



# Performance Evaluation of Select Growth Schemes in India

Prashanta Athma<sup>1</sup> and K. Raj Kumar<sup>2</sup>

<sup>1</sup>Department of Commerce Osmania University College for Women, Osmania University, Koti, Hyderabad, Telangana State.

<sup>2</sup>Department of Commerce University College, Palamuru University Mahabubnagar, Telangana State.

## ARTICLE INFO

### Article history:

Received: 20 May 2016;

Received in revised form:

15 June 2016;

Accepted: 20 June 2016;

### Keywords

AMC,

AUM,

MF,

YoY,

SEBI.

## ABSTRACT

Mutual Funds are dynamic Financial Institutions which play a crucial role in an economy by mobilizing savings and investing in the Capital Markets thus establishing a link between the savers and the users. Mutual Funds are used as a medium-to-long term investment option by the investors. Indian Mutual Fund industry has two distinct types of sponsors Viz., Public-Sector and Private-Sector. The present study aims to evaluate and compare the performance of select Growth Schemes of both Private Sector and Public Sector Mutual Funds in India. This study covers a period of ten years from 2003-04 to 2012-13 for the purpose of evaluation of performance. A majority of the schemes had Mean Returns and Beta above their corresponding Benchmark. Further, it has significant difference between the mean returns of Private Sector and Public Sector Mutual Funds in India. Mutual Funds Companies have to strengthen their R&D, focus on reducing load fee and expenses ratio depending on market conditions to have better future performance.

© 2016 Elixir All rights reserved.

## Introduction

Mutual Funds are dynamic Financial Institutions which play a crucial role in an economy by mobilizing savings and investing in the Capital Markets thus establishing a link between the savers and the users. Mutual Funds have seen a tremendous growth in the last few years. Mutual Funds provide households an option for portfolio diversification and relative risk aversion through collection of funds from the households and makes investments in the stock and the debt market.

Indian equities have significantly outperformed the developed markets over the year on year (YoY). Given India's growth potential, the time is opportune to progressively invest money in equity market throughout the year. Mutual Fund Companies are offering more and more number of Equity Schemes, Income Schemes, Balanced Funds, Exchange Traded Funds and Hybrid Funds to the investors. The objective of the Mutual Funds is to provide a continuous liquidity and higher yields with a high degree of safety to the investors. Before an investment is made the evaluation of the performance of the Mutual Funds is necessary to make a right investment decision.

### Need for the study

Mutual Funds are used as a medium-to-long term investment option by the investors. Indian Mutual Fund industry has two distinct types of sponsors Viz., Public-Sector and Private-Sector. The number of funds floated by Public-Sector Sponsors is minimal compared to Private-Sector players. There is a hypothetical assumption that private-sector outperforms public-sector due to several factors such as responsibility, commitment and so on. It is of paramount importance for the Policy Makers, Governing Bodies, Mutual Fund Companies and the investors to analyze as to which schemes are efficient performers. The present study aims to fill up the gap by making Inter-sector, Intra-sector and Scheme wise evaluation of performance of the Select Companies.

## Review of Literature

Sharad Panwar and Dr. R. Madhumathi (2006)<sup>1</sup> found that public-sector sponsored funds do not differ significantly from private-sector sponsored funds in terms of mean returns. But, there is a significant difference in terms of other variables. Satya S.D. & Bishnupriya. M (2006)<sup>2</sup> found that UTI Mutual Fund schemes and Franklin Templeton schemes have performed exceedingly well in public and private respectively. Sumalatha.B.S (2007)<sup>3</sup> found that competition is high in the public sector and foreign sector and it has declined in the private sector. Dr. Tl. M. Swaminathan (2012)<sup>4</sup> found that the returns of the growth schemes are more normally distributed compared to other categories, while the private sector has done better than the public sector. Mohd. Zaheeruddin *et al* (2013)<sup>5</sup> found that Mutual Funds are one of the best investment source available for Indian small investors to make an investment, if thoroughly assessed it may give big returns with little savings. Dr. Rupeet Kaur (2014)<sup>6</sup> found that open-ended debt Mutual Funds have not performed better than the benchmark indicators. The average return of the schemes is less than the market index. Sumana B.K & Prof B Shivaraj (2014)<sup>7</sup> found that performance of the funds primarily depends on the measure selected for analysis. There were no funds which had common ranks with respect to different performance measures used. Mr. Sunil M. Adhav, Dr. Pratap M. Chauhan (2015)<sup>8</sup> concluded that during 2009-10 to 2013-14 period the average return generated by Mutual Funds of selected Indian companies is above the risk free return of 91 day T-Bill and benchmark return.

### Research Gap

The above review of literature reveals that they have focused either on Public Sector or Private Sector Mutual Funds. In the Indian context, very few studies have compared the performance of the Mutual Fund Schemes of Private Sector and Public Sector. Hence, there is a need to evaluate the performance of Mutual Funds in terms of Scheme-wise, Company-wise and Sector-wise.

### Objectives of the study

The objective of the study is to evaluate and compare the performance of select Growth Schemes of both Private Sector and Public Sector Mutual Funds in India.

### Period of the Study

The study covers a period of ten years from 2003-04 to 2012-13 for the purpose of evaluation of performance. In the year 2003, UTI was bifurcated into two separate entities viz., UTI – I and UTI-II. UTI-II is established as UTI Asset Management Company Limited in the year 2003 and was brought under the SEBI Regulations. Thus, there would be uniformity as all the companies are now regulated by SEBI.

### Methodology

The methodology of the study is as follows:

#### ✓ Sources of Data

The study is mainly based on secondary data which include Annual Reports of the Mutual Funds, Fact Sheets, Brochures, Journals, SEBI Manuals, Publications and Websites.

#### ✓ Sample Selection

The selection of the sample from the total Companies and available schemes is discussed below.

#### a. Selection of Companies

A selection of 8 companies is made by using the Finite Population Correction (FPC) Factor Model<sup>9</sup> out of 35 Mutual Fund Companies functioning in India.

Public Sector	Private Sector	
	Indian Sector	Foreign Sector
Total Companies(5)	(19)	(11)
Total Selected Companies (2)	(4)	(2)
Public Sector	Private Sector	
	Indian Sector	Foreign Sector
1. UTI Asset Management Company Ltd. 2. SBI Funds Management Private Ltd.	1. Reliance Capital Asset Management Ltd., 2. HDFC Asset Management Co. Ltd 3. ICICI Prudential Asset Management Co. Ltd. 4. Birla Sun Life Asset Management Co. Ltd.	1. Franklin Templeton Asset Management (India) Private Ltd. 2. HSBC Asset Management (India) Private Ltd.

The selection of the company is based on the Average Assets Under Management

#### b. Selection of the Schemes

The Growth schemes which are common to all the select companies (8) which are operating during the years 2003-2013 are selected for the study for the purpose of comparative evaluation.

The variables for evaluating the performance are Return, Risk, Reward to variability, Reward to Volatility and Return on Net Selectivity.

#### Hypothesis-1

H<sub>0</sub>: There is no significant difference in the returns of Growth Schemes of Public Sector and Private Sector Mutual Funds.

H<sub>1</sub>: There is a significant difference in the returns of Growth Schemes of Public Sector and Private Sector Mutual Funds.

#### Hypothesis – 2:

H<sub>0</sub>: There is no significant difference in the returns of Growth Schemes of Public Sector and Indian Private Sector Mutual Funds.

H<sub>1</sub>: There is a significant difference in the returns of Growth Schemes of Public Sector and Indian Private Sector Mutual Funds.

#### Hypothesis – 3:

H<sub>0</sub>: There is no significant difference in the returns of Growth Schemes of Indian Private Sector and Foreign Private Sector Mutual Funds.

H<sub>1</sub>: There is a significant difference in the returns of Growth Schemes of Indian Private Sector and Foreign Private Sector Mutual Funds.

#### Hypothesis – 4:

H<sub>0</sub>: There is no significant difference in the returns of Growth Schemes of Public Sector and Foreign Private Sector Mutual Funds.

H<sub>1</sub>: There is a significant difference in the returns of Growth Schemes of Public Sector and Foreign Private Sector Mutual Funds.

#### Statistical Tools

Data are analyzed with the help of statistical tools like Averages, CAGR, Standard Deviation, Co-efficient of Correlation (r), Beta Co-efficient of Determination (r<sup>2</sup>) and t-Test. Performance evaluation is done by application of Sharpe Ratio, Treynor Ratio, Jensen Performance Index and Fama Decomposition Model.

#### Return & Risk analysis of Growth Schemes

Return is the major parameter for the evaluation of the performance of any organization as the investors make investment with the hope of earning higher return. Any rational Investor, before investing his or her investible wealth in the Mutual Funds, analyses the risk associated with a particular scheme. The return and risk for the Growth Schemes is evaluated scheme-wise and company-wise is presented for the select companies in the table below.

#### Analysis of Return: Scheme-wise, Company-wise & Sector-wise

It is observed that all the schemes have shown higher return in the year 2003-04 and later the returns are fluctuating over YoY. A majority of the Mutual Fund Schemes has shown negative returns in 2008-09 due to bearish market conditions in the stock market. The number of schemes offered in the Public Sector is very high because these are functioning since the inception of the Mutual Fund Sector in India but the returns of these schemes are low compared to the Private Sector Mutual Fund Schemes.

It is observed that out of 60 schemes, 40 schemes (67 percent) had Mean returns above their corresponding Market Returns which is fairly good indicator of Mutual Fund performance. Out of 19 schemes in Public Sector, only 8 Schemes namely Magnum Global Fund (36.96), Magnum Multiplier Plus Scheme (36.28), MSFC-Pharma Fund (31.01), MSFU-IT Fund (30.04), MSFC-FMCG Fund (28.63), UTI Master Index Fund (28.51), UTI MNC Fund (26.95) and Magnum Tax Gain Scheme (26.95) are earning above Market Return whereas all the other Schemes returns are lower than the benchmark return (25.82%). It indicates that SBI Mutual Fund Company schemes are earning higher returns compared to the UTI Mutual Fund company schemes within the Public Sector. Franklin Templeton India Mutual Fund Company is offering a variety of schemes to the investors and is also having a higher average return (30.38%) compared to HSBC Mutual Fund Company (25.64%) indicating that it is performing better compared to HSBC Mutual Fund Company within the Indian Foreign Private Sector.

Table 1. Return &amp; Risk Analysis of Growth Schemes.

S.No	Name of the Scheme	Return	Risk		r	r <sup>2</sup>	Expense Ratio
			δ	β			
1. Reliance Mutual Fund							
1	Reliance Growth Fund	44.38	65.77	1.55	0.948	0.898	1.82
2	Reliance Vision Fund	41.76	55.15	1.18	0.861	0.717	1.83
Mutual Fund Company wise Average Return		43.07					
2. HDFC Mutual Fund							
3	HDFC Capital Builder Fund	36.76	53.38	1.25	0.939	0.868	2.28
4	HDFC Equity Fund	38.03	55.75	1.36	0.98	0.961	1.91
5	HDFC Tax Saver Fund	37.75	54.16	1.27	0.936	0.877	2.15
6	HDFC Top 200 Fund	37.64	53.58	1.28	0.96	0.922	1.99
7	HDFC Growth Fund	34.78	48.42	1.16	0.961	0.924	2.20
8	HDFC Long Term Advantage Fund	36.32	54.2	1.27	0.938	0.881	2.27
9	HDFC Index Fund	27.97	41.58	0.98	0.998	0.996	1.22
Mutual Fund Company wise Average Return		35.61					
3. ICICI Prudential Mutual Fund							
10	ICICI Top 200 Fund	32.37	49.71	1.21	0.977	0.954	2.22
11	ICICI Prudential Top 100 Fund	28.81	41.21	1	0.979	0.959	2.30
12	ICICI Prudential FMCG Fund	37.99	42.5	0.87	0.851	0.725	2.15
13	ICICI Prudential Tax Plan	39.82	58.68	1.33	0.899	0.808	2.44
14	ICICI Prudential Technology Fund	33.36	53.59	1.16	0.859	0.737	2.50
15	ICICI Prudential Index Fund	25.76	38.52	0.96	0.996	0.992	1.33
16	ICICI Prudential Dynamic Plan	33.50	44.29	1.07	0.971	0.944	2.03
17	ICICI Prudential SPICE Fund	26.53	39.43	0.98	0.999	0.999	0.76
Mutual Fund Company wise Average Return		32.27					
4. Birla Sunlife Mutual Fund							
18	Birla Sun Life 95 Fund	25.93	34.43	0.84	0.981	0.963	2.41
19	Birla Advantage Fund	31.37	67.39	0.64	0.315	0.099	2.29
20	Birla Sunlife Tax Relief'96	17.64	64.5	1.39	0.915	0.838	2.29
21	Birla Sunlife Equity Fund	36.31	54.79	1.33	0.975	0.95	2.16
22	Birla Sunlife MNC Fund	31.21	45.3	1.07	0.959	0.919	2.41
23	Birla Sunlife Opportunities Fund	24.73	50.41	1.16	0.919	0.845	2.51
24	Birla Sunlife Buy India Fund	35.00	49.07	1.14	0.929	0.864	2.49
25	Birla Sunlife New Millennium Fund	27.14	46.54	1.05	0.893	0.797	2.48
26	Birla Sunlife Basic Industries Fund	43.51	65.2	1.46	0.948	0.898	
27	Birla Sunlife Frontline Equity Fund	31.75	43.43	1.07	0.989	0.978	2.30
28	Birla Sunlife Index Fund	24.22	38.85	0.96	0.995	0.99	1.56
29	Birla Sunlife Midcap Fund	39.11	61.11	1.43	0.936	0.877	2.27
30	Birla Sunlife Dividend Yield Plus	31.24	47.4	1.07	0.906	0.822	2.27
Mutual Fund Company wise Average Return		31.09					
5. Franklin Templeton India Mutual Fund							
31	Franklin India Blue chip Fund	33.76	50.49	1.21	0.963	0.927	1.90
32	Franklin India Prima Fund	39.71	64.47	1.48	0.922	0.851	2.05
33	Franklin India Prima Plus	33.68	46.77	1.13	0.973	0.947	2.29
34	Templeton India Growth Fund	34.33	54.28	1.28	0.945	0.892	2.09
35	Franklin Infotech Fund	26.91	48.08	0.9	0.725	0.526	2.39
36	Franklin India Tax Shield Fund	32.83	46.47	1.12	0.969	0.938	2.30
37	Franklin India Opportunities Fund	28.34	44.81	1.1	0.986	0.973	2.24
38	Franklin India Index Fund Nifty Plan	20.39	32.94	0.77	0.925	0.855	1.00
39	Franklin India Index Fund BSE Plan	23.45	37.26	0.92	0.988	0.977	1.06
Mutual Fund Company wise Average Return		30.38					
6. HSBC Mutual Fund							
40	HSBC Equity Fund	33.73	54.27	1.17	0.85	0.723	2.04
41	HSBC India Opportunities Fund	17.54	33.37	0.59	0.68	0.463	2.29
Mutual Fund Company wise Average Return		25.64					
7. UTI Mutual Fund							
42	UTIMaster share	20.70	31.35	0.7	0.887	0.788	1.81
43	UTIMaster Plus	15.12	34.88	0.64	0.718	0.515	1.65
44	UTIEquity Fund	25.46	36.65	0.88	0.958	0.917	1.65
45	UTIMNC Fund	26.95	39.7	0.92	0.955	0.911	1.92
46	UTIMaster Value Fund	18.68	46.65	0.97	0.833	0.694	1.85
47	UTIMaster Index Fund	28.51	41.32	1.01	0.999	0.998	0.75
48	UTIServices Industries Fund	23.63	40.75	0.98	0.962	0.925	1.83
49	UTIPharma & Healthcare Fund	21.03	33.34	0.75	0.905	0.819	1.83
50	UTIEquity Tax saving plan	19.72	35.8	0.87	0.972	0.944	1.83
51	UTINifty Index Fund	24.59	37.77	0.94	0.997	0.995	1.02
Mutual Fund Company wise Average Return		22.44					

8. SBIMutual Fund							
52	Magnum Equity Fund	26.22	42.52	1.02	0.964	0.93	2.34
53	Magnum Multiplier Plus Scheme	36.28	51.4	1.24	0.965	0.931	2.52
54	Magnum Tax gain Scheme	26.92	47.02	0.92	0.769	0.591	2.06
55	MSFU-Contra Fund	25.40	43.44	0.78	0.691	0.478	1.96
56	MSFU - FMCG Fund	28.63	31.91	0.54	0.734	0.539	2.38
57	MSFU - IT Fund	30.04	57.25	1.1	0.761	0.579	2.28
58	MSFU - Pharma Fund	31.01	51.71	1.19	0.943	0.888	2.25
59	Magnum Index Fund	23.73	37.53	0.93	0.997	0.994	1.38
60	Magnum Global Fund	36.96	56.4	1.26	0.896	0.803	2.06
Company wise Rank based on Average Return		29.46					

Source: All Mutual Fund Companies official Websites

Note: Average market return is 25.82 percent

On an average returns, Reliance Mutual Fund Company and HDFC Mutual Fund Companies are having highest returns i.e. 43.07 percent and 35.61 percent respectively within the Indian Private Sector as well as among all the Mutual Fund Companies. It is concluded that out of 30 schemes, 26 schemes are yielding higher return than the market return (25.82) which means that the Private Sector Mutual Companies are performing better compared to Public Sector Mutual Fund Companies.

#### Return Analysis: Public Sector Vs Private Sector Mutual Funds

It is tested to see if there is a significant in the return between the Public Sector (19 schemes) and Private Sector (41 schemes).

**Table 2. Results of Sector Wise Analysis using Independent Sample t-Test .**

Group Statistics					
	Sector	N	Mean	Std. Deviation	Std. Error Mean
Returns	Indian Private Sector	30	33.0897	6.30285	1.15074
	Foreign Private Sector	11	29.5155	6.80340	2.05130
	Private Sector	41	32.1307	6.55312	1.02343
	Public Sector	19	25.7674	5.57177	1.27825

#### Public Sector Vs Private Sector

The t-test result (with equal variances assumed) shows a value of 3.660 (N=60, d.f. = 58), p-value=0.001, which is less than 0.05. Therefore, the null hypothesis is rejected at 5% level of significance, which means that there is a significant difference in the average returns of Private Sector Mutual Funds (32.13) and Public Sector (25.27) Mutual Funds and also indicates the performance of Private Sector Mutual Funds is better compared to Public Sector Mutual Funds.

#### Public Sector Vs Indian Private Sector Vs Foreign Private Sector Mutual Funds

The p-value at 41.92 degrees of freedom is less than 0.05 which mean that the null hypothesis is rejected. It is found that there is significant difference between the Indian Private Sector Mutual Funds and Public Sector Mutual Funds.

In the case of Indian Private Sector and Foreign Sector Mutual Funds; Public Sector and Foreign Sector Mutual

Funds, p-value is greater than 0.05. Hence, the null hypothesis is accepted in both the cases.

It shows that the difference between the mean returns of these sectors is low which means that there is no significant difference in the returns of these sectors.

#### Analysis of Risk

Total risk analyzed with the help of Standard Deviation ( $\delta$ ) and systematic risk analyzed with help of Beta ( $\beta$ ). Out of 60 schemes, the standard deviation of 44 schemes (73 percent) is more than the market risk which means that these are more risky. Among these schemes, 26 schemes are from Indian Private Sector, 8 from Foreign Private Sector and 10 schemes from Public Sector. It indicates that the Indian Private Sector Mutual Fund Companies are more risky compared to the Foreign Private Sector and Public Sector and therefore their returns are also high.

On an overall basis, a majority of the schemes of SBI Mutual Fund Companies have higher beta values compared to UTI Mutual Fund schemes within the Public sector. The Private Sector Mutual Fund schemes are having higher beta values with  $>1.0$  except HSBC Mutual Fund Company schemes, indicating that the Private Sector Mutual Fund Schemes are risky compared to the Public Sector Schemes. There is a positive correlation among all the schemes which means that the schemes returns are moving along with the market return.

As per the SEBI (MF) Regulation 52(1) stipulated a limit that a Fund can charge. Equity funds can charge a maximum of 2.5 per cent, whereas a debt fund can charge 2.25 per cent of the average weekly net assets. It is found that out of 60 schemes, the expenses ratio of 4 schemes is more than 2.5 percent in which the Birla Sunlife Opportunities Fund (2.56 Percent) and Birla Sunlife Buy India Fund (2.54 percent) have higher expenses ratio and these are ranked last among all the schemes. 22 schemes expenses ratio is ranging between 2.25-2.50 percent and 14 schemes are ranging between 2-2.25 percent and remaining schemes ratio is lower than 2 percent.

Only 3 schemes namely UTI Master Index Fund (0.75), ICICI Prudential SPiCE Fund (0.76) and Franklin India Index Fund Nifty Plan (1.01) have very low expenses ratio which indicates that the expenses ratios of the Index Funds are low compared to the other schemes.

S. No.	Sector	Sum of Squares	Levene's Test for Equality of Variances		t	df	Sig. (2-tailed)
			F	Sig.			
1	Private Sector	Equal variances assumed	1.052	0.309	3.660	58	0.001
	Public Sector	Equal variances not assumed			3.886	40.909	0.000
2	Indian Private Sector	Equal variances assumed	0.800	0.376	4.139	47	0.000
	Public Sector	Equal variances not assumed			4.257	41.912	0.000
3	Indian Private Sector	Equal variances assumed	0.176	0.677	1.576	39	0.123
	Foreign Private Sector	Equal variances not assumed			1.520	16.714	0.147
4	Foreign Private Sector	Equal variances assumed	1.207	0.281	1.638	28	0.113
	Public Sector	Equal variances not assumed			1.551	17.784	0.139

It is concluded that the expenses ratio of SBI Mutual Fund schemes is high in case of the Public Sector Mutual Funds and Birla Sunlife Mutual Fund Schemes have higher expenses ratio within the Private Sector as well as on the whole.

#### **Performance Evaluation of Select Growth Schemes**

The performance evaluation of select growth schemes is done with the help of Sharpe Ratio, Treynor Ratio, Jensen Performance Index and Fama Decomposition Model and same is presented in table-3.

#### **Sharpe Ratio (Reward to Variability)**

It is observed that all the schemes are generating excess return over the risk free return (8.13) relating to their total risk. The Sharpe ratios of 7 schemes are equal i.e. 0.55 and ranked five among all the schemes. It is found that UTI Nifty Index Fund and MSFU-Pharma Fund have equal Sharpe value i.e. 0.44 to their benchmark value which means that these are moderate performers with the market performance. It is observed that the reward to variability of 21 schemes are lower than the benchmark return which means that they have failed to beat the market Sharpe ratio. The worst performers are Birla Sunlife Tax Relief'96 (0.15), UTI Master Plus (0.20) and UTI Master Value Fund (0.23). Out of 19 schemes under Public Sector Mutual Fund Schemes, 12 schemes returns are lower than the market return. The Private sector Mutual Fund Schemes are having higher Sharpe values and performing better compared to the Public sector Mutual Funds, of which the ICICI Prudential FMCG Fund has a higher value i.e. 0.70 and it ranked top among all the select schemes.

#### **Treynor Ratio (Reward to Volatility)**

It is observed that 47 schemes out of 60 schemes are earning excess return over its market return which indicates that these schemes are performing better than the market. 13 schemes returns are less than benchmark return (17.69), out of which, 6 schemes belongs to UTI Mutual Fund; it means that these are not performing well compared to the other schemes. It is observed that a majority of the Index funds returns are lower than the market returns. The MSFU-FMCG Fund (38.21), Birla Advantage Fund (36.26) and ICICI Prudential FMCG Fund (34.18) are top performing schemes whereas UTI Master Plus (10.98), UTI Master Value Fund (10.85) and Birla Sunlife Tax Relief'96 fund (6.82) are poor performing schemes. It is found that a majority of the Private sector Mutual Funds schemes are having higher return to volatility compared to the Benchmark return as well as Public sector indicating that these are performing better in the Mutual Fund Sector.

#### **Jensen Performance Index**

It is found that 47 schemes are having positive alpha values which show that these are giving excess returns to their investors. 13 schemes have negative alpha values where a majority of the schemes belongs to UTI Mutual Fund (06 Schemes), Birla Sunlife Mutual Fund (03 schemes) and Franklin Templeton Mutual Fund (03 schemes); it indicates the failure on the part of their Fund Managers to forecast security prices in time for taking better investment decisions. 9 schemes of Private sector and 1 scheme of Public Sector are ranked within the top 10 Mutual Fund Schemes which means that the Private Sector Mutual Funds are performing better compared to the Public Sector Mutual Funds.

It is also observed that a majority of the schemes are having a positive differential returns which shows that these schemes are providing incremental returns to their investors. The ICICI Prudential FMCG Fund (19.28), Reliance Vision Fund (17.48) and Reliance Growth Fund (15.42) are top performing schemes. Only 3 schemes are having negative

returns namely Birla Sunlife Tax Relief'96 (-10.75), UTI Master Value Fund (-6.66) and UTI Master Plus (-4.27) showing poor performance. On the whole, the SBI Mutual Fund is better compared to the UTI Mutual Fund within the Public Sector whereas the Reliance Mutual Fund and ICICI Mutual Fund schemes are performing well within the Private Sector and Overall Mutual Fund sector.

#### **Fama Decomposition Model**

It is observed that 21 schemes are having a positive value relating to the return on market risk and diversification of risk but return on net selectivity stock are negative which indicates the failure on the part of their Fund Managers to forecast security prices in time for taking better investment decisions. It is concluded that among the Public Sector, higher value of return on net selectivity is with MSFU-FMCG Fund (6.45) followed by Magnum multiplier plus Fund (5.52), while in the Private Sector, higher value was evidenced in case of ICICI Prudential FMCG Fund (11.15), Reliance Vision Fund (9.35) and Reliance Growth Fund (7.29).

On the whole, the performance of the Public Sector Mutual Funds has failed to satisfy their investors in terms of the returns on net selectivity which was in spite of taking higher risk. On the other hand, HDFC Mutual Fund, Reliance Mutual Fund and ICICI Mutual Fund schemes are having higher returns within the Private Sector as well as compared to the Public Sector.

#### **Suggestions**

- Most of the select schemes of the Mutual Funds have shown negative alpha values which shows that the Fund Managers failed to forecast appropriate security prices which result in poor performance. It is suggested that the Mutual Funds have to strengthen their Research and Development Department in order to have better future projections.
- Load fee and expense ratio have been found as the major causes for inefficiency in Mutual Fund schemes and hence Mutual Fund Companies may focus on reducing these costs by adopting appropriate strategies (Active/Passive) depending upon the market conditions.

#### **Conclusion**

It can be concluded that a majority of the schemes had Mean Returns and Beta above their corresponding Benchmark. There is a positive correlation between the Fund Return and Market Return. A majority of the schemes have higher coefficient values, which mean that there is a high impact of the Market Return on the Schemes Return. It is found that there is a significant difference between the mean returns of Private Sector Mutual Funds and Public Sector Mutual Funds; whereas, there is no significant difference in the case of the Indian Private Sector and Foreign Private Sector Mutual Funds in India.

On the whole, the results of various performance evaluation tools used shows that the Indian Private Sector Mutual Fund Companies such as the Reliance Mutual Fund Company and HDFC Mutual Fund Company have the best performance among all the select Companies.

Table 4. Performance Evaluation of Select Growth Schemes.

S. No	Name of the Scheme	Sharpe Ratio			Treynor Ratio			Jensen Performance Index				Fama Decomposition Model			Overall Rank
		Ratio	Intra Firm Scheme Rank	Overall Rank	Ratio	Intra Firm Scheme Rank	Overall Rank	Index Value	Rank (α)/(β)	Intra Firm Rank	Overall Rank	Return from Market Risk (R1)	Return from Diversification of Risk (R <sub>2</sub> )	Return on Net Selectivity (R3)	
1. Reliance Mutual Fund															
1	Reliance Growth Fund	0.55	2	5	23.4	2	9	8.83	5.7	2	9	27.42	1.54	7.29	3
2	Reliance Vision Fund	0.61	1	3	28.5	1	4	12.75	10.81	1	4	20.87	3.4	9.35	2
2. HDFC Mutual Fund															
3	HDFC Capital Builder Fund	0.54	4	12	23	4	13	6.56	5.26	3	13	22.07	1.43	5.13	14
4	HDFC Equity Fund	0.54	4	12	22	6	21	5.83	4.28	5	21	24.07	0.47	5.35	11
5	HDFC Tax Saver Fund	0.55	1	5	23.4	1	10	7.18	5.66	1	10	22.44	1.4	5.77	9
6	HDFC Top 200 Fund	0.55	1	5	23	2	11	6.78	5.28	2	11	22.73	0.86	5.92	6
7	HDFC Growth Fund	0.55	1	5	23	3	12	6.12	5.27	4	12	20.53	0.79	5.33	12
8	HDFC Long Term Advantage Fund	0.52	6	18	22.1	5	17	5.67	4.45	6	17	22.53	1.33	4.33	17
9	HDFC Index Fund	0.48	7	30	20.2	7	36	2.49	2.54	7	36	17.35	0.96	1.53	33
3. ICICI Prudential Mutual Fund															
10	ICICI Top 200 Fund	0.49	5	26	20	6	38	2.82	2.32	6	38	21.43	0.46	2.36	27
11	ICICI Prudential Top 100 Fund	0.5	4	25	20.6	5	32	2.9	2.89	5	32	17.78	0.37	2.53	26
12	ICICI Prudential FMCG Fund	0.7	1	1	34.2	1	3	14.41	16.49	1	3	15.46	3.25	11.15	1
13	ICICI Prudential Tax Plan	0.54	3	12	23.9	2	6	8.19	6.16	2	6	23.5	2.34	5.85	8
14	ICICI Prudential Technology Fund	0.47	6	32	21.8	4	23	4.73	4.08	4	23	20.5	3.09	1.64	32
15	ICICI Prudential Index Fund	0.46	8	37	18.5	8	43	0.73	0.76	8	43	16.9	0.06	0.67	37
16	ICICI Prudential Dynamic Plan	0.57	2	4	23.7	3	7	6.42	5.99	3	7	18.95	0.54	5.87	7
17	ICICI Prudential SPiCe Fund	0.47	7	32	18.8	7	42	1.05	1.07	7	42	17.35	0.01	1.04	36
4. Birla Sunlife Mutual Fund															
18	Birla Sun Life 95 Fund	0.52	4	19	21.1	9	29	2.9	3.45	9	29	14.9	0.26	2.65	25
19	Birla Advantage Fund	0.34	11	54	36.3	1	2	11.9	18.57	1	2	11.34	18.33	-6.43	57
20	Birla Sunlife Tax Relief'96	0.15	13	60	6.82	13	60	-15.16	-10.9	13	60	24.67	3.72	-18.88	60
21	Birla Sunlife Equity Fund	0.51	5	20	21.1	8	28	4.6	3.45	6	28	23.58	0.55	4.05	20
22	Birla Sunlife MNC Fund	0.51	5	20	21.7	6	25	4.24	3.98	7	25	18.84	1.1	3.14	24
23	Birla Sunlife Opportunities Fund	0.33	12	55	14.3	12	56	-3.88	-3.35	12	56	20.48	1.71	-5.59	56
24	Birla Sunlife Buy India Fund	0.55	1	5	23.5	3	8	6.63	5.8	3	8	20.24	1.37	5.26	13
25	Birla Sunlife New Millennium Fund	0.41	9	43	18.2	10	45	0.51	0.49	10	45	18.5	1.99	-1.48	46
26	Birla Sunlife Basic Industries Fund	0.54	2	12	24.2	2	5	9.55	6.54	2	5	25.83	2.88	6.67	4
27	Birla Sunlife Frontline Equity Fund	0.54	2	12	22.1	4	18	4.68	4.37	5	18	18.94	0.18	4.5	16
28	Birla Sunlife Index Fund	0.41	9	43	16.7	11	51	-0.94	-0.98	11	51	17.03	0.08	-1.02	43

29	Birla Sunlife Midcap Fund	0.51	5	20	21.7	5	24	5.71	4	4	24	25.27	1.64	4.08	19
30	Birla Sunlife Dividend Yield Plus	0.49	8	26	21.5	7	26	4.12	3.83	8	26	18.99	1.87	2.24	29
<b>5. Franklin Templeton India Mutual Fund</b>															
31	Franklin India Bluechip Fund	0.51	3	20	21.1	4	30	4.18	3.45	4	30	21.45	0.78	3.4	22
32	Franklin India Prima Fund	0.49	4	26	21.3	3	27	5.35	3.61	2	27	26.23	2.15	3.2	23
33	Franklin India Prima Plus	0.55	1	5	22.5	1	16	5.49	4.84	1	16	20.06	0.53	4.96	15
34	Templeton India Growth Fund	0.48	5	30	20.4	6	34	3.49	2.72	5	34	22.71	1.19	2.31	28
35	Franklin Infotech Fund	0.39	8	49	20.9	5	31	2.88	3.21	6	31	15.9	5.27	-2.39	51
36	Franklin India Tax Shield Fund	0.53	2	17	22	2	20	4.87	4.34	3	20	19.83	0.63	4.24	18
37	Franklin India Opportunities Fund	0.45	6	38	18.4	7	44	0.75	0.68	7	44	19.47	0.26	0.48	38
38	Franklin India Index Fund Nifty Plan	0.37	9	53	16	9	53	-1.3	-1.69	9	53	13.55	0.95	-2.24	50
39	Franklin India Index Fund BSE Plan	0.41	7	44	16.7	8	52	-0.92	-1.01	8	52	16.24	0.17	-1.09	44
<b>6. HSBC Mutual Fund</b>															
40	HSBC Equity Fund	0.47	1	32	21.8	1	22	4.84	4.13	1	22	20.75	3.14	1.7	31
41	HSBC India Opportunities Fund	0.28	2	57	15.9	2	54	-1.05	-1.78	2	54	10.46	4.23	-5.28	55
<b>7. UTI Mutual Fund</b>															
42	UTIMaster share	0.4	5	46	17.9	4	46	0.12	0.17	4	46	12.45	1.35	-1.23	45
43	UTIMaster Plus	0.2	10	59	11	9	58	-4.27	-6.71	9	58	11.25	4.1	-8.37	58
44	UTIEquity Fund	0.47	2	32	19.8	3	40	1.82	2.08	3	40	15.51	0.63	1.2	35
45	UTIMNC Fund	0.47	2	32	20.4	1	33	2.52	2.73	1	33	16.3	1.18	1.34	34
46	UTIMaster Value Fund	0.23	9	58	10.9	10	59	-6.66	-6.84	10	59	17.21	3.33	-9.98	59
47	UTIMaster Index Fund	0.49	1	26	20.1	2	37	2.44	2.4	2	37	17.94	0.25	2.19	30
48	UTIServices Industries Fund	0.38	7	51	15.9	7	55	-1.76	-1.81	7	55	17.26	0.68	-2.45	52
49	UTIPharma & Healthcare Fund	0.39	6	49	17.3	6	49	-0.31	-0.41	6	49	13.2	1.48	-1.78	47
50	UTIEquity Tax saving plan	0.32	8	56	13.4	8	57	-3.74	-4.32	8	57	15.32	0.44	-4.18	54
51	UTINifty Index Fund	0.44	4	40	17.6	5	48	-0.13	-0.14	5	48	16.59	0.04	-0.17	40
<b>8. SBI Mutual Fund</b>															
52	Magnum Equity Fund	0.43	5	41	17.7	8	47	0.02	0.02	8	47	18.06	0.66	-0.63	41
53	Magnum Multiplier Plus Scheme	0.55	2	5	22.8	3	15	6.28	5.08	3	15	21.86	0.77	5.52	10
54	Magnum Tax gain Scheme	0.4	7	46	20.4	5	35	2.46	2.67	5	35	16.33	4.37	-1.91	49
55	MSFU-ContraFund	0.4	7	46	22	4	19	3.41	4.35	4	19	13.86	5.27	-1.86	48
56	MSFU - FMCG Fund	0.64	1	2	38.2	1	1	11.01	20.52	1	1	9.49	4.56	6.45	5
57	MSFU - IT Fund	0.38	9	51	19.9	6	39	2.39	2.17	6	39	19.51	5.69	-3.3	53
58	MSFU - Pharma Fund	0.44	4	39	19.2	7	41	1.84	1.55	7	41	21.04	1.73	0.11	39
59	Magnum Index Fund	0.42	6	42	16.8	9	50	-0.88	-0.94	9	50	16.48	0.04	-0.92	42
60	Magnum Global Fund	0.51	3	20	22.9	2	14	6.59	5.24	2	14	22.24	2.59	4	21

Source: All companies Official websites, (Data retrieved from 2003-04 to 2012-13)

Note: i. Risk free Return – 91-days Treasury Bills Interest Rate i.e. 8.13 percent

ii. Sharpe Ratio of Benchmark Return is 0.44

iii. Treynor Ratio of Benchmark Return is 17.69

**References**

1. Sharad Panwar and Dr. R. Madhumathi, "Characteristics and Performance Evaluation of Selected Mutual Funds in India", Social Science Research Network, [www.ssrn.com](http://www.ssrn.com), 2006.
2. Satya Swaroop Debasish & Bishnu Priya Misra (2006) "Performance Evaluation of selected Growth oriented Mutual Funds in India", Indian Management Studies, Vol. X, No.1 (April 2006), pp 141-154.
3. Sumalatha.B.S, "State of Competition among the Mutual Funds in India: An Exploratory Analysis", [www.igidr.ac.in](http://www.igidr.ac.in), 2007
4. Dr. Tl. M. Swaaminathan (2012) "Investment Size and Normality of Returns of Private and Public Sector Mutual Fund Schemes in India", Asian Journal of Multidimensional Research Vol.1 Issue 6, November 2012, pp 102-110. [www.tarj.in](http://www.tarj.in)
5. Mohamed.zaheeruddin, Pinninti Sivakumar & K.Srinivas Reddy, "Performance evaluation of mutual funds in India with special reference to selected financial intermediaries", IOSR Journal of Business and Management (IOSR-JBM), Volume 7, Issue 2 (Jan. - Feb. 2013), PP 34-40.
6. Dr. Rupeet Kaur, "Performance Evaluation of Debt Mutual Fund Schemes in India", GALAXY International Interdisciplinary Research Journal, Vol.2 (2), FEBRUARY-2014, PP 180-192.
7. Sumana B.K & Prof B Shivaraj, "Performance Evaluation of Active Mutual Funds in India", ELK Asia Pacific Journal of Finance and Risk Management, Volume 5 Issue 4 (2014). PP 1-18.
8. Mr. Sunil M. Adhav, Dr. Pratap M. Chauhan, "Comparative Study of Mutual Funds of Selected Indian Companies", International Journal of Science, Technology & Management, Volume No.04, Issue No. 02, February 2015. PP 44-51.
9. Mark Bernson, David Levin, Katherine A Szabat, "Basic Business Statistics: Concepts & Applications", pg-CD-8-1, 2015.