PERFORMANCE EVALUATION OF PUBLIC AND PRIVATE SECTOR MUTUAL FUNDS

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ABSTRACT

In this paper the performance evaluation of the financial system comprises of financial institutions, instruments and markets that provide an effective payment and credit system that facility the channeling of funds from savers to the investors of the economy. Indian Mutual Funds have emerged as strong financial stability to the financial system. Mutual Funds have opened new vistas to investors and imported much needed liquidity to the system. Mutual Funds are dynamic financial institutions, which play a crucial role in an economy by mobilizing savings and investing in the capital markets savings and the investing in the capital markets. Therefore, the activities of Mutual Funds have both short and long to be analyzed to find the impact on the savings and capital market and national economy. Investigation of the portfolio diversification and relative risk aversion through collection of funds from the households and makes investments in the stock and the debt market is done.

KEYWORDS – *Mutual funds, Portfolio, savings, public and private sectors*

I. INTRODUCTION

A Mutual fund is a trust that pools the savings of a number of investors who share a common financial goal. The money thus collected is then invested in capital market instruments such as shares, debentures and other securities. The income earned through these investments and the capital appreciations realized are shared by its unit holders in proportion to the number of units owned by them. Thus a mutual fund is the most suitable investment of the common man as it offers an opportunity to invest in a diversified, professionally managed basket of securities at a relatively low cost. The flow chart below describes broadly the working of mutual funds.

Mutual funds in INDIA

ABN AMRO Mutual Fund, Birla Sun Life Mutual Fund, Bank of Baroda Mutual Fund (BOB Mutual Fund, HDFC Mutual Fund, HSBC Mutual Fund, ING Vysya Mutual Fund, Prudential ICICI Mutual Fund, Sahara Mutual Fund, State Bank of India Mutual Fund (SBI and Tata Mutual Fund.The concept of mutual funds in India dates back to the year 1963. The era between 1963 and 1987 marked the existence of only one mutual fund Company in India with Rs. 67bn assets under management (AUM).by the end of its monopoly era. The Unit Trust of India (UTI), by the end of the 80s decade, few other mutual fund companies in India took their position in mutual fund market. The new entries of mutual fund companies in India were SBI Mutual Fund, Canbank Mutual Fund, Punjab National Bank Mutual Fund, Indian Bank Mutual Fund, Bank of India Mutual Fund. The succeeding decade showed a new horizon in India mutual fund industry. By the end of 1993, the total AUM of the industry was Rs.470.04 bn. The private sector funds started penetrating the fund families. In the same year the first Mutual Fund Regulations came into existence with re-registering all mutual funds except UTI. The regulation was further given a revised shape in 1996. Kothari Pioneer was the first private sector mutual fund company in India which has now merged with Franklin Templeton. Just after ten years with private sector players penetration, the total assets rose up to Rs. 1218.05 bn . Today there are 33 mutual fund companies India.

II. ASSET MANAGEMENT COMPANIES

Asset management companies are the companies involved in the mutual fund business. These companies manage all the transaction of mutual funds from the beginning to the end.

The following are the list of AMC's operating currently in India. They are

A. UTI Asset management company (P) ltd
B. Bank sponsored BoB asset management company ltd
Can bank investment management services ltd
PNB asset management company ltd
SBI funds management company ltd
C. Institutions GIC asset management company ltd
1 IDBI principal asset management co ltd
2 IL&FS asset management co ltd
3 Jeevan bima sahayoge asset management co ltd

D. Private sector

1 Indian Benchmark asset management co ltd
2 Cholamandalam asset management co ltd
3 Escort asset management co ltd
4 JM capital management ltd
5 Kotak Mahindra asset management ltd
6 Sundaram asset management co ltd
7 Reliance capital asset management ltd

2. Joint ventures - Pre dominantly Indian

1 Burlap sun life insurance management co ltd
2 Credit capital asset management co ltd
3 DSP Merrill Lynch fund manager pvt ltd
4 First Indian management co ltd
5 Tata TD water house asset management pvt ltd
6 HDFC asset management pvt ltd

3. Joint ventures - Pre dominantly Foreign

1 Alliance capital asset management (India) pvt ltd
2 Deut she asset management (India) pvt ltd
3 Dundee investment management research pvt ltd
4 HSBC asset management (India) pvt ltd
5 ING investment management (India) pvt ltd
6 Morgan Stanley investment management pvt ltd
7 Prudential ICICI management co ltd
8 Standard Chartered asset management co pvt ltd
9 Sun F & C asset management (India) pvt ltd
10 Templeton asset Management (India) pvt ltd
11 Zurich Asset management company (India) pvt ltd

SBI (State Bank of India) Mutual Fund
SBI mutual funds is the first Bank sponsored mutual fund to lunch offshore fund ,the India magnum fund with a corpus of Rs 225cr. Approximately. Today it is the largest Bank sponsored mutual funds in India They have already launched 35 schemes out of which 15 have already yielded handsome returns to investors. SBI mutual fund has more than RS 5500 cores as AUM. Now it has an investor base over 8lakhs spread over 18 schemes.

UTI (Unit Trust of India)
UTI Asset management company private limited, established in Jan 14,2003, manages the UTI mutual fund with the support of UTI trustee .company private limited .UTI asset management company presently manages corpus of over rs 20000corors. The sponsor of UTI mutual funds are Bank of Board (BOB) Punjab national Bank (PNB), State Bank of India (SBI) and life insurance Corporation of India (LOIC). The schemes of UTI mu7tual fund are liquid funds, asset management funds, index funds, equity funds and balance Fund.

HDFC (Housing Development Finance Corporation)
HDFC mutual funds was setup on June 30,2000with two sponsors namely HDFC limited and standard Life investments Limited.

HDFC Mutual Fund

Mutual Fund has been one of the best performing mutual funds in the last few years. HDFC Asset Management Company Limited (AMC) functions as an Asset Management Company for the HDFC Mutual Fund. AMC is a joint venture between housing finance giant HDFC and British investment firm Standard Life Investments

Limited. It conducts the operations of the Mutual Fund and manages assets of the schemes, including the schemes launched from time to time. As of Aug 2006, the fund has assets of Rs.25, 892 cores under management.

IN 2003, following a decision by the Zurich Insurance Company (ZIC), the Sponsor of Zurich India Mutual Fund, to divest its asset management business in India, AMC had entered into an agreement with ZIC to acquire the asset management business. Consequently, all the schemes of Zurich Mutual Fund in India had been transferred to HDFC Mutual Fund and renamed as HDFC schemes.

Here is a list of mutual funds of HDFC:

Equity Funds:
HDFC Growth Fund
HDFC Long Term Advantage Fund
HDFC Index Fund

- HDFC Index Fund Nifty Plan
- HDFC Index Fund SENSEX Plan
- HDFC Index Fund SENSEX Plus Plan

HDFC Equity Fund
HDFC Capital Builder Fund
HDFC Tax Saver
HDFC Top 200 Fund
HDFC Core & Satellite Fund
HDFC Premier Multi-Cap Fund
HDFC Long Term Equity Fund
Balanced Funds
HDFC Children's Gift Fund Investment Plan
HDFC Children's Gift Fund Savings Plan
HDFC Balanced Fund
HDFC Prudence Fund

Debt Funds
HDFC Income Fund
HDFC Liquid Fund
HDFC Gilt Fund Short Term Plan
HDFC Gilt Fund Long Term Plan
HDFC Short Term Plan
HDFC Floating Rate Income Fund Short Term Plan
HDFC Floating Rate Income Fund Long Term Plan
HDFC Liquid Fund - PREMIUM PLAN
HDFC Liquid Fund - PREMIUM PLUS PLAN
HDFC Short Term Plan - PREMIUM PLAN
HDFC Short Term Plan - PREMIUM PLUS PLAN
HDFC Income Fund Premium Plan
HDFC Income Fund Premium Plus Plan
HDFC High Interest Fund
HDFC High Interest Fund - Short Term Plan
HDFC Cash Management Fund - Savings Plan
HDFC Cash Management Fund - Call Plan
HDFCMF Monthly Income Plan - Short Term Plan
HDFCMF Monthly Income Plan - Long Term Plan
HDFC Cash Management Fund - Savings Plus Plan
HDFC Multiple Yield Fund
HDFC Multiple Yield Fund Plan 2005
HDFC Fixed Maturity Plan

JM FINANCIAL MUTUAL FUND

One of India's first private sector mutual funds, JM mutual fund was launched by the one of the best-known domestic brokerages, JM Financial, owned by the Company family. The Niles Company-led JM Group played a pivotal role in the development of India's nascent capital markets in the 1950s.

JM mutual fund is not a part of JM Morgan Stanley, JM Financials joint venture with Morgan Stanley for investment banking and other financial services. The fund is sponsored by JM Financial and Investment Consultancy Services Private Limited and JM Financial Limited. The AMC of the fund is JM Financial Asset Management Private Limited. The AMC started operations in December 1994 with a simultaneous launch of three funds, JM Liquid Fund (now JM Income Fund), JM Equity Fund and JM balanced Fund. The company is headed by Vijay Kelkar, former finance secretary and advisor to the government of India, as chairman of the board. As of Aug 2006, the fund has assets of over Rs.4, 241 crore under management.

Debt Funds

JM Income
JM Income Institutional
JM Equity & Derivative
JM Short Term
JM Short Term Institutional
JM Floater Long Term
JM Floater Short Term
JM FMP Quarterly SA3
JM FMP Quarterly SB3
JM High Liquidity
JM High Liquidity Institutional
JM High Liquidity Super Institutional

Gilt Fund

JM G-Sec PF
JM G-Sec PF plus
JM G-Sec Regular

Equity Funds

JM Equity
JM Basic Fund
JM Autosector Fund
JM Healthcare Sector Fund

MIP

JM MIP Dividend Monthly
JM MIP Dividend Quarterly
JM MIP Dividend Yearly
JM MIP Growth

Balanced Funds

JM Balanced Growth
JM Balanced Dividend

III. PERFORMANCE EVALUATION OF SELECTED MUTUALFUNDS

In India, at present, there are many mutual funds as also investment companies operating both in the public sector as well as in the private sector. These compete with each other for mobilizing the investment funds with individual investors and other organizations desirous of placing their funds with these mutual funds would like to know the comparative performance of each so as to select the best mutual fund or investment company. For this, evaluation of the performance of mutual funds and their schemes is necessary.

In order to determine the risk adjusted returns of investing portfolio, several eminent authors have worked since 1960’s to develop composite performance indices to evaluate a portfolio by comparing alternative portfolio within a particular risk class. The most important and widely used measures of performance of Mutual Funds are:

1 The Treynor's Measure
2 The Sharpe's Measure
3 The Jenson's Model

MEASURING MUTUAL FUNDS RETURN

The first step in mutual fund evaluation is calculation of the rate of return earned over the holding period. Return may be defined to include changes in the value of the mutual fund over the holding mutual fund plus any income earned over the period. However, in the case of mutual funds, during the holding period, Cash inflows into the fund and cash withdrawals from the fund may occur. The unit-value method may be used to calculate return in this case.

The one period rate of return, r, for a mutual fund may then be defined as the change in the per unit net asset value (NAV), plus it's per unit cash disbursements (D) and per unit capital gains disbursements (C) such as bonus shares, it may be calculated as.

$$Rap = \frac{(NAVt - NAVt\text{-}1) + DT + C}{NAV_{t-1}}$$

Were

NAVt = NAV per unit at the end of the holding period
NAVt-1 = NAV per unit at the beginning of the holding period
Dt = Cash disbursements per unit during the holding period
Ct = Capital gains disbursements per unit during the holding period

This formula gives the holding period yield or rate of return earned on a mutual fund. This may be expressed as a percentage.

RISK ADJUSTED RETURNS

Risk free rate of interest is the return that an investor can earn in a risk less security, i.e., without bearing any risk. The return earned over and above the risk free rate is the risk premium that is the reward for bearing risk.

THE SHARPE's MEASURE:

In this model, performance of fund is evaluated on the basis of Sharpe ratio, which is ratio of returns generated by the fund over and above risk free return and the total risk associated with it. According to Sharpe it is the total disk of the fund that the investors are concerned about. So, this model evaluates funds on the basis of reward per unit of total risk

$$\text{Sharpe index} = \frac{\text{Portfolio average return – Risk free rate of return}}{\text{Standard deviation of the portfolio return}}$$

Symbolically, it can be written as:

$$\mathbf{Sp} = \frac{(R_p - Rf)}{\delta p}$$

Where Sp = Sharpe index, Rp = Portfolio average return, Risk free rate of return, δp = Standard deviation of the portfolio return

While a high and positive Sharpe ratio shows a superior risk adjusted performance of a fund, a low and negative Sharpe ratio is an indication of unfavorable performance.

THE TREYNOR's MEASURE:

It was developed by Jack Treynor. Treynor's Index is a ratio of return generated by the fund over and above risk free return (i.e. Government securities, Treasury bills), during the given period of time and systematic risk associated with beta.

$$\textbf{Tenor's Index} = \frac{(R_{ap} - F_{ro})}{\beta p}$$

Where R_p = represent the return of fund, ***R_f = represents the risk free rate and βp = represent beta of funds***

All risk-averse investors would like to maximize this value. While a high and positive treynor's index shows a superior risk adjusted performance of fund, a low and negative treynor's index is an indication of unfavorable performances

JENSENs MODEL: Jansen's model proposes another risk adjusted performance measure. Michael Jenson developed this measure and is something referred as the differential return method. This measure involves evaluation of returns that the fund has generated Vs the return actually out of the fund given at that level of systematic risk. The surplus between the two returns in called Alpha, which measures the performance of a fund compared with the actual returns over the period. Required rate of return on fund at a given level of Beta

Can be calculated as:

$$R_p = \frac{\square_p}{\square_p}$$

Where $\square_p = R_p - R_p$ _

$R_p = R_f + \square_p\ (R_m - R_f)$

Jp = Jensen's Ratio

αp = The intercept

βp = A measure of systematic risk

Rp = Average return of portfolio

Rf = Risk free rate of return

Rm = Average market return

R_m is average market return during the given period.

F_{ro} is the risk free rate of return

Performance Measurement

In this section, an attempt is made to measure the performance of selected mutual funds. For this purpose the models developed by Sharpe, Trey nor and Jenseen were used. Before taking up this, the details about returns of selected funds are presented. In addition, to have an idea about volatility of funds to market return, the Beta values and standard deviation values are calculated.

Table 1.1: Equity Fund Dividends

Year	**Percentage of return**				
	SBI	**UTI**	**HDFC**	**JM financial**	**Market Index**
2005	9.70	6.65	13.25	4.18	9.60
2006	9.15	2.35	5.00	0.692	11.41
2007	12.93	10.70	8.70	11.40	10.10
AVG	10.40	6.57	8.98	5.43	10.37

Source: www.mutualfundsindia.com and www.bseindia.com

The average return of SBI is 10.40% and highest is 12.93% and lowest is 9.15% it is concluded that the return is increased trend.The return of UTI fund shows that it has earned highest return of 10.70 % on its investments in the year 2007. It has, on an AVG generated a return of 6.57% for the period from 2005-2007. Average return of HDFC is 8.978% and the highest in 2005 is 13.25% and lowest is in 2006 is decreased 5.00%. The return of JM financial fund shows that earned highest return of 11.40% on its investments in the year 2007. And lowest is in 2006 is decreased 0.692%. It has on AVG generated return of 5.43%for the period from 2005-2007. Market return is in 2005 9.60% and in 2006 11.47% and in 2007 is 10.105%. So, it concluded that market return also high in 2005 but it decreased in 2006 and increased in 2007.

The average return of SBI is more than other mutual funds

Table1.2: Equity fund growth

Year	Percentage of return

	SBI	UTI	HDFC	JM financial	Market Index
2005	9.70	11.20	13.22	11.25	9.60
2006	10.83	3.33	5.10	10.05	11.41
2007	11.68	7.07	11.65	11.65	10.10
VG	10.73	7.20	9.99	10.98	10.37

The above table reveals that SBI made a highest return of 11.68% on its investment year 2007.and lowest is in 2005 is decreased 9.70%. However it has earned on an average 10.73% return on investment for the period 2005- 06. The UTI fund made highest return of 11.20% on its investment in the year 2005 and lowest is in 2006 is decreased 3.33%.on an average the fund made a return 7.20% in period 2005-07. The return of HDFC fund also following this same trend. It has need highest return 13.22% and lowest is in 2006 is decreased 5.10%. The fund however average return of 9.99% during period. The JM financial fund made a highest return of 11.65% on its investments in the year 2006 it has also and lowest return of 10.05% in year 2006 on average return of 10.98% for the period 2005-07. Market return fund also following same trend it has made highest return of 11.41% it investment in year 2006 and lowest return of 9.60% in year 2005. The fund hewer AVG return of 10.37% during the period. The comparative analysis this fore funds shows that JM finance fund made a highest average return 10.98% and on its investment for the period 2005-07, followed by SBI and UTI and HDFC fund that order,

Table 1.3: Balanced Fund Dividend

Years	**Percentage of return**				
	SBI	**UTI**	**HDFC**	**JM financial**	**Market Index**
2005	.3	8.93	-1.73	11.43	9.60
2006	.13	19	3.375	5.65	11.41
2007	.45	5.58	12.42	10.30	10.10
AVG	.98	11.17	4.69	9.13	10.37

For the above can be concluded that SBI fund made highest return of 9.45% on it investment for the year 2007 and lowest return of 6.30%,in 2005. However the fund made on an AVG 7.98% for period 2005-07, The return of UTI fund shows that it has earned a highest return of 19.00% on its investment in year 2006 and lowest return of 5.58% in 2007. it has on an AVG a return of 11.17% for period 2005-07. In this fund also the return of HDFC fund also following the same trend. It has made highest return 12.42% on its investment in the year 2007. it has also incurred lose of 1.73%n in year 2005. it has on an average generated a return of 4.69% for the period 2005-07. The return of JM finance fund show that has earned a highest return of 11.43% on investment in the year 2005 and lowest return of 5.65% in year 2006.the fund however AVG of 9.13% during period. The return of market return fund also following the same trend it has made highest return of 10.41% and lowest return of 9.60% in year 2005.the fund however AVG of 10.37% during period, the average return UTI more then other mutual funds.

Table 1.4: Balanced Fund Growth

Years	**Percentage of return**				
	SBI	**UTI**	**HDFC**	**JM financial**	**Market Index**
2005	10.60	5.78	6.48	6.59	9.60
2006	7.78	5.85	6.43	9.55	11.41
2007	10.78	8.28	6.70	10.38	10.70
AVG	9.74	6.64	6.53	8.84	10.37

Its can observed from the above table that SBI fund made return of about 10.78%.on it’s invest in the year 2007. it has lowest return of 7.78% in the year 2006. The fund also made an AVG return of about 9072 during period from 2005to 2007. The return of UTI fund show that it earned a highest return of 80.28% on its investments in the year 2007and lowest return of 50.78% in 2005. It has on an average generated a return of 6.64% for the period from 2005-07. The HDEFC fund has made a highest return of 6.70% on its investment for the year

2007and lowest return of 6.43%in 2006.the fund made average return of 6.53% during the period. The JM financial fund has mad a highest return of 10.38% on its investment for the year 2007 and lowest return of 6.59%in 2005. Fund made an AVG return of 8.84% in the period from 2005-2007. The average return of 10.37% market index more then other mutual funds.

Table – 2: Index Return

year	Absolute returns%
2005	**9.60**
2006	**11.41**
2007	**10.10**
AVG return	**10.37**

From the above table it can be noted that the index made highest of 11.41% for the year 2006 index return also incurred a lowest of 9.60% in year 2005 an on average the index made a 10.37%for the period 2005-07.

QUANTIFICATION OF RISK

Expected Risk $(\delta) = \sqrt{\sum_{J=1}^{n} (R_{aj} - E(ra))^2 P_j}$

Where

R_{aj} = Return on security "a" under event of "j"

E (ra) = Expected average return on security "a"

P_j = Probability of event "j"

This formula is used to find the expected risk. But in the study my objective is to calculate the Historical Risk. The formula is:-

Historical Risk $(\delta) = \dfrac{\sum_{J=1}^{n} (R_{aj} - \check{R}a)^2}{N}$

Where R_{aj} = Return on security "a" in period of "j"

Ra = Average return of security "a"

N = No of observations

The expanded form of the formula is:

Historical Risk $(\delta) = \sqrt{(R_{a1} - R_a)^2+(R_{a2} - R_a)^2+ \text{- - - - - - - -} +(R_{an} - R_a)^2}$

Tables of Standard Deviations

Table 3.1: Equity fund Dividend

Fund name	3year Average Return	Standard Deviation
SBI	10.40	9.81
UTI	6.57	11.96
HDFC	8.98	11.32
JM financial	5.43	15.43
Market index	10.37	7.29

From the above table present the average return and "δ" details. From the table it can be seen that SBI fund making highest average return of 10.4% during the period. However it's also facing highest "δ" of 15.43 of all the four funds. The UTI fund and HDFC fund and JM financial funds both are making similor amount average return of about 10.37% but market index is facing highest" δ" of 7.29.

Table 3.2: Equity fund Growth

Fund name	3year Average return	Standard Deviation
SBI	10.73	12.09
UTI	7.20	7.60
HDFC	9.99	11.56
JM financial	10.98	11.94

From the above value it con be concluded that compared with other funds JM financial fund making more returns and bearing risk of 11.94. Whereas SBI fund making 10.73% average return with the"δ" of 12.09. It has very low risk as compared to UTI fund and HDFC fund.

Table3.3: Balanced fund Dividend

Fund name	3year Average return	Standard Deviation
SBI	7.98	9.39
UTI	11.17	17.98
HDFC	4.69	15.67
JM financial	9.136	7.95

From the given values it is found that UTI fund is earning 11.17% AVG return with the higher δ as compared to other funds

Table 3.4Balanced fund Growth.

Fund name	3years average return	Standard Deviation
SBI	9.72	8.68
UTI	6.64	6.75
HDFC	6.53	8.37
JM financial	8.84	8.45

From the given values it is found that SBI fund is earning 9.72%AVGreturn with highest "δ" as compared to other funds.

Concept of Beta

Beta is a measure of relative risk of a security or its sensitivity to the movements in the market. It is a measure of volatility or the systematic risk faced by an asset or portfolio or project. It is calculated by using the covariance between returns of assets and returns of the market portfolio, divided by variance of return on the market portfolio. It shows how the price of a security responds to market factors. Market return is measured by the average return of a large sample of stocks. The beta for the overall market is equal to 1.00 and other betas are viewed in relation to this value. Betas can be positive or negative. Many large brokerage firms, investment companies and financial consultants provide beta for large number of stocks.

BETA CALCULATION

$$\beta = \frac{N\Sigma XY - \Sigma X \Sigma Y}{N\Sigma X^2 - (\Sigma X)^2}$$

Where

N = No of observations

ΣX = Sum of X returns (Here X is market return)

ΣY = Sum of Y returns (Here Y is a particular fund return)

X^2 = X * X

ΣXY = Sum of X * Y

CALCULATION OF BETA

Table 4.1: Equity fund Dividend

Fund name	∑X	∑Y	∑XY	$\sum X^2$	β
SBI	127.1	124.48	1738.00	2501.63	0.36
UTI	78.8	124.48	1051.18	2234.50	0.14
HDFC	107.80	124.48	1473.95	2508.06	0..23

JM financial	65.07	124.48	1024.17	3211.26	0.17

It is observed from the above table that SBI fund responding to the market rate by 0.36 times whereas UTI fund is responding only 0.14 times to the market return. The SBI fund is more volatile than UTI and HDFC and JM financial funds.

Table4.2: Equity fund Growth

Fund name	Σx	∑y	Σxy	Σx^2	β
SBI	128.8	124.48	1967.85	3138.60	0.38
UTI	86.38	124.48	884.38	1315.77	-0.016
HDFC	119.90	124.48	1276.2	2691.89	0.112
JM financial	132.10	124.48	1753.21	3165.69	0.22

It is seen form the table that SBI fund, HDFC fund and JM financial more than one times of market return whereas UTI fund responding only -0.016 times.

Table 4.3: Balanced Fund Dividend

Fund Name	∑x	∑y	∑xy	$\sum x^2$	β
SBI	95.60	124.48	1219.06	1820.56	0.21
UTI	111.20	124.48	1230.01	4912.77	0.019
HDFC	56.30	124.48	1194.68	3211.23	0.21
JM financial	111.20	124.48	1230.01	4912.77	0.22

Above table from it can be concluded that that the SBI fund and HDFC fund and JM financial fund are responding more than one time of market return. Whereas UTI fund responding only 0.019 tunes.

Table 4.4 Balanced fund Dividend

Fund Name	∑x	∑y	∑xy	$\sum x^2$	β
SBI	116.60	124.48	1634.31	2038.36	0.45
UTI	79.60	124.48	1115.59	1075.92	0.53
HDFC	78.40	124.48	1332.85	1353.71	0.61
JM financial	106.06	124.48	1412.33	1795.29	0.36

From the above table it can be concluded that the SBI fund, UTI fund and HDFC fund are responding more than times of market return. Whereas JM financial fund responding only 0.36 times.

SHARPE MEASUREMENT RATIO TABLES

Table 5.1: Equity Fund Dividend

Fund Name	Rp	Rf	δp	Sharpe Ratio	Rank
SBI	10.59	6.50	9.81	0.416	I
UTI	6.59	6.50	11.98	0.007	III
HDFC	8.98	6.50	11.32	0.219	II
JM financial	5.42	6.50	15.43	-0.0069	IV
Market Index	10.38	6.50	7.29	0.532	-

The table shows that SBI fund as per Sharpe measurement is ranked one whereas HDFC fund getting IInd rank. The UTI fund getting IIIrd rank. JM financial getting IVth rank in the Sharpe evaluation. compared a market index SBI fund is earning good return and UTI fund is getting better returns where as HDFC fund is better return where JM financial fund is getting whereas returns.

Table 5.2: Equity Fund Growth

Fund Name	Rp	Rf	δp	Sharpe Ratio	Rank
SBI	10.73	6.50	12.09	0.34	I
UTI	7.19	6.50	7.60	0.090	IV
HDFC	9.99	6.50	11.56	0.301	III
JM financial	11.00	6.50	11.94	0.376	II

As per sharpe measurement, SBI fund is ranked Ist, JM financial fund is ranked IInd and HDFC fund is III ranked, and UTI fund is IVth ranked. By comparing with market return all the funds are getting low return

Table 5.3: Balanced Fund Dividend

Fund Name	Rp	Rf	δp	Sharpe Ratio	Rank
SBI	7.96	6.50	9.39	0.155	II
UTI	9.26	6.50	17.90	0.154	III
HDFC	4.69	6.50	15.67	-0.115	IV
JM financial	9.12	6.50	7.95	0.329	I

According sharpe model, JM financial fund is placed First ranked SBI fund and UTI fund sharpe IIIrd and IInd ranked, HDFC fund is placed IVth ranks respectively company with market return al the funds one performing well.

Table 5.4: Balanced Fund Growth

Fund Name	Rp	Rf	δp	Sharpe Ratio	Rank
SBI	9.71	6.50	8.68	0.369	I
UTI	6.63	6.50	6.75	0.019	III
HDFC	6.52	6.50	8.37	0.003	IV
JM financial	8.88	6.50	8.45	0.281	II

According sharpe model, SBI fund is placed first rank JM financial and UTI fund share IIIrd and IInd rank HDFC fund is placed IVth ranked. Respectively comparing with market return all fund are performing well. By comparing all the four schemes i.e. SBI, UTI, and HDFC and fund it can be found that the balanced fund growth is getting good return than the any schemes the balanced dividend scheme is bearing more risk them the any other schemes

TREYNOR MEASUREMENT RATIO TABLES

Table 6.1: Equity Fund Dividend

Fund Name	Rp	Rf	βp	Trey nor Ratio	Rank
SBI	10.59	6.50	0.36	14.13	I
UTI	6.59	6.50	0.14	0.642	III

HDFC	8.99	6.50	0.23	10.78	II
JM financial	5.42	6.50	0.17	-69.35	IV
Market Index	10.38	6.50	1	3.88	-

Above table reveals that SBI fund ranked first in terms of making returns whereas IInd rank shared by HDFC fund and IIIrd rank by UTI fund and the IVth rank JM financial in terms of making return of in relating to market returns. Comparing with the market return again SBI fund is getting good returns. UTI fund is earned better returns, whereas HDFC fund is earned better returns JM financial fund is not making surricient.

Table 6.2:Equity Fund Growth

Fund Name	Rp	Rf	βp	Trey nor Ratio	Rank
SBI	10.73	6.50	0.38	11.13	I
UTI	7.19	6.50	0.016	-43.12	IV
HDFC	9.99	6.50	0.42	10.78	II
JM financial	11.00	6.50	0.22	-6.352	III

From the given table it is observed that SBI fund is ranked First, HDFC fund and JM financial fund are ranked IIIrd and IInd and UTI fund is ranked IVth respectively. When compared with market return all the funds are not getting sufficient returns.

Table 6.3 Balanced Fund Dividends

Fund Name	Rp	Rf	βp	Trey nor Ratio	Rank
SBI	7.96	6.50	0.21	6.952	III
UTI	9.26	6.50	0.019	145.26	I
HDFC	4.69	6.50	0.21	-8.61	IV
JM financial	9.12	6.50	0.22	11.90	II

Observing given table it is known that UTI fund is ranked First JM financial fund IInd SBI fund is IIIrd and HDFC fund is IVth comparing with market return all the funds are not getting sufficient returns.

Table 6.4 Balanced Fund Growth

Fund Name	Rp	Rf	βp	Trey nor Ratio	Rank
SBI	9.71	6.50	0.415	7.33	I
UTI	6.63	6.50	0.53	0.245	III
HDFC	6.53	6.50	0.37	0.081	IV
JM financial	8.88	6.50	0.36	6.611	II

From the given it is observed that SBI fund is ranked First JM financial and UTI fund are ranked IIIrd and IInd and HDFC fund IVth respectively comparing with market return all the fund are making good return.. According to terynors measurement also balanced fund growth scheme is performing well as compared to the market return and balanced growth fund is not performing of the bench market i.e., Market return.

JENSEN PERFORMANCE MEASUREMENT RATIO TABLE

Table 7.1: Equity Fund Dividend

Fund Name	R_m	R_f	β_p	R_p	R_p	α_p	J_p	Rank

SBI	10.37	6.50	0.36	10.40	26.54	-16.41	-44.83	I
UTI	10.37	6.50	0.14	6.57	25.70	-19.13	136.64	IV
HDFC	10.37	6.50	0.23	8.98	-25.78	-169.80	-73.14	II
JM financial	10.37	6.50	0.17.	5.43	25.81	-20.38	-119.8	III

As per Jensen performance measurement the SBI fund ranked First getting a negative figure of -44.83 which is an indication that the management has used greater skills in managing the investment. Whereas HDFC ranked IInd getting a positive figure of -73.14 which is moderately performing. However the UTI fund is performing negatively, the management of UTI fund failed to manage the investment effectively.

Table 7.2 Equity Fund Growth

Fund Name	R_m	R_f	β_p	R_p	R_p	α_p	J_p	**Rank**
SBI	**10.37**	**.50**	**0.38**	**10.73**	**26.62**	**-15.89**	**-41.81**	**IV**
UTI	**10.37**	**.50**	**-0.016**	**7.20**	**25.09**	**-17.89**	**111.12**	**I**
HDFC	**10.37**	**.50**	**0.42**	**9.92**	**26.78**	**-16.86**	**-40.14**	**III**
JM financial	**10.37**	**.50**	**0.22**	**10.98**	**26.00**	**-15.02**	**-6.83**	**II**

According to Jensen model all the funds are failed to earn up to the mark returns. The UTI Fund ranked first getting a figure of 0(approx), which is an indication that the management has did not use great skills in managing the portfolio. From the given that observed UTI ranked First. Whereas JM financial Fund is ranked second by getting a negative figure of less than 1. However the UTI fund is performing negatively, the management of UTI fund failed to manage the portfolio effectively

Table 7.3:Balanced Fund Dividends

Fund Name	R_m	R_f	β_p	R_p	R_p	α_p	J_p	**Rank**
SBI	10.37	6.50	0.21	7.99	25.97	-17.99	-85.66	II
UTI	10.37	6.50	0.019	11.17	25.22	-14.05	-739.47	IV
HDFC	10.37	6.50	0.21	4.69	25.97	-21.28	-101.33	III
JM financial	10.37	6.50	0.22	9.23	26.00	-16.87	-76.68	I

According to Jensen model all the funds are failed to earn up to the mark returns. As compared to other funds UTI fund performing with worst return of –739.47. On the basis of the above presentation, it can be found that the MNC industry is facing a problem, so all the funds are not getting sufficient returns.

Table 7.4: Balanced Fund Growth

Fund Name	R_m	R_f	β_p	R_p	R_p	α_p	J_p	**Rank**
SBI	10.37	6.50	0.45	.72	26.89	-17.17	-38.15	III
UTI	10.37	6.50	0.53	.64	7.20	-20.56	-38.79	II
HDFC	10.37	6.50	8.37	.53	7.54	-51.01	-6.09	I

JM financial	10.37	6.50	0.36	.84	6.54	-17.70	-49.16	IV

Source: www.mutualfundsindia.com and www.bseindia.com

According to Jensen model all the funds are failed to earn up to the mark returns. The HDFC Fund ranked first getting a figure of 0(approx), which is an indication that the management has did not use great skills in managing the portfolio. Whereas HDFC Fund is ranked second by getting a negative figure of less than 1. However the HDFC fund is performing negatively, the management of HDFC fund failed to manage the portfolio effectively.

IV. CONCLUSION

It is hopeful that this study creates awareness that the mutual funds are worth investment practice. The various schemes of mutual funds provide the investors with a wide range of investments options according to his risk bearing capacities and interest. Besides they also give a handy return to the investors. The project analyses various schemes of Different Companies. In India Mutual funds are playing important role. The mutual fund Companies pool the savings of small investors and invest those collected huge amount of funds in different sectors of the economy. They are performing like intermediary between small investor and the Indian capital market. In recent years many mutual fund companies are established. Through this competition is increased among the companies. To encounter the competition the different companies are introducing different types of mutual fund schemes with attractive returns and low risk. So it is an advantage to the investors. For taking a decision to invest in mutual funds, the evaluation plays a greater role. The rankings given to the mutual funds attract the investment by the investors to the respective funds. For the purpose of ranking the performance of various mutual funds the methods such as Sharpe. Trey nor and Jensen were applied to the various funds in different schemes. It is hoped that the ranks provided for the fund in this chapter explains relative performance of the schemes. The relative performance of different types of funds according to different types of performance measurements are explained in the next page.

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