

## AN EMPIRICAL ANALYSIS OF VARIOUS SCHEMES FOR EVALUATION OF MUTUAL FUNDS

Dr. Surender Kumar Gupta\*

Neema Chauhan\*\*

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### ABSTRACT

*Era of growth of economy and the capital market in India, the size of investors has multiplied. Remarkable developments in the past few years are experienced by capital market India. Mutual Fund is most favorable investment for the investors as it offers an opportunity to invest in a diversified, professionally managed basket of securities at a relatively low cost there is growing competition between mutual fund firms in post reform India. For investor it is always difficult to decide which mutual fund firm to choose. So a close monitoring and evaluation of mutual funds are essential for fund manager to make this instrument as the strongest and most preferred instruments in Indian capital market in the coming years. There are as many as 40 Asset Management Companies on India which are ready to provide round about 700 various types of mutual funds schemes, which consist of debt schemes, liquid schemes, equity schemes and sectoral schemes etc. To cater different types of investors needs. So before investing in mutual fund industry one has to analyze various available schemes provided by various firms. Among the most preferred schemes growth schemes and balanced schemes; balanced schemes have shown remarkable results and proved to be better than other schemes available.*

**Keywords:-** Indian Capital Market, Asset Management Companies, Growth fund schemes, Balanced fund schemes.

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\*Associate Professor MAIMT-Jagadhri

\*\*Student MAIMT Jagadhri

## I-INTRODUCTION

Mutual funds are most suitable vehicle to mobilize the investor's money in various securities of the market. Their main purpose is to assist the investors earning an income or building their wealth, by participating in the opportunities available. A mutual fund is a trust that pools the savings of a number of investors who shares 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.

The Indian financial services have undergone a metamorphosis since 1980. During the late seventies and eighties, the Indian financial services industry was dominated by commercial banks and other financial institutions that cater to the requirement of the Indian industry. In fact the capital market played a secondary role only. The economic liberalization has brought in a complete transformation in the Indian financial service industry (Gordan, Natarajan, 1999).

A mutual fund is simply a financial intermediary that allows a group of investors to pool their money together with a predetermined investment objective. The mutual fund will have a fund manager who is responsible for investing the pooled money into specific securities (usually stocks or bonds). When you invest in a mutual fund, you are buying shares (or portions) of the mutual fund and become a shareholder of the fund.

Now a day's mutual fund is facing a major change in Indian scenario. Due to intense competition and changes in the market structure are seen and for this mutual fund industry is spending huge amount of money on advertisement also.

Investments in securities are spread across a wide cross-section of industries and sectors and thus the risk is reduced. Diversification reduces the risk because all stocks may not move in the same direction in the same proportion at the same time. Mutual fund issues units to the investors in accordance with quantum of money invested by them. Investors of mutual funds are known as unit holders. The investors in proportion to their investments share the profits or losses. The mutual funds normally come out with a number of schemes with different investment objectives, which are launched from time to time.

**Unit Trust of India** was the first mutual fund set up in India in the year 1963. In early 1990s, Government allowed public sector banks and institutions to set up mutual funds.

**SEBI (Securities Exchange Board of India)** formulates policies and regulates the mutual funds to protect the interest of the investors. All mutual funds whether promoted by public

sector or private sector entities including those promoted by foreign entities are governed by the same set of Regulations.

- **Mutual fund schemes:-**

- Growth / Equity Funds:

The aim of growth funds is to provide capital appreciation over the medium to long term. Such schemes normally invest a majority of their corpus in equities. Such funds have comparatively high risk. It has been proved that returns from stocks, have outperformed most as compare to other kind of investments held over the long term. Growth schemes are ideal for investors having a long-term outlook seeking appreciation over a period of time.

- Balanced Funds:

The aim of balanced funds is to provide both growth and regular income. Such schemes periodically distribute a part of their earning and invest both in equities and fixed income securities in the proportion indicated in their offer documents.. These are ideal for investors looking for a combination of income and moderate growth. They generally invest 40-60% in equity and debt instruments. These funds are also affected because of fluctuations in share prices in the stock markets. However, NAVs of such funds are likely to be less volatile compared to pure equity funds.

- **NEED TO MEASURE FUND PERFORMANCE:**

**The Investor's Perspective:**

The investor would naturally be interested in tracking the value of his investments, whether he invest directly in the markets or indirectly through mutual funds. He therefore needs to understand the basic knowledge of the different measures of evaluating the performance of a fund. Only then would he be in a position to judge correctly whether his fund is performing well or not, and make the right decisions.

**The Advisor's Perspective:**

If you were an intermediary recommending a mutual fund to a potential investor, he would expect you to give him proper advice on which funds have a good performance track record. If you want to be an effective investment advisor, then you too have to know how to measure and evaluate the performance of the different funds that are available to the investor.

➤ **IMPORTANT TERMS FOR EVALUATION;-**

**STANDARD DEVIATION:-**

It is a square root of variance and measures the average deviation from the mean. It helps in identifying the consistency in performance. The lower this figure is the better it is as a higher figure means more inconsistency and a higher risk of a downside in return.

**BETA:-**

Beta is a statistical measure that indicates how sensitive a fund is to market movements. It measures the percentage change in the price of the security/fund for every one - percent change in the market. A high beta is good or bad depending on the state of the market. Beta depends on the market index used to calculate it. Therefore it is of utmost importance that index used for calculating beta should be appropriate and should bear a strong correlation with it.

**RISK FREE RATE:**

Risk free rate of return refers to that minimum return on investment that has no risk of losing the investment over which it is earned. In the present study, risk free rate generated by risk free instruments like treasury bills, government of India guarantee bonds and bank deposits.

**SHARPE RATIO:-**

The performance measure developed by William Sharpe is referred to as the Sharpe ratio or the reward to variability ratio. It is the ratio of the reward or risk premium to the variability of return or risk as measured by the standard deviation of return.

**TREYNOR RATIO:-**

The performance measure developed by Jack Treynor is referred to as Treynor ratio or reward to volatility ratio. It is the ratio of the reward or risk premium to the volatility of return as measured by the by the portfolio beta.

➤ **II-LITERATURE REVIEW AND RESEARCH METHODOLOGY**

O.P GUPTA AND AMITABH GUPTA (2007) states that due to inadequate diversification, a substantial part of the variation in fund returns is not explained by market. There is no conclusive evidence, which suggests mutual funds are superior to the market during the study period. Sample funds are not adequately diversified. He supported his statement by analyzing various schemes of the mutual funds and thus analyze to the extent an investor would need it. NALINI PRAVA TRIPATHY (2009) explains that investment performance of Indian mutual funds in terms of six performances measure is rational. Out of 31 taxes planning schemes only 1 scheme has higher return than the market return. He explained and analyzed every

scheme with reference to the present scenario. Using Sharpe ratio, trey nor and jensons as the tool to evaluate the performance of the mutual funds.

JASPAL SINGH AND SUBHASH CHANDER (2003) concluded that salaried and retired categories gave maximum weight age to past records of the organization. Investors belonging to business category have given maximum weight age to the option of repurchase of the units by the funds followed by easy transferability. So before investing into the mutual funds they have to analyze about the companies past records to know the expected profitability.

LALIT SUKHIJA (2010) explains that mutual funds helps in saving the tax by reducing it. It also helps in creating large corpus through systematically investing your money in the equity market. He explains various benefits by investing in mutual funds. As in the present scenario there is a need of high income due to higher expenditure so investing into the mutual funds will prove to tax saving which the every investor wants.

➤ **MUTUAL FUNDS SCHEMES-EQUITY** – The following table explains the various data required for evaluating mutual funds schemes. It explains the return, standard deviation, beta values and Sharpe and Treynor ratio.

Companies	Return	Standard deviation (%)	Beta values	Sharpe ratio	Treynor Ratio
SBI	7.22	3.76	0.88	.06	.24
DSP BLACK	7.25	3.20	0.76	.08	.32
ICICI	7.01`	.25	0.74	.07	.02
TATA	7.18	3.09	0.71	.06	.27
CANARA	7.32	3.64	.86	.09	.37
FRANKLIN	6.64	4.11	.87	-.09	-.05
HDFC	7.33	3.77	.90	.09	.36
UTI	7.24	3.08	.73	.08	.33

➤ **MUTUAL FUNDS SCHEMES-BALANCED FUNDS-**

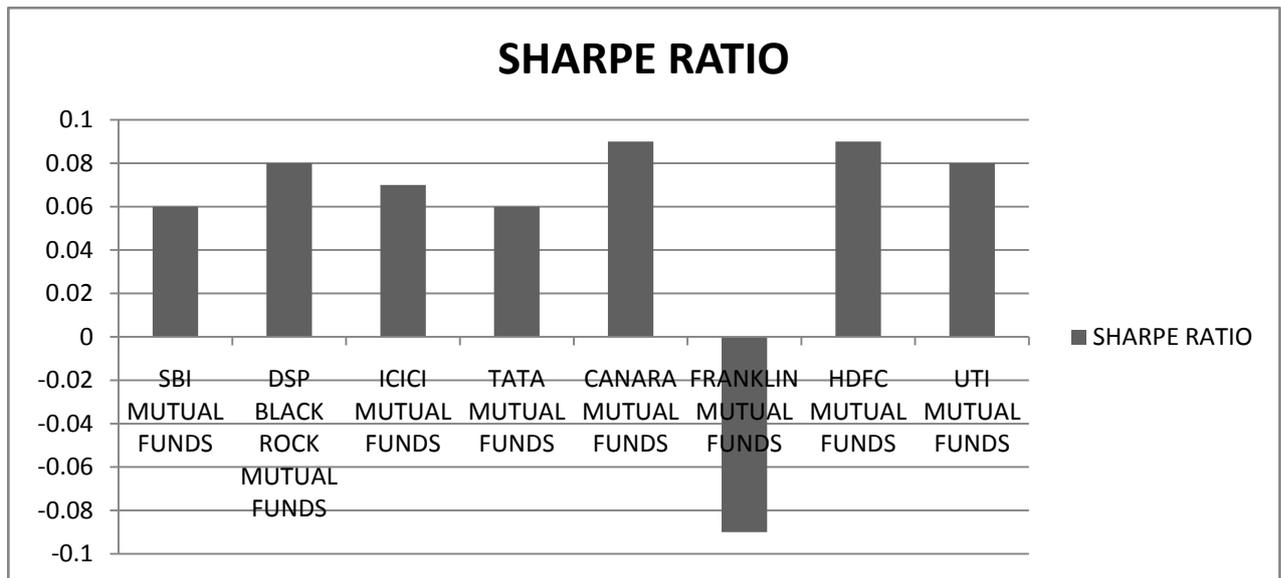
➤ This table is giving the various data required to evaluate the balanced find schemes such as returns, standard deviation and beta values. Measures such as Sharpe ratio and Treynor ratio is also given.

COMPANIES	RETURNS	STANDARD DEVIATION	BETA VALUES	SHARPE RATIO	TRYNOR RATIO
SBI	7.11	2.97	1.08	.04	.10
DSP BLACK ROCK	7.16	2.40	.82	.07	.22
ICICI	7.17	2.56	.90	.07	.21
TATA	7.25	2.83	1.00	.09	.24
CANARA	7.24	2.77	.98	.09	.25
FRANKLIN	8.23	2.46	.90	.05	.15
HDFC	9.77	2.52	.88	.11	.32
UTI	7.16	2.72	.98	.06	.17

➤ **Comparison of companies on the basis of equity funds schemes:-**

- **On the basis of Sharpe ratio**

COMPANIES	SHARPE RATIO
SBI MUTUAL FUNDS	.06
DSP BLACK ROCK MUTUAL FUNDS	.08
ICICI MUTUAL FUNDS	.07
TATA MUTUAL FUNDS	.06
CANARA MUTUAL FUNDS	.09
FRANKLIN MUTUAL FUNDS	-.09
HDFC MUTUAL FUNDS	.09
UTI MUTUAL FUNDS	.08



### ❖ INTERPRETATION-

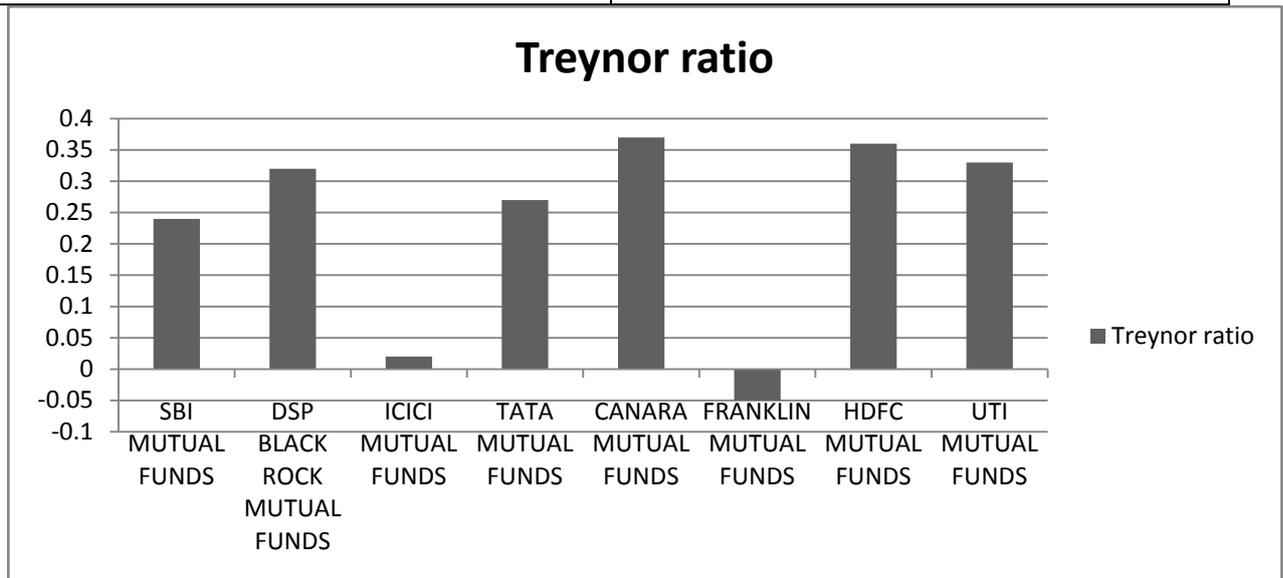
- ✓ Thus it is concluded that according to the sharpe ratio CANARA mutual funds and HDFC mutual funds have the highest sharpe ratio as .09 so these funds have performed much better as compared to other companies of mutual funds.
- ✓ On the second position are the UTI and DSP BLACK ROCK mutual funds as sharpe ratio is .08 so these are also giving good performance.
- ✓ On the third position is the ICICI mutual funds as sharpe ratio is .07 which is average among all companies.
- ✓ On the fourth position is the companies with sharpe ratio .06 which are SBI and TATA mutual funds which is least performing among the selected companies.
- ✓ FRANKLIN mutual funds are negative performer as there sharpe ratio is -.09 that is a category in which risk is high for the investors to invest their money.

#### • On the basis of treynor ratio

Companies	Treynor ratio
SBI MUTUAL FUNDS	.24
DSP BLACK ROCK MUTUAL FUNDS	.32
ICICI MUTUAL FUNDS	.02
TATA MUTUAL FUNDS	.27
CANARA MUTUAL FUNDS	.37
FRANKLIN MUTUAL FUNDS	-.05
HDFC MUTUAL FUNDS	.36

UTI MUTUAL FUNDS

.33



❖ **INTERPRETATION:**

✓ Thus according to above we conclude that treynor ratio says that CANARA mutual funds with .37 are the highest performer and they have shown good results as compared to other companies.

✓ On the second position comes the HDFC mutual funds with .36 and on the third position comes the UTI mutual funds with .33 which are giving relatively good performance as compared to others.

✓ On the fourth position comes the DSP BLACK ROCK mutual funds with .32 which is also coming among the good performers and then on the fifth position comes the TATA mutual funds with ratio .27 which comparatively less.

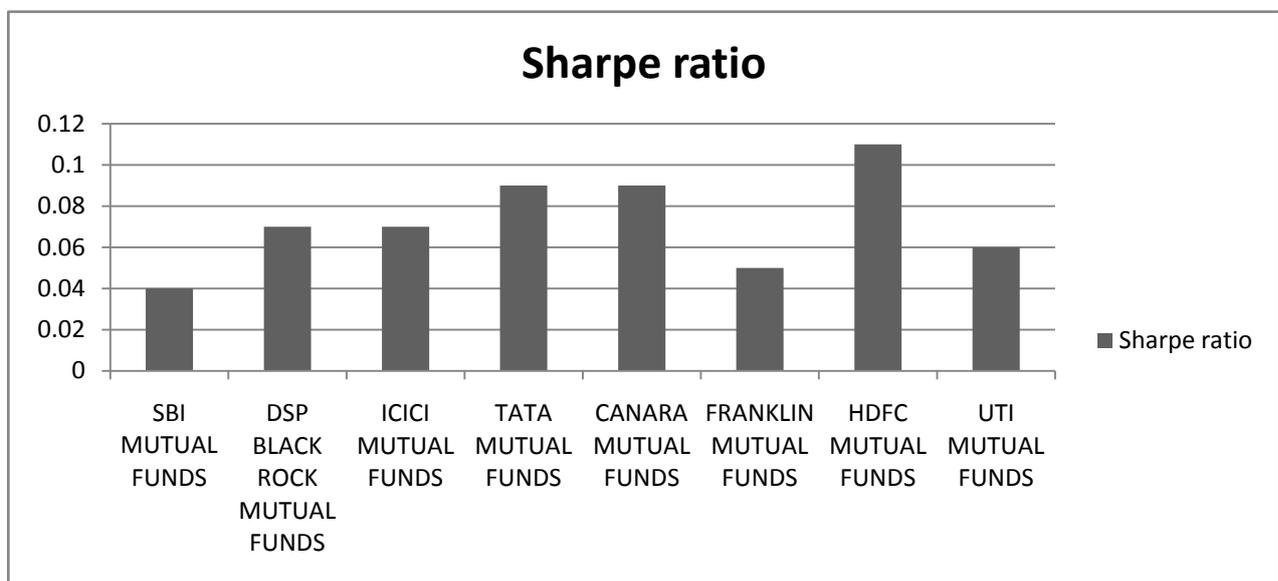
✓ On the sixth position comes SBI mutual funds with ratio .24 which very less to invest into the funds and then comes the least positive performer ICICI with .02 which least to invest into

✓ The last and the negative performer according to treynor ratio is FRANKILIN mutual funds with -.05.

➤ **Comparison of companies on the basis of balanced fund schemes:**

- **On the basis sharpe ratio**

Companies	Sharpe ratio
SBI MUTUAL FUNDS	.04
DSP BLACK ROCK MUTUAL FUNDS	.07
ICICI MUTUAL FUNDS	.07
TATA MUTUAL FUNDS	.09
CANARA MUTUAL FUNDS	.09
FRANKLIN MUTUAL FUNDS	.05
HDFC MUTUAL FUNDS	.11
UTI MUTUAL FUNDS	.06



❖ **INTERPRETATION:**

✓ Thus on the basis of Sharpe ratio among the balanced fund schemes first comes the HDFC mutual funds with .11 that is the best performer among the companies taken. Then the next comes the TATA and CANARA mutual funds with ratio .09 that is also among good performer.

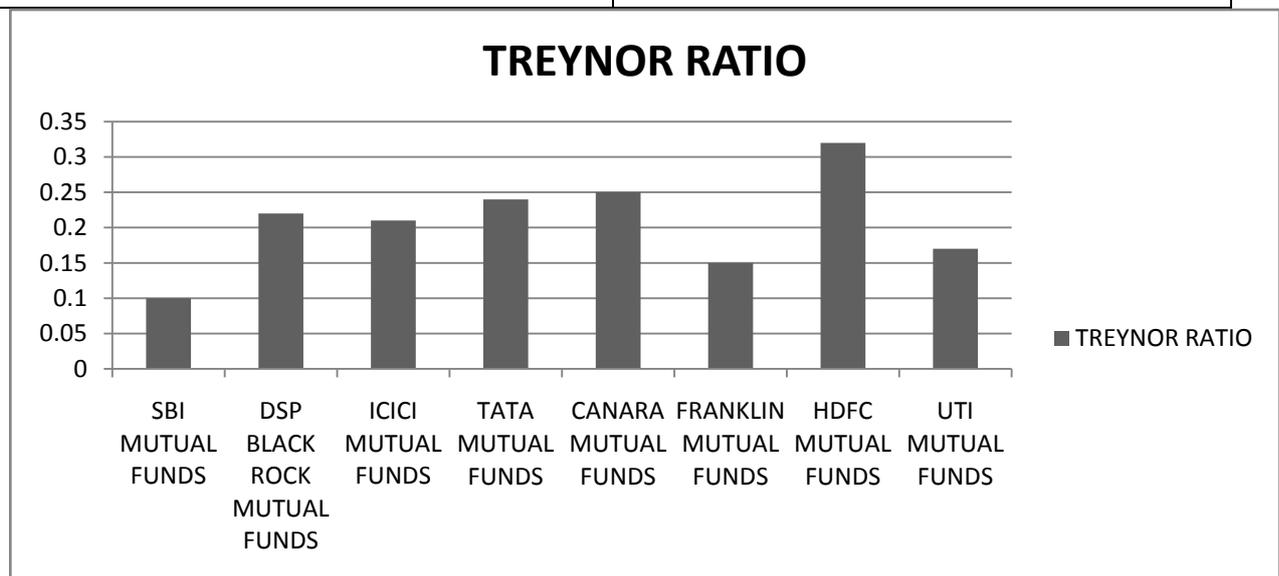
✓ Then on the third position comes the ICICI and DSP BLACK ROCK mutual funds with ratio .07 that is also among the average performer to invest among the companies selected.

✓ Then on the fourth position comes the UTI mutual funds with ratio .06 that is among the less return performer and the fifth comes the FRANKLIN mutual funds with ratio .05 that is also among the least performer.

✓ And the last comes the SBI mutual funds with .04 that is company which is not appropriate to invest for the investors.

- **On the basis of trey nor ratio**

COMPANIES	TREYNOR RATIO
SBI MUTUAL FUNDS	.10
DSP BLACK ROCK MUTUAL FUNDS	.22
ICICI MUTUAL FUNDS	.21
TATA MUTUAL FUNDS	.24
CANARA MUTUAL FUNDS	.25
FRANKLIN MUTUAL FUNDS	.15
HDFC MUTUAL FUNDS	.32
UTI MUTUAL FUNDS	.17



❖ **INTERPRETATION:**

✓ Thus concluded that on the first position comes the HDFC mutual fund with ratio .32 this is the highest among the selected companies and good for the investors to invest.

✓ On the second position comes the CANARA mutual fund with .25 that is also among the good performers and good to invest in. On the third position comes the TATA mutual fund with .24 that is also among good performer.

✓ On the fourth position comes the DSP BLACK ROCK mutual funds with ratio .22 and on the fifth position comes the ICICI mutual funds with .21 which among the less performer.

✓ On the sixth position comes the UTI mutual funds with .17 and the on the seventh position comes the FRANKLIN mutual funds with ratio .15 which is among less performer.

✓ And the last comes the SBI mutual funds with ratio .10 which is not good fund to invest into as treasury nor ratio is least.

❖ **EVALUATION:**

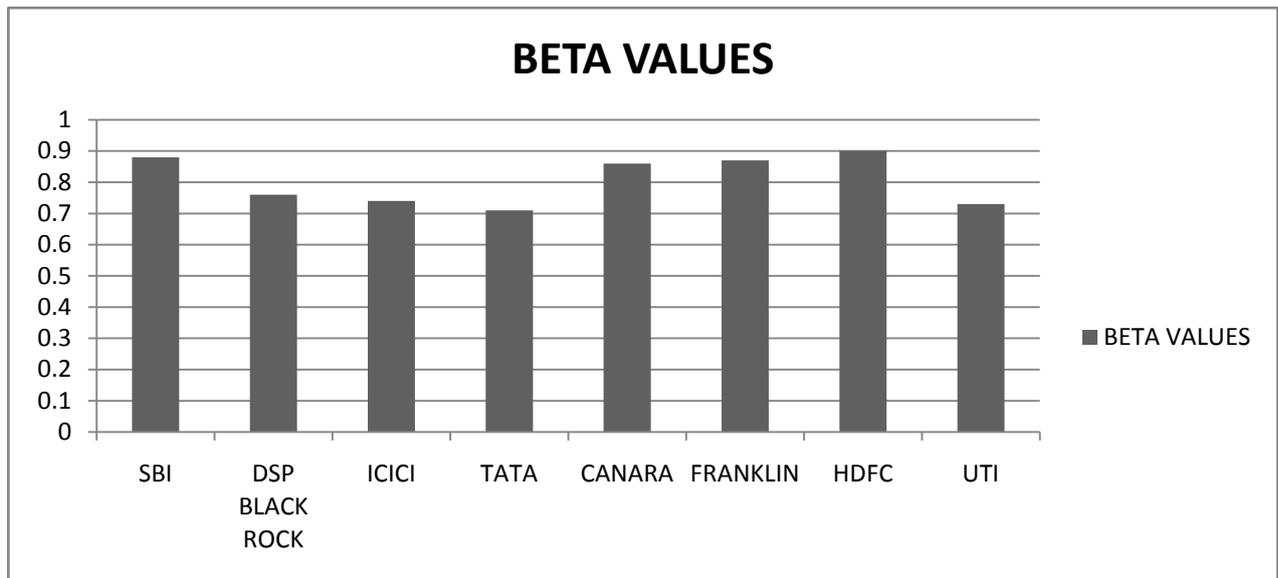
STATUS	Equity funds	Balanced funds
Highest Sharpe ratio	CANARA & HDFC FUNDS	HDFC FUNDS
Lowest Sharpe ratio	FRANKLIN FUNDS	SBI FUNDS

STATUS	Equity funds	Balanced funds
Highest treasury nor ratio	CANARA FUNDS	HDFC FUNDS
Lowest treasury nor ratio	FRANKLIN FUNDS	SBI FUNDS

➤ **COMPARISON OF COMPANIES ON THE BASIS OF BETA VALUES:**

❖ **EQUITY FUND SCHEMES:**

COMPANIES	BETA VALUES
SBI	.88
DSP BLACK ROCK	.76
ICICI	.74
TATA	.71
CANARA	.86
FRANKLIN	.87
HDFC	.90
UTI	.73

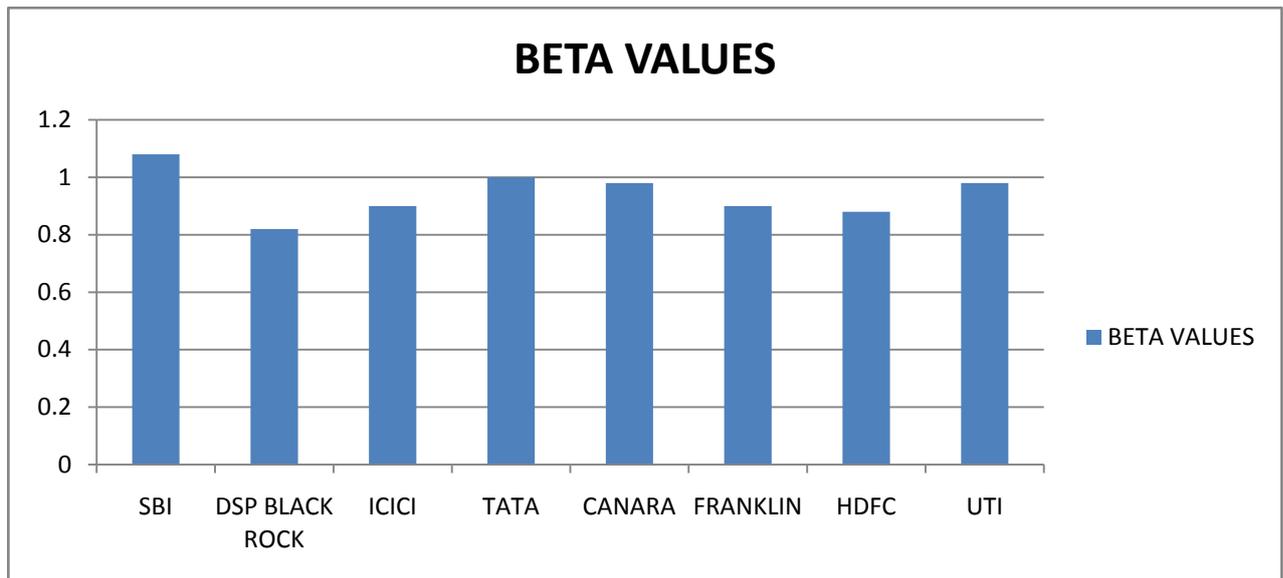


❖ **INTERPRETATION:**

All the companies in the equity fund schemes the beta values  $<1$  that is all the funds are defensive funds and that is less risk in all these selected companies. These funds are less volatile and among these also the companies with least beta values are the most defensive funds. TATA mutual funds are the least among defensive funds with .71 and HDFC mutual funds are higher in the defensive funds.

❖ **BALANCED FUND SCHEMES:**

COMPANIES	BETA VALUES
SBI	1.08
DSP BLACK ROCK	.82
ICICI	.90
TATA	1.00
CANARA	.98
FRANKLIN	.90
HDFC	.88
UTI	.98



❖ **INTERPRETATION:**

Thus interpreted that among all the companies in balanced funds SBI funds is with highest beta values that is systematic risk 1.08 that is  $\beta > 1$  that this is the aggressive funds. In this fund the market rises the returns also increases with that. Second is the TATA mutual funds with beta values = 1 that is they are the passive funds that is this fund moves with the market. All the rest of the funds are defensive funds that is the beta values  $< 1$  and they less volatile funds.

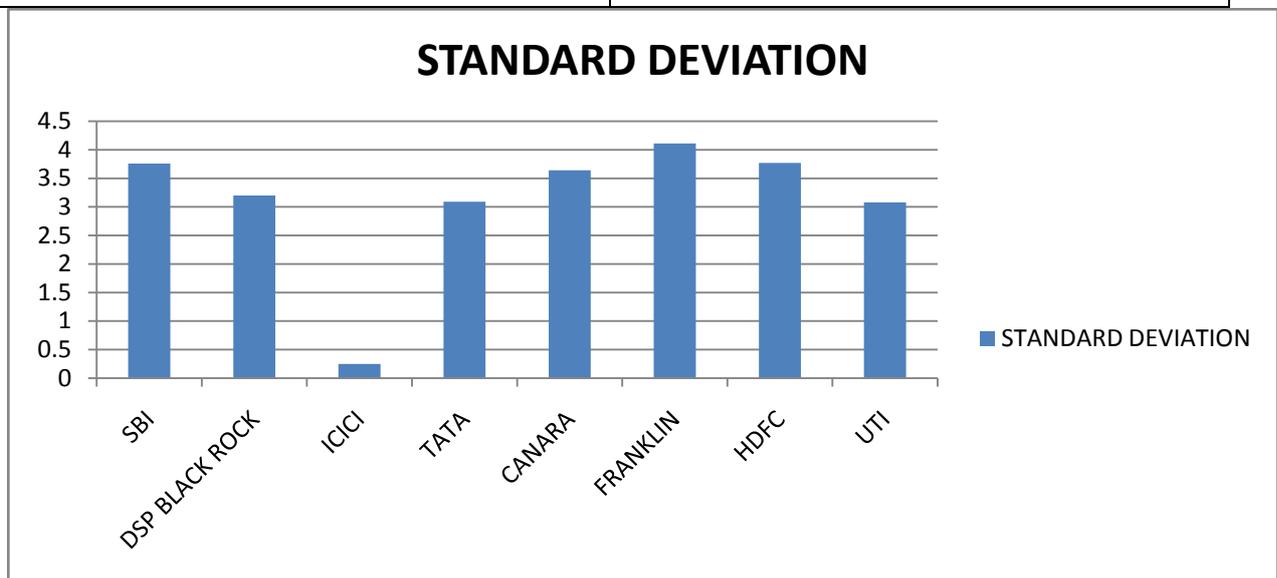
**EVALUATION:**

Funds nature	Equity funds	Balanced funds
Passive funds( $\beta=1$ )	-	TATA funds
Defensive funds( $\beta < 1$ )	All the companies	Rest of the companies
Aggressive funds( $\beta > 1$ )	-	SBI funds

➤ **COMPARISON BETWEEN COMPANIES ON THE BASIS OF STANDARD DEVIATION:**

❖ **EQUITY FUND SCHEMES**

COMPANIES	STANDARD DEVIATION
SBI	3.76
DSP BLACK ROCK	3.20
ICICI	.25
TATA	3.09
CANARA	3.64
FRANKLIN	4.11
HDFC	3.77
UTI	3.08

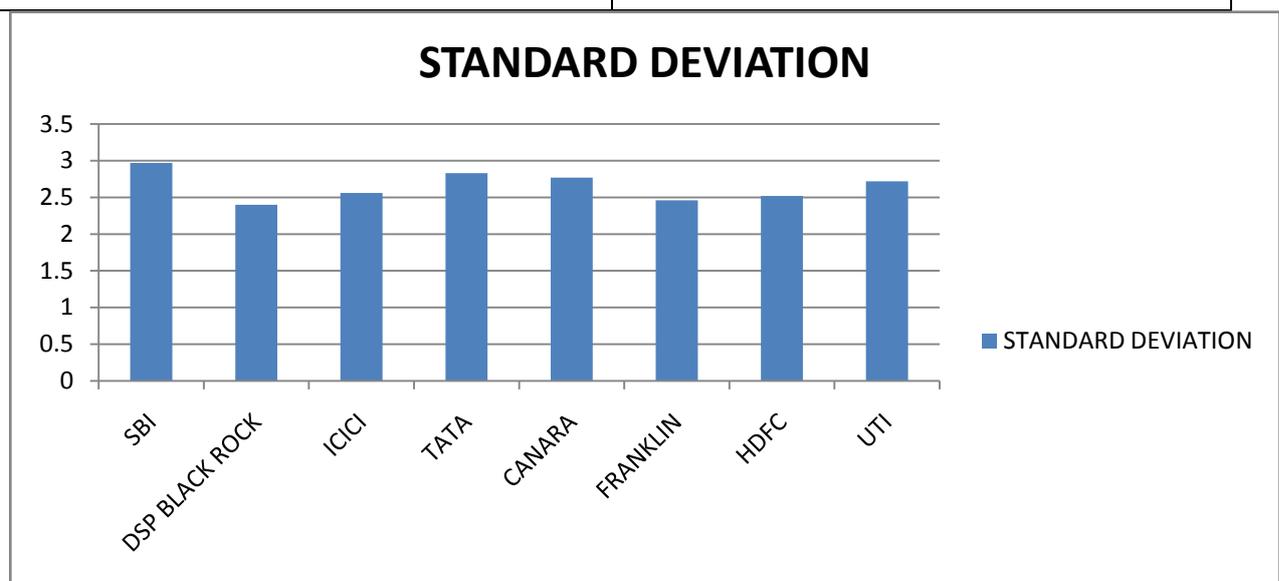


❖ **INTERPRETATION:**

Thus concluded that FRANKLIN mutual funds are with the highest standard deviation that is 4.11 that is highly volatile and ICICI mutual funds are with the lowest standard deviation that is .25 which has low volatility. All other funds are having the standard deviation above 3.00 that is they all have high volatility.

❖ **BALANCED FUND SCHEMES:**

COMPANIES	STANDARD DEVIATION
SBI	2.97
DSP BLACK ROCK	2.40
ICICI	2.56
TATA	2.83
CANARA	2.77
FRANKLIN	2.46
HDFC	2.52
UTI	2.72

❖ **INTERPRETATION:**

Thus concluded that among all the companies SBI mutual funds are having the highest standard deviation that is 2.97 and the DSP BLACK ROCK mutual funds are having the least standard deviation as 2.40 as compared to other companies. So as the standard deviation increases the volatility also increases and vice versa. All other companies are also having the standard deviation above 2.00 so they are among highly volatile funds.

❖ **EVALUATION:**

VOLATILITY	EQUITY FUNDS	BALANCED FUNDS
high volatility	FRANKLIN	SBI
low volatility	ICICI	DSP BLACK ROCK

❖ **CONCLUSION**

With comparison to balanced funds and equity funds the analysis is that balanced funds are more profitable funds than equity funds. In equity fund schemes CANARA MUTUAL funds are good performing funds and the HDFC MUTUAL FUNDS are the second good performing funds in equity schemes. In equity fund schemes FRANKLIN MUTUAL FUNDS are the most non performing funds and the ICICI MUTUAL FUNDS are the second non performing mutual funds. In balanced fund schemes HDFC MUTUAL FUNDS are the good performing mutual funds and the CANARA MUTUAL FUNDS are the second most profitable mutual funds to invest in. In balanced funds SBI MUTUAL FUNDS are the most nonperforming mutual funds and FRANKLIN MUTUAL FUNDS are the second most nonperforming mutual fund. According to beta value in balanced funds SBI mutual funds have the highest risk and the DSP mutual funds have the lowest risk. According to beta values in equity funds HDFC mutual funds have the highest risk and the TATA has the lowest risk. According to standard deviation SBI and FRANKLIN mutual funds have the highest value in balanced and equity respectively.

From analyzing the above data it is concluded that among equity fund schemes and balanced fund schemes are balanced fund schemes are performing better and with the analysis of 8 mutual fund companies it is analyzed that CANARA mutual funds are the best performer both in the balanced funds and equity funds and the second position is taken by the HDFC mutual funds both in equity schemes and balanced fund schemes and the most nonperforming funds both in equity and balanced funds are FRANKLIN mutual funds. In balanced funds SBI mutual funds are nonperforming that is risky to invest into this. And in the equity fund schemes ICICI mutual funds are highly risky to invest into.

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10. [www.indianground.com/realestate.htm](http://www.indianground.com/realestate.htm): This site explains the s
11. [www.livemint.com/wallstreet\\_journal.htm](http://www.livemint.com/wallstreet_journal.htm): This site explains the scenario of real estate sector in India.
12. [www.moneycontrol.com/stockquote](http://www.moneycontrol.com/stockquote): This site gives information’s regarding the stocks bid and ask price and their returns.