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A Study on Comparative Analysis of Infrastructure Funds

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ABSTRACT

Companies raising funds for two purposes, ie., either for internal purpose or external purpose including investment activities. Now-a-days investment is a part of the activities of the corporate, especially, the firm who is having surplus funds in addition to the funds which is used for the normal course of business. The investors choosing the best investments proposals after taken into the consideration of three important investment principles, like safety, profitability and liquidity. In recent years the investors concentrating the blooming sectors especially infrastructure sector for their investment. Infrastructure is the buzzword in the present Indian context as there is a huge gap between demand and supply. Infrastructure funds are part of a mutual fund category called thematic funds. *While sectoral funds invest in particular sectors like, information technology, power, metals, oil and gas, etc.,. Thematic funds invests in themes like infrastructure, consumption-led categories like the retail industry and outsourcing companies. Taken into the consideration of above the researchers have been analyzed three companies infrastructure funds to know the performance of each other.*
Acknowledgement: *I would like to acknowledge and thank Mr. A Ragavendran, MBA Final Year Student, school of management, Karunya University, Coimbatore for extending immense help in every phase of writingthis article.* ***Key words:*** *Infrastructure funds, Mutual funds, Thematic funds and Sectoral funds.*

1. INTRODUCTION

Infrastructure is the buzzword in the present Indian context. Infrastructure funds are part of a mutual fund category called *thematic funds*. Now a day's the development of infrastructure sector is incredible one. Infrastructure companies are performing very well, and developing countries like India, china are concentrating infrastructure development to attract foreign investment. So, the mutual funds companies are increasing their investments in infrastructure scheme. Mutual fund is a pool of money that is professionally managed for the benefit of all shareholders. As an investor in a mutual fund, one owns a portion of the fund, sharing in any increase or decrease in the value of the fund. A mutual fund may focus on stocks, bonds, cash, or a combination of these asset classes.

The income earned through these investments and its unit holders in proportion to the number of units owned by them (pro rata) shares the capital appreciation realized by the scheme. Thus, a Mutual Fund is the most suitable investment for the common person as it offers an opportunity to invest in a diversified, professionally managed portfolio at a relatively low cost. Anybody with an investible surplus of as little as a few thousand rupees can invest in Mutual Funds. Each Mutual Fund scheme has a defined investment objective and strategy. In effect, the mutual fund vehicle exploits economies of scale in all three areas - research, investments and transaction processing. Like most developed and developing countries the mutual fund cult has been catching on in India. The important reasons for this interesting occurrence are:

- Mutual funds make it easy and less costly for investors to satisfy their need for capital growth, income and/or income preservation.
- Mutual fund brings the benefits of diversification and money management to the individual investor, providing an opportunity for financial success that was once available only to a select few.
- A mutual fund, by its very nature, is diversified - its assets are invested in many different securities. Beyond that, there are many different types of mutual funds with different objectives and levels of growth potential, furthering your odds to diversify.

2. STATEMENT OF THE PROBLEM

- People do not have awareness about the mutual fund.
- Even if they have the knowledge about the mutual fund, they are not looking at the past performance and following.
- Some investors think that investing mutual fund is highly risky.
- So that the researcher has selected this topic to carry out this study.

3. NEED FOR THE STUDY

During the recent years Indian Mutual fund industry has witnessed a major structural transformation and growth as a result of policy initiatives. For the purpose of participating in the stock market, the people who do not have the time or perhaps the expertise to take direct investment decisions in equities successfully, the option they have is to entrust the hard earned money to the professionals who drive the mutual funds.

As there lies a vague situation that looms large in the minds of the investors is upon whom an average investor should rely, or to distinguish better mutual funds from the other, from the investment point of view. Thus it becomes important to examine the performance of the industry in the changed environment.

4. LITERATURE REVIEW

The purpose of the chapter is to review the various studies conducted and made to consolidate the views and studies to determine the effectiveness of different factors which influence the equity price.

Mr. Suresh Gupta mentioned at present, with most mutual fund investments confined to about 50 cities in the country, this is feasible and already substantially enabled. However, there are scalability issues – if volumes were to rise substantially or if a larger number of cities and towns were to be more actively sucked into mutual fund investing, the operational risks of processing transactions in the present manner would get exacerbated. It is from this perspective that this Report examines the adequacy of mutual fund infrastructure.

Jayant Trivedi & Saloni Gaba evaluated the efficacy of private sector participation in infrastructure development would be contingent upon the capability to commercialize these projects whereby recovery of investments would be through a system of user charges. There is a potential for public private partnerships (PPPs) to contribute more and help bridge the infrastructure gap in India. There has been considerable progress in the last ten years in attracting private investment into the infrastructure sectors; first in telecommunications, then in ports and roads, and in individual projects in other sectors.With the current GDP growth of 8%, in which there is contribution of nearly 51% from services and 16% from manufacturing sector there is a need for proper alignment of resources. To sustain this growth India needs to develop sound infrastructure so that the right input of skilled, qualified and socially contented labor; visible and reliable supply chains; prompt and accurate information for decision making; efficient process and updated technology can be given to the operations of manufacturing and services.

Nishant Kumar Wed Jun 24, 2009 Infrastructure shares are hot commodities for funds in India after the recent elections, and their attraction is only set to grow as the new government lays out plans to improve the country's overburdened roads and bridges in next month's budget.Fund managers are hoping the new government will bolster spending on infrastructure, remove policy bottlenecks by easing land acquisition rules and environmental clearances, amend labour laws and simplify procedures for project approvals. While such expectations have helped infrastructure shares surge twice as fast as India's benchmark index since mid-May, a clear roadmap in the budget would

Vol. 5 No. 2 / October 2010
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further improve visibility and could convince the funds to pay even higher valuations Infrastructure shares are hot commodities for funds in India after the recent elections, and their attraction is only set to grow as the new government lays out plans to improve the country's overburdened roads and bridges in next month's budget.

Prof. Leopold A. Bernstein (1975) evaluated the performance of Indian Mutual Fund Schemes in a bear market using relative performance index, risk-return analysis, Treynor's ratio, Sharpe's ratio, Jensen's measure. The study finds that Medium Term Debt Funds were the best performing funds during the bear period of September 98-April 2002 and 58 of 269 open ended mutual funds provided better returns than the overall market returns.

5. OBJECTIVES OF THE STUDY

- To analyze the investment performance of the Infrastructure fund.
- To measure the risk and return of the selected growth fund schemes.
- To measure the variability and volatility of the selected growth fund schemes.

6. TOOLS FOR ANALYSIS

- The Treynor's Performance Index
- The Sharpe's Performance Index
- Jensen's Performance Index

Treynor Measure Developed by Jack Treynor, this performance measure evaluates funds on the basis of Treynor's Index. This Index is a ratio of return generated by the fund over and above risk free rate of return (generally taken to be the return on securities backed by the government, as there is no credit risk associated), during a given period and systematic risk associated with it (beta). Symbolically, it can be represented as:- Treynor's Index (Ti) = (Ri - Rf)/Bi.

Where, Ri represents return on fund, Rf is risk free rate of return and Bi is beta of the fund. 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 a fund, a low and negative Treynor's Index is an indication of unfavorable performance.

Sharpe Measure In this model, performance of a fund is evaluated on the basis of Sharpe Ratio, which is a ratio of returns generated by the fund over and above risk free rate of return and the total risk associated with it. According to Sharpe, it is the total risk of the fund that the investors are concerned about. So, the model evaluates funds on the basis of reward per unit of total risk. Symbolically, it can be written as:- Sharpe Index (Si) = (Ri - Rf)/St

Where, St is standard deviation of the fund. 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. Comparison Of Sharpe And Treynor Sharpe and Treynor measures are similar in a way, since they both divide the risk premium by a numerical risk measure. The total risk is appropriate when we are evaluating the risk return relationship for well-diversified portfolios. On the other hand, the systematic risk is the relevant measure of risk when we are evaluating less than fully diversified portfolios or individual stocks. For a well-diversified portfolio the total risk is equal to systematic risk. Rankings based on total risk (Sharpe measure) and systematic risk (Treynor measure) should be identical for a well-diversified portfolio, as the total risk is reduced to systematic risk. Therefore, a poorly diversified fund that ranks higher on Treynor measure, compared with another fund that is highly diversified, will rank lower on Sharpe Measure.

Jensen Model Jenson's model proposes another risk adjusted performance measure. This measure was developed by Michael Jenson and is sometimes referred to as the Differential Return Method. This

measure involves evaluation of the returns that the fund has generated vs. the returns actually expected out of the fund given the level of its systematic risk. The surplus between the two returns is called Alpha, which measures the performance of a fund compared with the actual returns over the period. Required return of a fund at a given level of risk (Bi) can be calculated as: -Ri =Rp-(Rf + Bi (Rm - Rf)

Where, Rm is average market return during the given period. After calculating it, alpha can be obtained by subtracting required return from the actual return of the fund. Higher alpha represents superior performance of the fund and vice versa. Limitation of this model is that it considers only systematic risk not the entire risk associated with the fund and an ordinary investor cannot mitigate unsystematic risk, as his knowledge of market is primitive.

7. ANALYSIS AND INTERPRETATION

The analysis of data requires a number of closely related operations such as establishment of categories, the application of these categories to raw data through coding, tabulation and then drawing inferences. The unwieldy data should necessarily condense into a manageable groups and tables for further analysis. Thus, researcher should classify the raw data into some purposeful and usable categories.

Analysis work after tabulation is generally based on the computation of various percentages, coefficients, etc., by applying various well defined statistical formulae. In the process of analysis, relationships or differences supporting or conflicting with original or new hypotheses should be subjected to tests of significance to determine with what validity data can be said to indicate any conclusion

The real value of research lies in its ability to arrive at certain generalizations. If the researcher had no hypothesis to start with, he might seek to explain his findings on the basis of some theory. It is known as interpretation. The process of interpretation may quite often trigger off new questions which in turn may lead further researches. The project deals with the analysis of five of the infrastructure funds viz.

a) ICICI Prudential Infrastructure Fund
b) Tata Infrastructure Fund
c) UTI Thematic Infrastructure Fund

a) ICICI Prudential Infrastructure Fund

Objective: To generate capital appreciation and income distribution to unit holders by investing predominantly in equity/equity related securities of the company are belonging to the infrastructure industries and balance in debt securities and money market instruments including call money.

Structure: Open-ended equity Fund
Inception Date: August 16, 2005
Plans and Options under the Plan: Growth Option & Dividend Option.

Face Value (Rs/Unit): Rs. 10

Minimum Investment: Rs. 5000

Entry Load: For investments of less than Rs. 5 Crores, Entry load is 2.25% of applicable NAV. For investments of Rs. 5 crores and above, Entry Load is Nil.

During the year 2005, ICICI Prudential Infrastructure fund's return was 1.22 which was better than that of the market return which was -2.27. The fund's risk was higher than that of the market risk as the fund's beta was 0.12.

During the year 2006, ICICI Prudential Infrastructure fund's return has increased to 4.77 from 1.22and was higher than the market return which was about 1.76. The fund's risk during this year was higher than that of the market risk as the fund's beta was 3.29.

During the year 2007, ICICI Prudential Infrastructure fund's return has increased to 7.52 from 4.77 and was higher than the market return which was about

Vol. 5 No. 2 / October 2010
ISSN: 0973-4503 RNI : UPENG 2006/17831

Table - 1

Below table shows Analysis of ICICI Infra structure funds.

Yrs	Sharpe Index Si = Rp – (Rf / St)				Treynor Index Tn = (Rp –Rf) / Bp				Jensen Index Ji =Rp- (Rf+Bp)(Rm- Rf)				
	Rp	Rf	St	Value	Rp	Rf	Bp	Value	Rp	Rf	Bp	Rm	Value
2005	1.39	1.25	7.65	**1.22**	1.39	1.25	1.1	**0.12**	1.39	1.25	1.1	2.81	**-2.27**
2006	4.84	1.25	19.2	**4.77**	4.84	1.25	1.09	**3.29**	4.84	1.25	1.09	2.56	**1.76**
2007	7.6	1.25	17.69	**7.52**	7.6	1.25	1.14	**5.57**	7.6	1.25	1.14	1.02	**8.12**
2008	-4.30	1.25	12.78	**-4.40**	-4.3	1.25	1.09	**-5.09**	-4.30	1.25	1.09	1.98	**-6.01**
2009	5.39	1.25	18.5	**5.32**	5.39	1.25	1.03	**4.01**	5.39	1.25	1.03	3.01	**1.36**

Table - 2

Sharpe Index, Treynor Index and Jenson Index for TATA Infrastructure Fund

Yrs	Sharpe Index Si = Rp – (Rf / St)				Treynor Index Tn = Rp –Rf / Bp				Jensen Index Ji =Rp- (Rf+Bp)(Rm- Rf)				
	Rp	Rf	St	Value	Rp	Rf	Bp	Value	Rp	Rf	Bp	Rm	Value
2005	4.34	1.25	9.26	**4.21**	4.34	1.25	1.1	**2.80**	4.34	1.25	1.1	5.64	**-5.98**
2006	4.07	1.25	19.72	**4.01**	4.07	1.25	1.7	**1.65**	4.07	1.25	1.7	3.00	**-1.10**
2007	4.14	1.25	23.34	**4.08**	4.14	1.25	0.9	**3.01**	4.14	1.25	0.96	2.57	**1.22**
2008	-4.9	1.25	12.51	**-5.04**	-4.95	1.25	0.6	**-8.98**	-4.95	1.25	0.69	-0.6	**-1.21**
2009	5.32	1.25	22.8	**5.26**	5.32	1.25	0.5	**7.67**	5.32	1.25	0.53	6.75	**-4.47**

8.12. The fund's risk during this year was lesser than that of the market risk as the fund's beta was 5.57.

During the year 2008, ICICI Prudential Infrastructure fund's return has decreased to -4.40from 7.52 and was lesser than the market return which was about -6.01. The fund's risk during this year was higher than that of the market risk as the fund's beta was -5.09.

During the year 2009, ICICI Prudential Infrastructure fund's return has increased to 5.32from -4.40 and was lesser than the market return which was about 1.36. The fund's risk during this year was higher than that of the market risk as the fund's beta was 4.01.

b) Tata Infrastructu refund Objective: Tata Infrastructure Fund seeks to provide income distribution and / or medium to long term capital gains by investing predominantly in equity / equity related instrument of companies in infrastructure sector.

Structure: Open-ended Equity Fund
Inception Date: November 25, 2005
Plans and Options under the Plan: Growth, Dividend
Face Value (Rs/Unit): Rs. 10
Minimum Investment: Rs.5000
Entry Load: For investment amount greater than or equal to Rs.2 crores: ***Nil.*** For investment amount less than Rs.2 crores: ***2.25%.***

Exit Load: For each investment amount of less than Rs. 2crores: ***1%*** if redeemed on or before expiry of 6 months from the date of allotment.

During the year 2005, TATA Infrastructure fund's return was 4.21 which were better than that of the market return which was -5.98. The fund's risk was higher than that of the market risk as the fund's beta was 2.809.

During the year 2006, TATA Infrastructure fund's return has decreased to 4.01 from 4.21 and was lesser than the market return which was about -1.10. The fund's risk during this year was higher than that of the market risk as the fund's beta was 1.65.

During the year 2007, TATA Infrastructure fund's return has increased to 4.08 from 4.01 and was lesser than the market return which was about 1.22. The fund's risk during this year was higher than

that of the market risk as the fund's beta was 3.01.

During the year 2008, TATA Infrastructure fund's return has decreased to -5.04from 4.08 and was lesser than the market return which was about -1.21.The fund's risk during this year was lesser than that of the market risk as the fund's beta was -8.98.

During the year 2009, TATA Infrastructure fund's return has increased to 5.26 from -5.04 and was higher than the market return which was about -4.47. The fund's risk during this year was lesser than that of the market risk as the fund's beta was 7.67.

c) UTI Infrastructure Fund

Objective: To provide Capital appreciation through investing in the stocks of the companies engaged in the sectors like Metals, Building materials, oil and gas, power, chemicals, engineering etc.

Structure: Open Ended Equity Fund
Inception Date: March 09, 2004
Plans and Options under the Plan: Income Option, Growth Option
Face Value (Rs/Unit): Rs. 10
Minimum Investment: Rs. 5,000/-

Entry Load: Nil for investments made after 10.10.2004 and amount >=Rs 2 crore., Entry load 2.25% for investments made after 10.10.2004 and amount < Rs 25 lakhs

Exit Load: Nil. The following table shows the Sharpe Index, Treynor Index and Jenson Index for UTI Infrastructure Fund

During the year 2005, UTI infrastructure return was 4.42 which were better than that of the market return which was 1.58. The fund's risk was higher than that of the market risk as the fund's beta was 2.12

During the year 2006, UTI Infrastructure fund's return has decreased to 4.88 from 4.42 and was less than the market return which was about 1.99. The fund's risk during this year was higher than that of the market risk as the fund's beta was 3.45.

During the year 2007, UTI Infrastructure fund's return has increased to 5.8 from 4.88 and was less than the market return which was about 0.58. The fund's risk during this year was higher than that of the market risk as the fund's beta was 3.66.

During the year 2008, UTI Infrastructure fund's return has decreased to –4.82 from 5.8 and was less than the market return which was about -1.21.The fund's risk during this year was lesser than that of the market risk as the fund's beta was -8.98.

During the year 2009, UTI Infrastructure fund's return has increased to 5.39 from -4.82 and was less than the market return which was about -4.47. The fund's risk during this year was lesser than that of the market risk as the fund's beta was 7.67.

8. COMPARATIVE ANALYSIS

After the individual analysis, let's begin with the comparative analysis of the five funds. The comparison is based on the three index used for risk determination being Sharpe Index, Treynor Index and Jenson Index. It would also include the risk and return analysis and the difference in the rating of these five funds.

Table - 3

Sharpe Index, Treynor Index and Jenson Index for UTI Infrastructure Fund

Yrs	Sharpe Index Si = Rp – (Rf / St)				Treynor Index Tn = Rp –Rf / Bp				Jensen Index Ji =Rp- (Rf+Bp)(Rm- Rf)				
	Rp	Rf	St	Value	Rp	Rf	Bp	Value	Rp	Rf	Bp	Rm	Value
2005	4.56	1.25	9.45	**4.42**	4.56	1.25	1.56	**2.12**	4.56	1.25	1.56	2.30	**1.58**
2006	4.95	1.25	19.93	**4.88**	4.95	1.25	1.07	**3.45**	4.95	1.25	1.07	2.52	**1.99**
2007	5.87	1.25	17.91	**5.8**	5.87	1.25	1.26	**.03.66**	5.87	1.25	1.26	3.35	**0.58**
2008	-4.71	1.25	10.94	**-4.82**	-4.71	1.25	0.87	**-6.85**	-4.71	1.25	0.87	3.25	**-8.96**
2009	5.46	1.25	20.45	**5.39**	5.46	1.25	0.79	**5.32**	5.46	1.25	0.79	7.06	**-6.39**

Vol. 5 No. 2 / October 2010
ISSN: 0973-4503 RNI : UPENG 2006/17831

The following table shows performance analysis of infrastructure funds for the period 2005.

During the year 2005, the variability of UTI Infrastructure fund is better than other funds as its Sharpe ratio is 4.42 i.e. it produces excess return per unit of risk taken up by the fund. TATA Infrastructure fund had a better volatility ratio of 2.80 and UTI Infrastructure fund a good Jensen's ratio of about 1.588.

The following table shows performance analysis of infrastructure funds for the period 2006.

During the year 2006, the variability UTI Infrastructure fund is better than other funds as its Sharpe ratio is 4.88 i.e. it produces excess return per unit of risk taken up by the fund. UTI Infrastructure fund had a better volatility ratio of 3.45 and a good Jensen's ratio of about 1.99.

The following table shows performance analysis of infrastructure funds for the period 2007

During the year 2007, the variability of ICICI Infrastructure fund is better than other funds as its Sharpe ratio is 7.5 i.e. it produces excess return per unit of risk taken up by the fund and ICICI Infrastructure fund had a better volatility ratio of 5.57 and ICICI Infrastructure fund had a good Jensen's ratio of about 8.12

The following table shows performance analysis of infrastructure funds for the period 2008.

Table - 4
Performance Analysis of Infrastructure Funds For The Period 2005

S.no	Fund	Sharpe	Rank Index	Treynor's	Rank Index	Jensen Index	Rank
1	ICICI Infrastructure fund	1.22	3	0.12	3	-2.27	2
2	TATA Infrastructure fund	4.20	2	2.80	1	-5.98	3
3	UTI Infrastructure fund	4.42	1	2.12	2	1.588	1

Table - 5
Performance Analysis of Infrastructure Funds For The Period 2006

S.no	Fund	Sharpe	Rank Index	Treynor's	Rank Index	Jensen Index	Rank
1	ICICI Infrastructure fund	4.77	2	3.22	2	1.76	2
2	TATA Infrastructure fund	4.006	3	1.65	3	-1.10	3
3	UTI Infrastructure fund	4.88	1	3.45	1	1.99	1

Table - 6
Performance Analysis of Infrastructure Funds For The Period 2007

S.no	Fund	Sharpe	Rank Index	Treynor's	Rank Index	Jensen Index	Rank
1	ICICI Infrastructure fund	7.52	1	5.57	1	8.12	1
2	TATA Infrastructure fund	4.08	3	3.01	3	1.22	2
3	UTI Infrastructure fund	5.8002	2	3.66	2	0.58	3

Table - 7
Performance Analysis of Infrastructure Funds For The Period 2008

S.no	Fund	Sharpe	Rank Index	Treynor's	Rank Index	Jensen Index	Rank
1	ICICI Infrastructure fund	-4.405	1	-5.09	1	-6.016	2
2	TATA Infrastructure fund	-5.04	3	-8.98	3	-1.21	1
3	UTI Infrastructure fund	-4.82	2	-6.85	2	-8.96	3

Table - 8
Performance Analysis of Infrastructure Funds For The Period 2009

S.no	Fund	Sharpe	Rank Index	Treynor's	Rank Index	Jensen Index	Rank
1	ICICI Infrastructure fund	5.32	2	4.01	3	1.36	1
2	TATA Infrastructure fund	5.26	3	7.67	1	-4.47	2
3	UTI Infrastructure fund	5.39	1	5.32	2	-6.39	3

During the year 2008, the variability of ICICI Infrastructure fund is better than other funds as its Sharpe ratio is -4.405 i.e. it produces excess return per unit of risk taken up by the fund. ICICI Infrastructure fund had a better volatility ratio of -5.09 and TATA Infrastructure fund had a good Jensen's ratio of about -1.21.

The following table shows performance analysis of infrastructure funds for the period 2008.

During the year 2009, the variability of UTI Infrastructure fund is better than other funds as its Sharpe ratio is 5.39 i.e. it produces excess return per unit of risk taken up by the fund. TATA Infrastructure fund had a better volatility ratio of 7.67 and ICICI Infrastructure fund had a good Jensen's ratio of about 1.36

Findings: During the period of 2005 to 2009 in ICICI INFRASTRUCTURE FUNDS the Sharpe's index has yielded 7.52 during 2007, and the Tenor's index has yielded 5.57 during 2007, and the Jensen's index has yielded 8.12 during 2007.

During the period of 2005 to 2009 in TATA INFRASTRUCTURE FUND the Sharpe's index has yielded 5.26 during 2009, and the Treynor's index has yielded 7.67 during 2009, and the Jensen's index has yielded 1.22 during 2008.

During the period of 2005 to 2009 in UTI INFRASTRUCTURE FUND the Sharpe's index has yielded 5.8 during 2008, and the Treynor's index has yielded5.32 during 2009, and the Jensen's index has yielded 1.99 during 2006.

During the year 2008, the variability of all the infrastructure funds all three ratio's namely Sharpe ratio, Treynor's ratio, Jenson's ratio have gone negatively.

During the year 2005, the variability of UTI INFRASTRUCTURE FUND is better than other funds as its Sharpe ratio is 4.42 i.e. it produces excess return per unit of risk taken up by the fund. UTI INFRASTRUCTURE FUND a good Jensen's ratio of about 1.588.

During the year 2006, the variability of UTI INFRASTRUCTURE FUND is better than other funds as its Sharpe ratio is 4.88 i.e. it produces excess return per unit of risk taken up by the fund. UTI INFRASTRUCTURE FUND had a better volatility ratio of 3.45 and a good Jensen's ratio of about 1.99.

During the year 2007, the variability ICICI INFRASTRUCTURE FUND is better than other funds as its Sharpe ratio is 7.52 i.e. it produces excess return per unit of risk taken up by the fund. ICICI INFRASTRUCTURE FUND had a better volatility ratio of 5.57 and it had a good Jensen's ratio of about 8.12.

Overall UTI INFRASTRUCTURE FUND Fund has performed well during the period 2005 -Mar2009 and its Sharpe ratio was 5.88 produces excess return per unit of risk taken up by the fund, the volatility ratio of UTI INFRASTRUCTURE FUND is better than other funds as its Treynor's ratio is 5.32 i.e. the rate of return towards the systematic risk taken up by the fund is higher, and the net selectivity of the UTI INFRASTRUCTURE FUND fund is better than other funds, as its Jensen's ratio is 1.99.

Vol. 5 No. 2 / October 2010
ISSN: 0973-4503 RNI : UPENG 2006/17831

9. SUGGESTIONS

As per study, UTI INFRASTRUCTURE FUND has performed better than the other growth fund in terms of its return, variability and Jensen's ratio. So the investor whose main objective is long term capital appreciation can invest in UTI INFRASTRUCTURE FUND.

The investor shall analyze the performance of the fund before investing for a minimum period of 4 to 5 years for a true fact rather than going in for current year's fact.

The investor shall also consider the selection of the stock i.e. quality of investments by the concerned fund manager of the fund before investing.

The investor shall also consider the sensitivity of the funds return to the benchmark returns. The selectivity or volatility can be measured using Treynor ratio.

The investor shall look into the variability of the fund before investing which is indicated by the sharpe ratio.

As far as the mutual fund is considered the investor's are supposed to be active and well disciplined.

10. CONCLUSION

The big challenge for the mutual fund industry is to provide a transition path for investor funds away from government sponsored risk free products to market related instruments. The investors should have faith on the fund house and the people who are managing them since they are handling their hard earned money to them and the faith would come only with experience. Investors should choose a scheme based on its merits considering performance record of the mutual fund, service standards and professional management. The better managed scheme with higher NAV may give higher returns compared to a scheme which is available at lower NAV but is not managed efficiently. Similar is the case of a fall in NAV's. Therefore, the investor should give more weight age to the professional management of a scheme instead of NAV for any scheme.

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***NAV:** Net Annual Value; **Si:** Sharpe Index; **Ti:** Treynor's Index; **Ji:** Jensen Index; **Rp:** Rate of return; **Rf:** Rate of risk free return; **St:** Standard Deviation; **Bp:** Beta value; **Rm:** Average Rate of Market return; **IDFC:** Infrastructure Development Financial Corporation; **L&T :** Larsen & Turbo; **ONGC**: Oil & Natural Gas Corporation Ltd.; **HDFC:** Housing Development Finance Corporation Limited; **CESC:** Calcutta Electricity Supply Corporation Limited; **PTC:** Power Trading Corporation Of India; **NTPC**: Northwest Territories Power Corporation; **ICICI:** Industrial Credit and Investment Corporation of India; **UTI:** Unite Trust Of India.*