

PERFORMANCE EVALUATION OF EQUITY DIVERSIFIED SCHEME OF UTI EQUITY FUND

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Abstract: *The Mutual Fund Industry has grown at a phenomenal rate during the present days. During the period from December 2004 to June 2008, Assets Under Management of Mutual funds increased by Rs.4,14,062 crore to Rs. 5,64,599.28 crore. The Mutual Industry has been playing key role in the capital market. This paper aims to study the performance evaluation of UTI Equity Fund. The analysis was achieved by assessing various financial tests like Standard Deviation, Beta, Sharpe Ratio, Treynor Ratio, Jensen Ratio, Fama Ratio, (M²) Franco Modigliani and Lea Modigliani and R² (Correlation-squared). Data was collected from various websites like AMFI, SEBI and RBI. This analysis gives a picture that most of the year's fund returns more than the market return according to the different approaches.*

Index Terms - Mutual fund, UTI, Assets under Management, Sharpe Ratio, Treynor Ratio.

I. Introduction

A mutual fund collects the savings from small investors, invest them in Government and other corporate securities and earn income through interest and dividends, besides capital gains. It works on the principle of 'small drops of water make a big ocean'. For example, if one has Rs.1,000 to invest, it may not fetch very much on its own. But, when it is peopled with Rs. 1,000 each from a lot of other people, then, one could create a 'big fund' large enough to invest in a wide varieties of shares and debentures on a commanding scale and thus to enjoy the economies of large –scale operations.

This research paper focusing on performance evaluation of equity diversified scheme.

II. Review of Literature

John McDonald (1974) evaluated the relationship between the stated fund objectives and their risks and return attributes. This paper concludes that, on an average the fund managers appeared to keep their portfolios within the stated risk. Some funds in the lower risk group possessed higher risk than funds in the most risky group.

James R.F. Guy (1978) examined the risk-adjusted performance of UK investment trusts through the usage of Sharpe and Jensen measures. He concludes that no trust had exhibited superior measured compared to the London Stock Exchange Index.

Sharad Panwar and R. Madhumathi (2006) in this paper "characteristics and performance evaluation of selected mutual funds in India" studied a sample of public sector sponsored & private sector sponsored funds of varied net assets to investigate the differences in characteristics of assets held, portfolio diversification and variable effects of 38 diversification on investment performance for the period may 2002 to May 2005. The paper resulted that public sector sponsored funds also not differ significantly from private sector funded funds in term of mean returns percent however they said there is a significant difference between public sector sponsored MFs. & private sector sponsored MFs in terms of average standard deviation, average variance and average co-efficient of variation. It is also found out that there is no statistical difference between sponsorship classes in terms of excess standard deviation adjusted returns as a performance measure. When they used residual variance (RV) as a measure of MF portfolio diversification characteristic, there was a statistical difference between public – sector sponsored mutual fund and private sector sponsored MF for the study period. The model built on testing the impact of diversification on fund performance they found a statistical difference among sponsorship classes when residual variance is used as a measure of portfolio diversification and excess standard deviation adjusted returns as a performance measure.

Karoui, Aymen and Meier, Iwan (2008) in his paper “Performance and characteristics of mutual fund” evaluated and measured the portfolio characteristics of 828 newly launched U.S. equity mutual funds over the time period 1991-2005 using Carhart (1997) 4 factor asset pricing model. The study revealed new U.S. equity mutual funds outperformed their peers by 0.12 percent per month over the first three years. However, there were distinct patterns in this superior risk adjusted performance estimated using Carhart’s (1997) 4 factor model. The number of fund that started to 40 outperforms older funds shrunk substantially after one to three years. These results suggested that the initially favorable performance was to some extent due to risk taking and not necessarily superior manager skill. Scrutinizing the returns further confirmed that the returns of the fund started to exhibit higher standard deviations and higher unsystematic risk that could not be explained by the risk exposure to the four factors of the Carhart model.

Objectives of the study

The objective of the study is to analyse the performance of UTI Equity Fund -Growth scheme in terms of return, risk with the market indices during the period from January 2008 to December 2017.

III. Research Methodology

For analysis purpose the present study is based on secondary data. The secondary data taken from various websites. The Net Asset Value (NAV) and Market indices values are collected from www.amfiindia.com, www.bluechipindia.co.in and www.bseindia.com. The present study is conducted for the period from 2008 to 2017. In the present study the risk and return of the UTI Equity Fund -Growth scheme is compared with benchmark indices such as Sensex, Sensex Next50 and Sensex 100. The performance evaluation of the UTI Equity Fund -Growth scheme is analyzed by applying the tools such as Standard Deviation, Beta, Sharpe Ratio, Treynor Ratio, Jensen Ratio, Fama Ratio, M² Measures and R – Square (R²).

IV. Analysis

Table 1 Performance Analysis of UTI Equity Fund -Growth scheme with SENSEX

YEAR	Rp	Rm	Beta	SDp	SDm	S p	S m	T	J	Fama	M ²	R ²
2008	4.99	-5.36	0.32	9.29	11.27	0.53	-0.48	15.49	3.57	-22.04	6.04	0.18
2009	-4.20	4.92	0.20	7.10	8.86	-0.60	0.55	-21.51	-3.51	-16.61	-5.25	0.07
2010	-1.26	0.88	0.30	4.16	4.79	-0.32	0.17	-4.31	-1.05	-0.93	-1.46	0.15
2011	2.39	-2.32	-0.47	4.99	5.88	0.47	-0.40	-4.97	3.64	-4.71	2.80	0.36
2012	-1.16	2.13	0.05	2.53	5.05	-0.48	0.41	-22.94	-1.17	-1.26	-2.37	0.01
2013	3.32	0.38	0.33	12.34	3.48	0.26	0.09	9.76	3.41	3.77	0.98	0.01
2014	4.27	2.39	-1.91	16.63	3.72	0.25	0.63	-2.20	-0.32	43.85	1.00	0.22
2015	4.35	-0.53	1.99	13.49	3.51	0.32	-0.17	2.16	3.22	-9.67	1.18	0.32
2016	0.49	-0.06	0.09	1.05	4.11	0.41	-0.03	4.98	0.48	-0.01	1.75	0.14
2017	0.43	1.60	-0.01	0.62	2.77	0.60	0.56	-67.44	0.34	0.13	1.73	0.00

Table 1 shows the performance analysis of Mutual Fund UTI Equity Fund- Growth Option scheme in terms of return on portfolio of selected scheme, return of the market index Sensex, beta, standard deviation of the portfolio of the fund and market index (BSE Sensex), Sharpe Ratio of the fund and market, Treynor Ratio, Jensen, Fama, M² and R².

The highest positive return of the UTI Equity Fund - Growth Option scheme is 4.99 in the year 2008 and the benchmark return during the year 2009 is 4.92 shows that the scheme has more returns than the market returns. The scheme returns are positive in 7 out of 10 years and the market returns are positive in 6 out of 10 years. The fund is getting more returns than the market returns in 6 out of 10 years indicating that the fund returns are better than the market return.

The highest standard deviation of the fund is 13.49 in the year 2015 that the fund is no risky than the benchmark return which is 11.27 during the same year. The scheme is more risky than the market in 3 out of 10 years but less riskier than the market in 7 out of 10 years.

The calculated beta of the scheme is positive in all the years indicating that the investments risk is going along with the market. Beta is less than 1 in 9 out of 10 years indicating that the scheme is less

volatile than the market indicating that the scheme is getting less return. Beta is greater than 1 in 1 out of 10 years indicating that the scheme is more volatile than the market signifying that the scheme is offering a higher rate of return but also posing more risk. The highest beta value is 1.99 in the year 2015 shows that scheme is more volatile and posing more riskier than the market and higher rate of return than the market.

The fund Sharpe ratio is better than market Sharpe ratio in 6 out of 10 years indicating that fund shows better performance than the market but in 4 out of 10 years the market shows better performance than the scheme.

The highest Treynor's ratio of the scheme is 15.49 in the year 2008 shows the funds superior risk-adjusted performance. The Treynor's ratio is positive in 4 out of 10 years indicating that the fund outperformed than the market but in the 6 out of 10 years underperformed than the market.

The highest Jensen ratio of the scheme is 3.57 in the year 2008 shows the fund return is higher than the market return. Jensen ratio is positive in 6 out of 10 years indicating that the funds return is higher than the expected beta statistic. Jensen ratio is negative in 4 out of 10 years indicating that the funds return is lower than the market returns implying that the mutual fund manager would not have earned enough return given the amount of risk he was taking.

Fama shows the highest value is 43.85 in the year 2014 shows the fund return is higher than the market return. Fama values are positive in 3 out of 10 years shows that the fund outperformed than the market. Fama values are negative in 7 out of 10 years, indicating that the fund performance is poor in that year.

The highest positive M^2 value is 6.04 in the year 2008 shows that the fund outperformed the market. M^2 values are positive in 7 out of 10 years shows that the fund outperformed the market portfolio. M^2 values are negative in 3 out of 10 years shows that the funds poor performance than the market portfolio.

The R^2 value is high in 0 out of 10 years indicating that the fund is in positive correlation with the market volatility indicating that the fund is getting positive returns with the market returns. The R^2 value is low in 10 out of 10 years indicating that the fund is in positive correlation with the market volatility but less positive returns with the market returns.

Table 2 Performance Analysis of UTI Equity Fund -Growth scheme with SENSEX NEXT 50

YEAR	Rp	Rm	Beta	SDp	SDm	S p	S m	T	J	Fama	M^2	R^2
2008	4.99	-5.35	0.25	9.29	14.38	0.53	-0.38	19.77	3.95	-17.26	7.70	0.18
2009	-4.20	5.01	0.12	7.10	10.64	-0.60	0.47	-34.69	-3.87	-14.06	-6.32	0.04
2010	-1.26	0.15	0.08	4.16	3.94	-0.32	0.02	-16.31	-1.25	-0.13	-1.19	0.01
2011	2.39	-3.08	-0.52	4.99	5.14	0.47	-0.61	-4.49	4.19	-7.08	2.46	0.34
2012	-1.16	3.07	0.01	2.53	7.49	-0.48	0.40	163.71	-1.31	-1.24	-3.55	0.00
2013	3.32	-0.52	-0.09	12.34	5.64	0.26	-0.10	-34.63	3.41	-4.13	1.55	0.00
2014	4.27	2.77	-1.09	16.63	7.28	0.25	0.37	-3.88	1.17	26.07	1.90	0.27
2015	4.35	-0.31	3.02	13.49	2.29	0.32	-0.16	1.42	3.27	-9.24	0.79	0.31
2016	0.49	-0.02	0.07	1.05	5.81	0.41	-0.01	6.21	0.49	-0.01	2.45	0.18
2017	0.43	2.18	-0.03	0.62	3.78	0.60	0.56	-14.28	0.26	0.13	2.34	0.03

Table 2 shows the performance analysis of Mutual Fund UTI Equity Fund- Growth Option scheme in terms of return on portfolio of selected scheme, return of the market index Sensex, beta, standard deviation of the portfolio of the fund and market index (BSE Sensex Next 50), Sharpe Ratio of the fund and market, Treynor Ratio, Jensen, Fama, M^2 and R^2 .

The highest positive return of the UTI Equity Fund - Growth Option scheme is 4.99 in the year 2008 and the benchmark return during the same year is 5.01 shows that the scheme has more returns than the market returns. The scheme returns are positive in 7 out of 10 years and the market returns are positive in 5 out of 10 years. The fund is getting more returns than the market returns in 6 out of 10 years indicating that the fund returns are better than the market return.

The highest standard deviation of the fund is 16.63 in the year 2014 that the fund is no risky than the benchmark return which is 14.38 during the same year. The scheme is more riskier than the market in 4 out of 10 years but less riskier than the market in 6 out of 10 years.

The calculated beta of the scheme is positive in all the years indicating that the investments risk is going along with the market. Beta is less than 1 in 9 out of 10 years indicating that the scheme is less volatile than the market indicating that the scheme is getting less returns. Beta is greater than 1 in 1 out of 10 years indicating that the scheme is more volatile than the market signifying that the scheme is offering a higher rate of return but also posing more risk. The highest beta value is 3.02 in the year 2015 shows that scheme is more volatile and posing more riskier than the market and higher rate of return than the market.

The fund Sharpe ratio is better than market Sharpe ratio in 6 out of 10 years indicating that fund shows better performance than the market but in 4 out of 10 years the market shows better performance than the scheme.

The highest Treynor's ratio of the scheme is 19.77 in the year 2008 shows the funds superior risk-adjusted performance. The Treynor's ratio is positive in 4 out of 10 years indicating that the fund outperformed than the market but in the 6 out of 10 years underperformed than the market.

The highest Jensen ratio of the scheme is 4.19 in the year 2011 shows the fund return is higher than the market return. Jensen ratio is positive in 7 out of 10 years indicating that the funds return is higher than the expected beta statistic. Jensen ratio is negative in 3 out of 10 years indicating that the funds return is lower than the market returns implying that the mutual fund manager would not have earned enough return given the amount of risk he was taking.

Fama shows the highest value is 26.07 in the year 2014 shows the fund return is higher than the market return. Fama values are positive in 2 out of 10 years shows that the fund outperformed than the market. Fama values are negative in 8 out of 10 years, indicating that the fund performance is poor in that year.

The highest positive M^2 value is 7.70 in the year 2008 shows that the fund outperformed the market. M^2 values are positive in 7 out of 10 years shows that the fund outperformed the market portfolio. M^2 values are negative in 3 out of 10 years shows that the funds poor performance than the market portfolio.

The R^2 value is high in 0 out of 10 years indicating that the fund is in positive correlation with the market volatility indicating that the fund is getting positive returns with the market returns. The R^2 value is low in 10 out of 10 years indicating that the fund is in positive correlation with the market volatility but less positive returns with the market returns.

Table 3 Performance Analysis of UTI Equity Fund -Growth scheme with SENSEX 100

YEAR	Rp	Rm	Beta	SDp	SDm	S p	S m	T	J	Fama	M^2	R^2
2008	4.99	-5.65	0.29	9.29	12.31	0.53	-0.46	16.96	3.66	-21.27	6.60	0.18
2009	-4.20	5.17	0.16	7.10	9.59	-0.60	0.53	-26.39	-3.67	-16.10	-5.69	0.06
2010	-1.26	0.64	0.27	4.16	4.48	-0.32	0.13	-4.88	-1.13	-0.71	-1.36	0.10
2011	2.39	-2.48	-0.48	4.99	5.72	0.47	-0.44	-4.86	3.75	-5.16	2.72	0.36
2012	-1.16	2.35	0.04	2.53	5.49	-0.48	0.42	-33.69	-1.21	-1.29	-2.59	0.01
2013	3.32	0.06	0.20	12.34	4.06	0.26	0.00	16.07	3.32	0.03	1.13	0.01
2014	4.27	2.47	-1.87	16.63	4.17	0.25	0.58	-2.26	-0.37	40.56	1.11	0.26
2015	4.35	-0.42	2.07	13.49	3.46	0.32	-0.14	2.08	3.39	-8.04	1.16	0.34
2016	0.49	0.00	0.09	1.05	4.43	0.41	-0.01	4.97	0.49	-0.01	1.88	0.16
2017	0.43	1.81	-0.02	0.62	2.71	0.60	0.65	-21.53	0.30	0.15	1.69	0.01

Table 3 shows the performance analysis of Mutual Fund UTI Equity Fund- Growth Option scheme in terms of return on portfolio of selected scheme, return of the market index Sensex, beta, standard deviation of the portfolio of the fund and market index (BSE Sensex 100), Sharpe Ratio of the fund and market, Treynor Ratio, Jensen, Fama, M^2 and R^2 .

The highest positive return of the UTI Equity Fund - Growth Option scheme is 4.99 in the year 2008 and the benchmark return during the year 2009 is 5.17 shows that the scheme has more returns than the market returns. The scheme returns are positive in 7 out of 10 years and the market returns are positive in 6 out of 10 years. The fund is getting more returns than the market returns in 6 out of 10 years indicating that the fund returns are better than the market return.

The highest standard deviation of the fund is 16.63 in the year 2014 that the fund is no riskier than the benchmark return which is 12.31 during the same year. The scheme is more riskier than the market in 3 out of 10 years but less riskier than the market in 7 out of 10 years.

The calculated beta of the scheme is positive in all the years indicating that the investments risk is going along with the market. Beta is less than 1 in 9 out of 10 years indicating that the scheme is less volatile than the market indicating that the scheme is getting less returns. Beta is greater than 1 in 1 out of 10 years indicating that the scheme is more volatile than the market signifying that the scheme is offering a higher rate of return but also posing more risk. The highest beta value is 2.07 in the year 2015 shows that scheme is more volatile and posing more riskier than the market and higher rate of return than the market.

The fund Sharpe ratio is better than market Sharpe ratio in 5 out of 10 years indicating that fund shows better performance than the market but in 5 out of 10 years the market shows better performance than the scheme.

The highest Treynor's ratio of the scheme is 16.96 in the year 2008 shows the funds superior risk-adjusted performance. The Treynor's ratio is positive in 4 out of 10 years indicating that the fund outperformed than the market but in the 6 out of 10 years underperformed than the market.

The highest Jensen ratio of the scheme is 3.75 in the year 2011 shows the fund return is higher than the market return. Jensen ratio is positive in 6 out of 10 years indicating that the funds return is higher than the expected beta statistic. Jensen ratio is negative in 4 out of 10 years indicating that the funds return is lower than the market returns implying that the mutual fund manager would not have earned enough return given the amount of risk he was taking.

Fama shows the highest value is 40.56 in the year 2014 shows the fund return is higher than the market return. Fama values are positive in 3 out of 10 years shows that the fund outperformed than the market. Fama values are negative in 7 out of 10 years, indicating that the fund performance is poor in that year.

The highest positive M^2 value is 6.60 in the year 2008 shows that the fund outperformed the market. M^2 values are positive in 7 out of 10 years shows that the fund outperformed the market portfolio. M^2 values are negative in 3 out of 10 years shows that the funds poor performance than the market portfolio.

The R^2 value is high in 0 out of 10 years indicating that the fund is in positive correlation with the market volatility indicating that the fund is getting positive returns with the market returns. The R^2 value is low in 10 out of 10 years indicating that the fund is in positive correlation with the market volatility but less positive returns with the market returns.

Table 4 Performance Analysis of UTI Equity Fund -Growth scheme with SENSEX 200

YEAR	Rp	Rm	Beta	SDp	SDm	S p	S m	T	J	Fama	M^2	R^2
2008	4.99	-5.82	0.29	9.29	12.51	0.53	-0.47	17.28	3.65	-21.54	6.71	0.18
2009	-4.20	5.32	0.15	7.10	9.77	-0.60	0.54	-28.92	-3.72	-16.30	-5.80	0.05
2010	-1.26	0.62	0.23	4.16	4.33	-0.32	0.13	-5.64	-1.16	-0.71	-1.31	0.07
2011	2.39	-2.62	-0.49	4.99	5.64	0.47	-0.47	-4.75	3.85	-5.52	2.69	0.37
2012	-1.16	2.37	0.04	2.53	5.55	-0.48	0.42	-33.67	-1.21	-1.29	-2.61	0.01
2013	3.32	-0.07	0.14	12.34	4.06	0.26	-0.03	22.94	3.31	-1.25	1.13	0.00
2014	4.27	2.63	-2.02	16.63	4.10	0.25	0.63	-2.09	-1.06	43.99	1.09	0.29
2015	4.35	-0.32	2.07	13.49	3.39	0.32	-0.11	2.07	3.59	-6.50	1.14	0.32
2016	0.49	0.01	0.09	1.05	4.48	0.41	-0.01	4.96	0.49	0.00	1.91	0.17
2017	0.43	1.93	-0.02	0.62	2.64	0.60	0.71	-18.50	0.29	0.17	1.64	0.01

Table 4 shows the performance analysis of Mutual Fund UTI Equity Fund- Growth Option scheme in terms of return on portfolio of selected scheme, return of the market index Sensex, beta, standard deviation of the portfolio of the fund and market index (BSE Sensex 200), Sharpe Ratio of the fund and market, Treynor Ratio, Jensen, Fama, M^2 and R^2 .

The highest positive return of the UTI Equity Fund - Growth Option scheme is 4.99 in the year 2008 and the benchmark return during the same year is 5.32 shows that the scheme has more returns than the market returns. The scheme returns are positive in 7 out of 10 years and the market returns are positive in 6

out of 10 years. The fund is getting more returns than the market returns in 6 out of 10 years indicating that the fund returns are better than the market return.

The highest standard deviation of the fund is 16.63 in the year 2014 that the fund is no risky than the benchmark return which is 12.51 during the year 2008. The scheme is more riskier than the market in 3 out of 10 years but less riskier than the market in 7 out of 10 years.

The calculated beta of the scheme is positive in all the years indicating that the investments risk is going along with the market. Beta is less than 1 in 9 out of 10 years indicating that the scheme is less volatile than the market indicating that the scheme is getting less returns. Beta is greater than 1 in 1 out of 10 years indicating that the scheme is more volatile than the market signifying that the scheme is offering a higher rate of return but also posing more risk. The highest beta value is 2.07 in the year 2015 shows that scheme is more volatile and posing more riskier than the market and higher rate of return than the market.

The fund Sharpe ratio is better than market Sharpe ratio in 5 out of 10 years indicating that fund shows better performance than the market but in 5 out of 10 years the market shows better performance than the scheme.

The highest Treynor's ratio of the scheme is 22.94 in the year 2013 shows the funds superior risk-adjusted performance. The Treynor's ratio is positive in 4 out of 10 years indicating that the fund outperformed than the market but in the 6 out of 10 years underperformed than the market.

The highest Jensen ratio of the scheme is 3.65 in the year 2008 shows the fund return is higher than the market return. Jensen ratio is positive in 6 out of 10 years indicating that the funds return is higher than the expected beta statistic. Jensen ratio is negative in 4 out of 10 years indicating that the funds return is lower than the market returns implying that the mutual fund manager would not have earned enough return given the amount of risk he was taking.

Fama shows the highest value is 43.99 in the year 2014 shows the fund return is higher than the market return. Fama values are positive in 3 out of 10 years shows that the fund outperformed than the market. Fama values are negative in 7 out of 10 years, indicating that the fund performance is poor in that year.

The highest positive M^2 value is 6.71 in the year 2008 shows that the fund outperformed the market. M^2 values are positive in 7 out of 10 years shows that the fund outperformed the market portfolio. M^2 values are negative in 3 out of 10 years shows that the funds poor performance than the market portfolio.

The R^2 value is high in 0 out of 10 years indicating that the fund is in positive correlation with the market volatility indicating that the fund is getting positive returns with the market returns. The R^2 value is low in 10 out of 10 years indicating that the fund is in positive correlation with the market volatility but less positive returns with the market returns.

Table 5 Performance Analysis of UTI Equity Fund -Growth scheme with SENSEX 500

YEAR	Rp	Rm	Beta	SDp	SDm	S p	S m	T	J	Fama	M^2	R^2
2008	4.99	-6.08	0.28	9.29	12.74	0.53	-0.48	17.83	3.64	-22.08	6.83	0.17
2009	-4.20	5.42	0.14	7.10	10.00	-0.60	0.54	-31.26	-3.77	-16.21	-5.93	0.04
2010	-1.26	0.59	0.21	4.16	4.27	-0.32	0.13	-6.13	-1.17	-0.69	-1.29	0.06
2011	2.39	-2.68	-0.50	4.99	5.62	0.47	-0.49	-4.70	3.90	-5.67	2.68	0.37
2012	-1.16	2.35	0.03	2.53	5.52	-0.48	0.42	-37.24	-1.22	-1.28	-2.60	0.01
2013	3.32	-0.16	0.07	12.34	4.10	0.26	-0.05	43.76	3.32	-2.15	1.14	0.00
2014	4.27	2.69	-2.00	16.63	4.17	0.25	0.63	-2.11	-1.14	44.28	1.11	0.30
2015	4.35	-0.30	1.95	13.49	3.35	0.32	-0.11	2.21	3.68	-6.15	1.12	0.28
2016	0.49	-0.02	0.08	1.05	4.64	0.41	-0.02	5.09	0.49	-0.01	1.97	0.17
2017	0.43	2.08	-0.02	0.62	2.63	0.60	0.77	-17.67	0.27	0.18	1.64	0.01

Table 5 shows the performance analysis of Mutual Fund UTI Equity Fund- Growth Option scheme in terms of return on portfolio of selected scheme, return of the market index Sensex, beta, standard deviation of the portfolio of the fund and market index (BSE Sensex 500), Sharpe Ratio of the fund and market, Treynor Ratio, Jensen, Fama, M^2 and R^2 .

The highest positive return of the UTI Equity Fund - Growth Option scheme is 4.99 in the year 2008 and the benchmark return during the year 2009 is 5.42 shows that the scheme has more returns than the market returns. The scheme returns are positive in 7 out of 10 years and the market returns are positive in 5 out of 10 years. The fund is getting more returns than the market returns in 6 out of 10 years indicating that the fund returns are better than the market return.

The highest standard deviation of the fund is 16.63 in the year 2014 that the fund is no risky than the benchmark return which is 12.74 during the same year. The scheme is more riskier than the market in 3 out of 10 years but less riskier than the market in 7 out of 10 years.

The calculated beta of the scheme is positive in all the years indicating that the investments risk is going along with the market. Beta is less than 1 in 9 out of 10 years indicating that the scheme is less volatile than the market indicating that the scheme is getting less returns. Beta is greater than 1 in 1 out of 10 years indicating that the scheme is more volatile than the market signifying that the scheme is offering a higher rate of return but also posing more risk. The highest beta value is 1.95 in the year 2015 shows that scheme is more volatile and posing more riskier than the market and higher rate of return than the market.

The fund Sharpe ratio is better than market Sharpe ratio in 5 out of 10 years indicating that fund shows better performance than the market but in 5 out of 10 years the market shows better performance than the scheme.

The highest Treynor's ratio of the scheme is 43.76 in the year 2013 shows the funds superior risk-adjusted performance. The Treynor's ratio is positive in 4 out of 10 years indicating that the fund outperformed than the market but in the 6 out of 10 years underperformed than the market.

The highest Jensen ratio of the scheme is 3.68 in the year 2015 shows the fund return is higher than the market return. Jensen ratio is positive in 6 out of 10 years indicating that the funds return is higher than the expected beta statistic. Jensen ratio is negative in 4 out of 10 years indicating that the funds return is lower than the market returns implying that the mutual fund manager would not have earned enough return given the amount of risk he was taking.

Fama shows the highest value is 44.28 in the year 2014 shows the fund return is higher than the market return. Fama values are positive in 2 out of 10 years shows that the fund outperformed than the market. Fama values are negative in 8 out of 10 years, indicating that the fund performance is poor in that year.

The highest positive M^2 value is 6.83 in the year 2008 shows that the fund outperformed the market. M^2 values are positive in 7 out of 10 years shows that the fund outperformed the market portfolio. M^2 values are negative in 3 out of 10 years shows that the funds poor performance than the market portfolio.

The R^2 value is high in 0 out of 10 years indicating that the fund is in positive correlation with the market volatility indicating that the fund is getting positive returns with the market returns. The R^2 value is low in 10 out of 10 years indicating that the fund is in positive correlation with the market volatility but less positive returns with the market returns.

V. Conclusion

The analysis of the mutual funds scheme of UTI Equity Fund -Growth scheme revealed that 6 out of 10 years of the funds returns better performed than the market. The beta is less than 1 in 8 to 9 years is less volatile than the market indices rest of the years the beta is more than one. According to Sharpe ratio the fund return has performed better than the market returns in 5 to 6 years. As per Treynor Ratio the fund underperformed than the market. According to Jensen Ratio the fund better performed than the market in 6 to 7. Finally, I conclude that as per Sharpe and Treynor Ratio the funds performed better than the market indices.

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