity, diversification and risk bearing in the returns generation process.

A study entitled "Risk-Adjusted Performance Evaluation of Indian Mutual Funds Schemes" by Muthappan and Damotharan (2006), analyzed the performance of risk and returns of mutual fund during the study period from 1995 to 2000. Based on the empirical investigation, the study concluded that the Indian mutual funds were properly diversified during the study period.

Sondhi and Jain (2006), in their study entitled "Can Growth Stocks be identified for Investment? - A Study of Equity Selectivity Abilities of Fund Managers in India", examined the returns and excess returns (called Jensen's alpha) of all equity mutual funds in the sample which have been in operation for more than three years.

All the above studies focused on the overall portfolio performance of all funds returns. But this study proposes to focus on the performance evaluation of sector funds which is the need of the hour.

Statement of the Problem

Nowadays mutual fund plays an important role in the development of financial market. In the mutual fund, a lot of schemes have been designed according to the unique needs of different types of investors and their

investment pattern. Generally equity funds oriented schemes get high risk and high returns. But sector fund investment is focused on a particular sector or a particular group of industry. The returns of sector fund depend on the performance of a particular industry. However, with growing number of different industrial sector funds to choose, the retail investors face many problems in selecting the appropriate fund. According to Fama's weak form efficiency, the past performance is indicative of future performance of any fund. Therefore, there is a need to identify and evaluate the past performance of higher earning sector fund. Against this backdrop, the present study is undertaken to identify the best sector funds.

Need of the Study

In the changed scenario, most of the corporate have been reportedly tapping the required funds through mutual fund route which is a reliable source of finance. The mutual funds are emerging as a viable long-term savings vehicle in the country. The sector funds need active management because they are also riskier than others. Besides, among various types of funds, sectors fund are popular now. The sector funds are useful for improving the performance of particular industry. It is strongly believed that any sector in our country whether Pharmacy, IT or any other sector remains attractive from an investment perspective only for a certain period. The reason for selecting sector funds has a lot to do with the performance of this category over the last years. An attempt is made in this study to analyse the performance of sector funds. The investors can develop investment strategy so as to earn superior returns.

Objectives of the Study

The present research study evaluates the following objectives.

1. To analyze the sector wise performance of selected mutual funds.
2. To appraise investment performance of selected mutual funds using Sharpe, Treynor, Jensen and Fama net selectivity models, and
3. To make out which sector's performance is better than others.

Limitations of the Study

1. The study selected only sector funds in the mutual funds industry.
2. The study analysed the data for three years period only.

Methodology of the Study

i) Sources of data

The required data about mutual fund schemes have been collected from the web site of Association of Mutual Fund in India (AMFI) (www.amfiindia.com). For this study, the interest rate for RBI 91 days Treasury Bill (4.65%) is taken as risk free rate. The data for the benchmark portfolio has been collected from NSE website (www.nseindia.com) where daily data are available.

ii) Sample size

As on 01.01.2008, Indian Mutual Fund Industry had 36 players. Out of 36 players, only 11 companies focused their investment for sector specialization in 11 sectors. So, all eleven companies have been selected for this study. These companies are Birla, Franklin, Prudential, SBI, TATA, CAN, UTI, DSP Merrill Lynch, Kotak, JM Healthcare and Reliance. The present study covered and used the data of 56 schemes offered by 11 sample mutual fund companies.

iii) Period of the study

For the purpose of evaluating the performance of the sample sectoral schemes, the dividend adjusted daily NAV has been used for three years period from January 1, 2006 to December 31, 2008.

iv) Tools used for Analysis

An attempt is made in this study to evaluate the performance of sample mutual fund schemes using four performance measures, namely, (1) Sharpe's Performance Ratio, (2) Treynor's Performance Ratio, (3) Jensen's Performance Measure and (4) Fama Component of Investment Performance. They are explained below.

(a) Rate of Returns:

$$R_p = \left[\frac{NAV_t - NAV_{t-1}}{NAV_{t-1}} * 100 \right]$$

Where,

R_p = Portfolio returns

NAV_t = Net asset value in period of t

NAV_{t-1} = Net asset value in period of t-1

(b) Sharpe's Performance Measure:

In this model, performance of a fund is evaluated on the basis of Sharpe ratio, which is a ratio of returns generated by the fund over and above risk free rate of returns and the total risk associated with it.

$$S_p = \frac{\bar{r}_p - r_f}{\sigma_p}$$

Where,

S_p = Sharpe Performance Measure

\bar{r}_p = Average returns of Portfolio p

r_f = Risk free rate

σ_p = Total risk of p

C. Treynor's Performance Measure:

This performance measure is developed by Jack Treynor to evaluate funds on the basis of Treynor's index. This Index is a ratio of returns generated by the fund over and above risk free rate of returns during a given period and systematic risk associated with it.

$$T_p = \frac{\bar{r}_p - r_f}{\beta_p}$$

Where,

T_p = Treynor Performance Measure

\bar{r}_p = Average returns of Portfolio p

r_f = Risk free rate

β_p = Market risk of r_p

(d) Jensen's Performance Measure:

Jensen's model proposes another risk adjusted performance measure. This measure was developed by Michael Jensen and it is sometimes referred to as the Differential Returns Method. This measure involves evaluation of the returns that the fund has generated vs. the returns actually expected out of the fund given the level of its systematic risk. The surplus between the two returns is called alpha, which measures the performance of a fund compared with the actual returns over the period.

$$\alpha = (r_p - r_f) - \beta_P (r_m - r_f)$$

Where,

- α = Differential excess returns
- β_P = Market risk of r_p
- r_p = Portfolio returns
- r_f = Risk free rate
- r_m = Market returns

(e) Fama Components of Investment Performance:

The Eugene Fama Model is an extension of Jensen model. This model compares the performance measured in terms of returns on a fund with the required returns commensurate with the total risk associated with it. The difference between these two is taken as a measure of the performance of the fund and it is called net selectivity.

$$\text{Net Selectivity} = (r_p - r_f) - \left(\frac{\sigma_p}{\sigma_m} \right) (r_m - r_f)$$

Where,

- r_p = Portfolio returns
- r_f = Risk free rate
- σ_p = Total risk of r_p
- σ_m = Total risk of r_m
- r_m = Market returns

Analysis of the Study

Table 1 shows the performance of sample sector mutual fund schemes during the study period from January 1, 2006 to December 31, 2008. The sample schemes from eleven sectors were analyzed in this study. The analysis covers totally 56 schemes which include seven schemes in FMCG sector, another seven in schemes in infrastructure, eight in Information Technology, eleven in Pharmacy, three in Automobile, two in Power, three in Media & Entertainment, five in Banking, six in Service, two in Life Science and Technology and two in Petrol Sector Funds. For the purpose of this study, the sample schemes were selected for analysis on the basis of sector by using Sharpe, Treynor, Fama, and Jensen measures.

It is clearly understood from the analysis of **section 1.a of Table 1** that the schemes of FMCG sector in general performed well under the Sharpe measure when compared to other three measures during the study period. The Birla Sun Life Buy India Fund-Plan B (Growth) provided better returns (0.0435) under Sharpe measure. In Treynor measure, Birla Sun Life Buy India Fund- Plan A earned dividend of 0.1327. But in Fama measure, Birla Sun Life Buy India Fund-Plan B (Growth) and in Jensen measure, Prudential ICICI FMCG Plan-Dividend Option earned excess returns of -0.0252 and 0.0486 respectively than other funds. The Franklin FMCG Fund – Growth Scheme (-0.0516) earned less returns in the FMCG sector during the study period.

The performance of mutual fund schemes in Infrastructure Sector during the study period is given in the **section 1.b of Table 1**. The UTI Infrastructure Fund (Growth) earned good returns of 0.0955 under Sharpe measure, while it earned returns of 0.0543 under Fama's net selectivity. The Prudential ICICI Infrastructure Fund (Growth) earned returns of 0.9882 under Treynor measure and 0.1379 under Jensen measure. It is surprising to note from the analysis that the CAN Infrastructure -Growth underperformed than other fund according to Fama's measure (-0.0190) and Jensen measure (-0.0077). This implies that the growth option funds outperformed as well as underperformed based on measures in the same sector.

The performances of eight Information Technology Sector funds were analyzed in **section 1c of Table 1**. It is significant to note from the analysis that the SBI MSFU IT obtained higher returns when compared to other sample funds under all measures, namely, Sharpe (0.0813), Treynor (2.2924), Fama (0.0307) and Jensen (0.1289) measures. The Prudential ICICI Technology Fund received second top position under all measures. UTI-GSF- Software-Growth and Income options have acquired the third top position according to Sharpe, Treynor measures and Fama's net selectivity. At the same time, Kotak Tech has underperformed according to all the measures.

The **section 1d of Table 1** identifies the performance of eleven mutual funds in Pharmaceutical sector during the study period. It is to be noted that all sample schemes performed well in the Sharpe measure when compared to other measures. The Reliance Pharma Fund (Dividend) (0.0161) and SBI MSFU Pharma (Dividend) (0.0161) earned better returns according to Sharpe and Jensen measure respectively. But Fama's measure showed negative results in all selected funds. JM Health Care Sector Fund Dividend underperformed during the study period based on all measures (Sharpe ratio -0.0153, Fama's net selectivity -0.1443 and Jensen -0.1129) and SBI MSFU Pharma – Dividend underperformed in Treynor ratio (-0.1626). The average returns of all schemes were low during the study period. In short, the overall performance of Pharmacy sector was poor during the study period.

The analyses of three Automobile sector funds are given in the **section of 1e of Table 1**. Only two companies' funds, namely, JM Auto Sector Fund (Dividend), UTI Auto Sector Fund Growth and Dividend were taken for analysis of this study. The JM Auto Sector Fund Dividend showed negative result under all measures. But UTI Auto Sector Fund Growth and Dividend option performed better under Sharpe (0.0075) and Treynor (0.0137) measures. However the average returns under all measures gave negative results. It indicates the poor performance of sample schemes of Automobile Sector during the study period.

The **section 1f of Table 1** presents the results of sample power sector funds performance during the study period. Two funds, namely, Reliance Diversified Power Sector Fund-Growth and Reliance

Diversified Power Sector Fund-Dividend were selected and analyzed. Among these two funds, the Reliance Diversified Power Sector Dividend option earned more returns than Growth option under all four measures used in this study.

The **section 1g of Table 1** shows the performance of three sample schemes in Media and Entertainment sector. The three sample funds selected are Reliance Media & Entertainment Fund-Growth, Reliance Media & Entertainment Fund-Growth (bonus) and Reliance Media & Entertainment Fund-Dividend. The average returns of these three schemes provided better returns as explained by 0.1371, 0.1361 and 0.1366 respectively under Treynor measure during the study period. It is clear that under Fama's measure, the performance results of all sample funds were poor than under all other measures. The Reliance Media and Entertainment Fund- Growth and Dividend options earned higher returns (0.0618) than bonus option (0.0615) under the Sharpe measure. Treynor and Jensen's measure clearly indicate that Reliance Media and Entertainment Fund Dividend options (0.0286) performed better than other sample schemes taken for this study.

The **section 1h of Table 1** gives the performance results of five sample funds, namely, Reliance Banking Fund-Growth Plan-Growth, Reliance Banking Fund-Dividend Plan-Dividend, Reliance Banking Fund-Growth Plan-Bonus Option, UTI Banking Sector Fund-Growth Option and UTI Banking Sector Fund-Income Option pertaining to Banking sector during the study period. The banking sector funds are invested in the listed banking company's financial instruments. It is to be noted that the average value of selected schemes showed shortfall both under Fama and Jensen's measures. At the same time, the Treynor measures indicate better performance than others according to the average returns of sample schemes. The UTI banking sector fund (growth option) survived better compared to the other sample schemes under Treynor (0.0938) and Sharpe (0.0449) measures.

The six sample funds in service sector performed well while the consideration of performance under all measures like Sharpe, Treynor, Fama and Jensen are shown in the **section 1i of Table 1**. It is clear that among these four measures, Treynor measure value shows better results than other three measures during

the study period. The Prudential ICICI Service Industries Fund Dividend Option produced higher results in Sharpe (0.0804), Treynor (1.0241) and Fama's (0.1115) measures. It is to be noted that UTI - GSF - Service-Growth and Income Options underperformed in Fama's net selectivity (-0.0088) and Jensen measures (-0.0021).

The result of the **section 1j of Table 1** demonstrates the returns performance of two Life Science and Technology Sector Fund during the study period. The above sample schemes, namely, Tata Life Science and Technology Fund Growth and Dividend outperformed others during the study period. The Tata Life Science and Technology Fund Dividend option earned better results than Growth option under Sharpe (0.0672), Treynor (0.1304) and Fama (0.0079) measures. It is to be noted that in Jensen measures both funds earned same returns of 0.0229. Among these four measures, Treynor measure showed higher returns result while Fama measures outcome showed lower returns result than others. At the same time, the performance of Life Science and Technology Sector Funds exhibited positive risk adjusted returns when compared to other sectors.

The **section 1k of Table 1** covers the performance of two sample schemes, namely, UTI - GSF - Petro-Growth Option and UTI - GSF - Petro-Income Option. From the analysis it is understood that the sample schemes taken in petroleum sector performed well under Sharpe and Treynor measures i.e. positive returns. At the same time, fund manager's stock picking ability was not good in relation to Fama net selectivity. Jensen's measure also points out the fact that the selected sample schemes underperformed during the study period. The UTI-GSF-Petro Income option performed well (Sharpe ratio 0.0064, Treynor ratio 0.0120) than growth option during the study period.

The average performance of 56 sample sector funds in 11 sectors is depicted in **Table 2**. It is significant to note that in Sharpe ratio (0.0881) and Fama's Net selectivity (0.0460), Power Sector performed well. But in Treynor measure, Information Technology performed better with an average value of 0.5593 and in Jensen measure, Infrastructure Sector earned returns of 0.0659. It is surprising to note that auto sector under performed in all the measures (Sharpe ratio (-0.0019), Treynor ratio (-0.0140), Net

selectivity (-0.1213) and Jensen (-0.0914)). The poor performance of the Automobile Sector Fund Schemes, when compared to other sectors, portrays poor management of Fund managers. The fund managers of automobile sector should take necessary steps to improve their performance in other sectors.

Summary of Findings and Suggestions

I. Findings

The following are the important findings of this study.

- a) Among the seven schemes in FMCG sector, Birla Sun Life Buy India Fund- Plan A (Dividend) and Birla Sun Life Buy India Fund-Plan B (Growth) showed better performance than other sample schemes. To maintain these continuous returns, the fund managers of sector schemes like Birla Sun Life Buy India Fund- Plan A- Dividend and Growth options invested in FMCG sector can follow the same portfolio strategy.
- b) UTI Infrastructure Fund (Growth) and Prudential ICICI Infrastructure Fund (Growth) performed well in Infrastructure Sector.
- c) It is important to note that sample schemes in Information technology sector, namely, Prudential ICICI Technology Fund and SBI MSFU IT had outperformed under all measures.
- d) Under Pharmaceutical sector, JM Health Care Sector Fund Growth and Dividend and UTI-GSF-Pharma Growth and Dividend showed poor performance during the study period. The overall performances of the Pharmacy Sector schemes are positive. But JM Health Care Sector Growth and Dividend Schemes showed poor performance. To improve the returns of those schemes, the fund managers should follow a profitable strategy.
- e) UTI Auto Sector Fund Growth and Dividend Option Schemes offer better returns in the Automobile Sector. The UTI Auto Sector fund company attracts more investors with this track record in the future.
- f) In power sector funds, Reliance Diversified Power Sector Dividend Option earned more returns when compared to other sample companies during the study period.

- g) It is found that sample schemes like Reliance Media and Entertainment Fund- Growth and Dividend Options in Media and Entertainment Sector earned higher returns. With this better performance, Reliance Media and Entertainment Fund can obtain top position in the Media and Entertainment Sector.
- h) It is significant that UTI Banking Sector Fund Growth Option survived better in banking sector during the study period. This better performance prompted new investors to invest more in the banking sector.
- I) Prudential ICICI Service Industries Fund Growth Option performed better in the service sector.
- j) Under Life Science and Technology Sector, Tata Life Science and Technology Fund Dividend Option earned better outcome during the study period.
- k) UTI-GSF-Petro Income Option performed well in petroleum sector. The UTI-GSF-Petro Income Option Fund Company is advised to maintain the same investment portfolio strategy.
- l) In Sharpe ratio and Fama's Net selectivity, Power Sector performed well. In Treynor measure, Information Technology performed better. Infrastructure sector outperformed under Jensen.

II. Suggestions

Based on the findings of the present study, select suggestions are given for fund managers from the investors' point of view.

(a) For Fund managers

- (i) The fund managers of selected sector schemes invested in FMCG, Pharmacy, Media & Entertainment, Banking and Petro sector are to perform well to promote the performance of the sectors with respect to industry.
- (ii) Depending on the market returns earned in the past, fund managers can change the portfolio construction in a profitable way.
- (iii) The outperformed schemes, namely, UTI Infrastructure Fund (Growth) and Prudential ICICI Infrastructure Fund (Growth) in

Infrastructure sector, Prudential ICICI Technology Fund and SBI MSFU IT in Information Technology sector, Reliance Diversified Power Sector Dividend Option in Power sector, Prudential ICICI Service Industries Fund Growth Option in Service sector and Tata Life Science and Technology Fund Dividend Option in Life Science and Technology sector should maintain their portfolio allocation strategies.

(b) For Investors

- (I) The investors should first select the sector based on its performance in the past in order to predict the future performance.
- (ii) They are advised to analyze the track record of the asset management companies and to invest in the profitable venture.
- (iii) Based on the investment objective, they can choose suitable options like dividend or growth to earn required returns.

Conclusion

The aim of sector specific fund is to create growth of capital over a period of time as well as to provide better income through investment in stocks of select sectors. The results of this study clearly show that Infrastructure, Technology, Information Technology, Power, Media & Entertainment, Service and Life Science & Technology Sector Funds have earned excess risk adjusted returns. It indicates the fact that these sector portfolio performances are encouraging in the mutual fund market. From the study, it was further proved that the fund managers net selectivity is outstanding in five sectors only which include Infrastructure, Information Technology, Power, Service, Life Science and Technology. The analytical result of this study indicates that diversified portfolio of other six sectors' funds (FMCG, Pharmacy, Media & Entertainment, Banking and Petro) have not earned positive results.

Scope for Further Research

The present study focused only on the period of three year i.e. from January, 2006 to December, 2008. It may be extended for longer periods. It is just like a performance analysis. In future it may be compared

with sectoral indices also. This study analyzed only eleven sectors and it can be increased. There is scope for analysis of the sector funds performance by using advanced tools like Fama's three factor model, etc.

References:

1. Amitabh Gupta, "Investment Performance of Indian Mutual Funds: an Empirical Study", Finance India, Vol. 14, No.3, 2000.
2. Hellara Slaheddine and Snoussiimen, "Implication of Arbitrage Strategies on Performance Persistence on Evidence on Tunisian Mutual Funds", Finance India, Vol.17, No 3, 2003.
3. Jaspal Singh and Subhash Chander, "An Empirical Analysis of Perceptions of Investors towards Mutual Funds", Vol. 18, No. 4, 2004.
4. Muthappan, P.K. and E. Damotharan, "Risk-Adjusted Performance Evaluation of Indian Mutual Funds Schemes", Finance India, Vol. 20, No. 3, 2006.
5. Narasimhan, M.S. and S. Vijayalakshmi, "Performance Analysis of Mutual Funds in India", Finance India, Vol. 15, No.1, 2001.
6. Priti Pandey and Sudesh, "Evaluating Stock Selection Abilities of Indian Capital Market", Management & Change, Vol. 9, No. 2, 2005.
7. Rachana Baid, "Mutual Funds Products and Services", Second Edition, New Delhi, Taxmann Publications (P) Ltd., 2007.
8. Ramesh Chander, "An Evaluation of Portfolio Performance Components across Fund Characteristics", Finance India, Vol. 16, No. 4, 2002.
9. Ramesh Chander, "Investment Manager's Market Timing Abilities: Empirical Evidence from the Indian Capital Market", IIMB Management Review, Vol. 18, No. 4, 2006.
10. Sadhak, H. "Mutual Funds in India: Marketing Strategies and Investment Practices", Second Edition, New Delhi, Response Books, 2003.
11. Sondhi, H.J. and P.K. Jain, "Can Growth Stocks be identified for Investment? A Study of Equity Selectivity Abilities of Fund Managers in India", Applied Finance, 2006.
12. www.amfiindia.com
13. www.google.co.in
14. www.mutualfundindia.com
15. www.myicwai.com
16. www.nseindia.com

with sectoral indices also. This study analyzed only eleven sectors and it can be increased. There is scope for analysis of the sector funds performance by using advanced tools like Fama's three factor model, etc.

References:

1. Amitabh Gupta, "Investment Performance of Indian Mutual Funds: an Empirical Study", Finance India, Vol. 14, No.3, 2000.
2. Hellara Slaheddine and Snoussiimen, "Implication of Arbitrage Strategies on Performance Persistence on Evidence on Tunisian Mutual Funds", Finance India, Vol.17, No 3, 2003.
3. Jaspal Singh and Subhash Chander, "An Empirical Analysis of Perceptions of Investors towards Mutual Funds", Vol. 18, No. 4, 2004.
4. Muthappan, P.K. and E. Damotharan, "Risk-Adjusted Performance Evaluation of Indian Mutual Funds Schemes", Finance India, Vol. 20, No. 3, 2006.
5. Narasimhan, M.S. and S. Vijayalakshmi, "Performance Analysis of Mutual Funds in India", Finance India, Vol. 15, No.1, 2001.
6. Priti Pandey and Sudesh, "Evaluating Stock Selection Abilities of Indian Capital Market", Management & Change, Vol. 9, No. 2, 2005.
7. Rachana Baid, "Mutual Funds Products and Services", Second Edition, New Delhi, Taxmann Publications (P) Ltd., 2007.
8. Ramesh Chander, "An Evaluation of Portfolio Performance Components across Fund Characteristics", Finance India, Vol. 16, No. 4, 2002.
9. Ramesh Chander, "Investment Manager's Market Timing Abilities: Empirical Evidence from the Indian Capital Market", IIMB Management Review, Vol. 18, No. 4, 2006.
10. Sadhak, H. "Mutual Funds in India: Marketing Strategies and Investment Practices", Second Edition, New Delhi, Response Books, 2003.
11. Sondhi, H.J. and P.K. Jain, "Can Growth Stocks be identified for Investment? A Study of Equity Selectivity Abilities of Fund Managers in India", Applied Finance, 2006.
12. www.amfiindia.com
13. www.google.co.in
14. www.mutualfundindia.com
15. www.myicwai.com
16. www.nseindia.com

Performance Analysis of Indian Mutual Fund Industry

Table 1
Performance of Sector Mutual Fund Schemes form 01/01/06 to 31/12/08

NAME OF THE SCHEME	Sharpe-Ratio	Treynor-Ratio	Net Selectivity	Jensen
a) FMCG				
Birla Sun Life Buy India Fund-Plan A(Dividend)	0.0305	0.1327	-0.1169	0.0251
Birla Sun Life Buy India Fund-Plan B(Growth)	0.0435	0.0806	-0.0252	-0.0163
Franklin FMCG Fund-Dividend	0.0153	0.0421	-0.0843	-0.0403
Franklin FMCG Fund-Growth	0.0142	0.0280	-0.0643	-0.0516
Prudential ICICI FMCG Plan-Growth Option	0.0346	-9.0906	-0.0381	0.0484
Prudential ICICI FMCG Plan-Dividend Option	0.0348	-9.5259	-0.0378	0.0486
SBI MSFU FMCG	-0.0485	-0.1362	-0.2720	-0.2093
b) INFRASTRUCTURE				
CAN Infrastructure-Growth	0.0519	0.0966	-0.0190	-0.0077
Tata Infrastructure Fund-Growth	0.0899	0.1670	0.0485	0.0603
Tata Infrastructure Fund-Dividend	0.0906	0.1685	0.0494	0.0612
UTI Infrastructure Fund-Growth Option	0.0955	0.1772	0.0543	0.0651
UTI Infrastructure Fund-Income Option	0.0948	0.1758	0.0532	0.0640
Prudential ICICI Infrastructure Fund-Growth	0.0897	0.9882	0.0471	0.1379
Prudential ICICI Infrastructure Fund-Dividend	0.0536	0.5716	-0.0158	0.0802
c) IT				
DSP Merrill Lynch Technology.com Fund	0.0715	0.1306	0.0155	0.0256
Kotak Tech	0.0585	0.1129	-0.0065	0.0077
Prudential ICICI Technology Fund	0.0773	1.4032	0.0267	0.1271
Franklin Infotech Fund-Dividend	0.0619	0.1232	0.0053	0.0224
Franklin Infotech Fund-Growth	0.0650	0.1293	0.0036	0.0218
UTI-GSF-Software-Growth Option	0.0747	0.1419	0.0207	0.0341
UTI-GSF-Software-Income Option	0.0745	0.1414	0.0204	0.0337
SBI MSFU IT	0.0813	2.2924	0.0307	0.1289
d) PHARMA				
Franklin Pharma Fund-Dividend	0.0037	0.0079	-0.0806	-0.0619
Franklin Pharma Fund-Growth	0.0109	0.0232	-0.0760	-0.0559
JM Healthcare Sector Fund-Growth	-0.0005	-0.0014	-0.1038	-0.0689
JM Healthcare Sector Fund-Dividend	-0.0153	-0.0348	-0.1443	-0.1129
Reliance Pharma Fund-Growth Plan-Growth	0.0160	0.0352	-0.0789	-0.0528
Reliance Pharma Fund-Growth Plan-Bonus	0.0160	0.0352	-0.0789	-0.0528
Reliance Pharma Fund-Dividend-Dividend	0.0161	0.0354	-0.0788	-0.0526
UTI-GSF-Pharma-Growth Option	-0.0025	-0.0052	-0.1016	-0.0801
UTI-GSF-Pharma-Income Option	-0.0026	-0.0056	-0.1017	-0.0803
SBI MSFU Pharma-Dividend	0.0058	-0.1626	-0.0962	0.0161
SBI MSFU Pharma-Growth	0.0063	0.0138	-0.0955	-0.0699
e) AUTO				
JM Auto Sector Fund-Dividend	-0.0208	-0.0693	-0.1882	-0.1172
UTI-Auto Sector Fund-Growth Option	0.0075	0.0137	-0.0880	-0.0787
UTI-Auto Sector Fund Income Option	0.0075	0.0137	-0.0876	-0.0782

Performance Analysis of Indian Mutual Fund Industry

NAME OF THE SCHEME	Sharpe-Ratio	Treynor-Ratio	Net Selectivity	Jensen
f) POWER				
Reliance Diversified Power Sector Fund-Growth	0.0880	0.1752	0.0458	0.0644
Reliance Diversified Power Sector Fund-Dividend	0.0882	0.1756	0.0461	0.0648
g) MEDIA & ENTERTAINMENT				
Reliance Media & Entertainment Fund-Growth	0.0618	0.1371	-0.0019	0.0285
Reliance Media & Entertainment Fund-Growth (bonus)	0.0615	0.1361	-0.0018	0.0282
Reliance Media & Entertainment Fund-Dividend	0.0618	0.1366	-0.0014	0.0286
h) BANKING SECTOR				
Reliance Banking Fund-Growth Plan-Growth	0.0212	0.0450	-0.0725	-0.0486
Reliance Banking Fund-Dividend Plan-Dividend	0.0217	0.0461	-0.0723	-0.0483
Reliance Banking Fund-Growth Plan-Bonus Option	0.0212	0.0450	-0.0725	-0.0486
UTI Banking Sector Fund-Growth Option	0.0449	0.0938	-0.0304	-0.0082
UTI Banking Sector Fund-Income Option	0.0446	0.0934	-0.0309	-0.0086
i) SERVICE				
Tata Service Industries Fund-Appreciation	0.0547	0.1069	-0.0134	0.0028
Tata Service Industries Fund-Dividend	0.0553	0.1080	-0.0124	0.0038
UTI-GSF-Service-Growth Option	0.0566	0.1012	-0.0088	-0.0021
UTI-GSF-Service-Income Option	0.0566	0.1013	-0.0088	-0.0021
Pru ICICI Services Industries Fund-Growth	0.0788	1.0078	0.0313	0.1098
Pru ICICI Services Industries Fund-Dividend	0.0804	1.0241	0.0280	0.1115
j) LIFE SCIENCE AND TECHNOLOGY				
Tata Life Sciences & Technology Fund-Growth	0.0671	0.1303	0.0078	0.0229
Tata Life Science & Technology Fund-Dividend	0.0672	0.1304	0.0079	0.0229
k) PETRO				
UTI-GSF-Petro-Growth Option	0.0062	0.0117	0.0914	-0.0793
UTI-GSF-Petro-Income Option	0.0064	0.0120	0.0913	-0.0793

Source:AMFI

Table 2
Average Performance of Sectors form 01/01/06 to 31/12/08

NAME OF THE SCHEME	Sharpe-Ratio	Treynor-Ratio	Net Selectivity	Jensen
FMCG	0.0178	-2.6385	-0.0912	-0.0279
INFRASTRUCTURE	0.0809	0.3350	0.0311	0.0659
INFORMATION TECHNOLOGY	0.0706	0.5593	0.0146	0.0501
PHARMA	0.0049	-0.0054	-0.0942	-0.0611
AUTO	-0.0019	-0.0140	-0.1213	-0.0914
POWER	0.0881	0.1754	0.0460	0.0646
MEDIA & ENTERTAINMENT	0.0617	0.1366	-0.0017	0.0284
BANKING	0.0307	0.0647	-0.0557	-0.0324
SERVICE	0.0637	0.4082	0.0027	0.0373
LIFE SCIENCE AND TECHNOLOGY	0.0672	0.1303	0.0078	0.0229
PETRO	0.0063	0.0119	-0.0913	-0.0793

Source:AMFI

