IOSR Journal of Engineering (IOSRJEN) **www.iosrjen.org**
ISSN (e): 2250-3021, ISSN (p): 2278-8719
Vol. 09, Issue 5 (May. 2019), ||S (XIII) || PP 05-10

Stock Selection Skills of Indian Mutual Fund Managers-An Empirical Study of Thematic-Infrastructure Mutual Fund schemes.

[1] Dr. Jaspal Gidwani [2] Prof. Amar Satijani
1. Department of Management Studies, Gurunanak Institute of Engineering & Technology, Nagp
2.Department of Management Studies, Jhulelal Institute of Technology, Nagpur.

Abstract: *Bundle of Investment avenues are available for Today's Investors in this financial world, ranging from Equity Stock investments to Gold, From Real Estate to Fixed Deposit and From Mutual Funds to Investments in Commodities. Based on Risk craving & return desire, Investors can choose from these investment options. As small investors generally do not have adequate time, knowledge, experience & resources for directly accessing the capital market, they have to rely on an intermediary, which undertakes informed investment decisions & provides consequential benefits of professional proficiency. Therefore Mutual Fund has been developed for such kind of investors through which they can have also access to capital Market indirectly. A mutual fund is the most suitable investment for the common investor as it offers an opportunity to invest in a diversified, professionally managed basket of securities at a relatively low cost.*

Usually, the focus in evaluating the overall performance of a mutual fund has been on fund manager's skill in stock selection. This paper is an empirical measurement of the performance of mutual fund managers in terms of "Stock selectivity", within the framework suggested by Eugene Fama (1972). The study examines the performance of 22 Infrastructure Equity Mutual Funds. The reference period for the study is January 2013 to December 2017.

In this paper stock selectivity skills of sample fund managers were tested by using Jensen's Alpha and Fama's net selectivity measure. We have used Jensen's measure and Fama's Net selectivity Model. The results of the study reveal that majority of the schemes have shown positive alpha and only some of the fund managers possess superior selectivity skills.

Key Words: *Mutual Funds, Infrastructure Equity Mutual Funds, Stock Selectivity.*

I. Introduction

After Globalization & Liberalisation ,mammoth Investment opportunities came into existence for Indian Investors. These Investment opportunities provide attractive returns to the investors, at the same time it carried huge riskt.

Investors need to know how risky individual assets are and what their contribution to the total risk of a portfolio would be. At the same time, allocations of wealth across different asset classes and specific investments have become a challenging task for the investors, portfolio managers and with fund managers also. Essentially, investors participate in financial markets over time in order to share and diversify various risks, which arise in their investment decisions. Investors use financial markets not only to share risk but to make risk-return trade-off in a better way. With the influx of Mutual funds which ultimately help the investors to Participate in optimal trading strategies that is economically feasible to mitigate the risk and optimise the return.

Plenty of Mutual Funds are available where the investors can put their money. Before investing they want to know which fund gives more return, which fund is performing well, which fund is more risky etc. All these can be found out using certain key statistics. With the help of these key statistics an investor can analyze different mutual funds and put his/her money in a fund which suits his/ her risk perception. Mutual fund returns can be compared using Average Annualised Return & Compounded Annual Growth Rate. Risk can be analyzed by finding out Standard Deviation, Beta. Key ratios like Sharpe ratio and Treynor ratio are used for Risk-Return analysis.

These are the conventional measures which have been considered usually for evaluating the performance of mutual fund schemes but now in this contemporary era, we also have to evaluate the fund Management as it also became one of the Parameter for the investors to compose their investment in a particular Mutual fund Scheme since the Professional Fund Management is expected to reward the investors with higher returns for the risk the funds are exposed too. It has been observed that higher or excess return is the result of Superior stock selection skills of the fund Manager.

Stock selection is the core in the investment management process. It involves identifying and selecting undervalued securities which among other things requires the successful forecasting of the company specific events or an ability to predict the general behaviour of security prices in the future. If the fund manager is able to identify and select the undervalued securities for the portfolio, then it will be possible for the fund manager to increase the returns of the schemes and vice versa. In practice fund managers are expected to earn superior returns for unit holders consistently as being professionals therefore possess superior skills to collect and analyze the data with the purpose to select the right type of securities for the portfolio. The present work is based on the review of selected Infrastructure based Mutual Fund Schemes

In this paper stock selectivity skills of sample fund managers were tested by using Jensen's Alpha and Fama's net selectivity measure.

II. Thematic Infrastructure Funds:-

Infrastructure development is critical for economic development. It has a domino effect on the other sectors of the economy .A developing country like India has to invest in the infrastructure sector for future growth. The push of the present government in improving infrastructure is thus a step in the right direction. In India Infrastructure typically includes projects done in a host of sectors. It includes sectors like roads, railways, airports, ports, dams, electricity, irrigation, telecom, water supply, sanitation systems, cross country systems and inland waterways etc.

The government cannot meet the needs of this diverse sector alone. The critical element thus is engaging the private sector in the improvement of infrastructure, as the government spending alone will not be enough to meet India's diverse infrastructure challenges. It requires funds in the form of investment from public also.

Infrastructure base Mutual Funds provide a superior investment option for the investors who want to invest in infrastructure companies, at the same time these funds invest in diversified Infrastructure companies also with a motto to provide healthier return to the investors along with spreading the risk of investors.

Infrastructure thematic funds provide the opportunity to invest in essential public assets, such as toll roads, airports and rail facilities. They are often attractive to investors looking for predictable returns, as infrastructure projects are typically characterised by low levels of competition and high barriers to entry. Some have the prices they charge subject to government regulation, with price increases requiring approval.

Infrastructure funds are managed by specialist fund managers, who make investment decisions on behalf of investors. Infrastructure assets include toll roads, airports, communications assets such as broadcasting towers, materials-handling facilities such as docks, Utilities such as electricity power lines and gas pipelines.
Returns from infrastructure funds usually combine capital growth and dividend income in varying proportions. In growth-orientated infrastructure funds, there may not be stable income in the near term but the fund seeks to achieve capital growth in the medium term. Infrastructure funds that generate steady income streams tend to invest in more mature assets.

III. Literature Review:-

Roy & Deb (2003) used conditional performance evaluation on a sample of 89 Indian MF schemes measuring with both unconditional and conditional form of CAPM model. The results suggest that the use of conditioning lagged information variables improves the performance of mutual fund schemes, causing alphas to shift towards right and reducing the number of negative timing coefficients.

Michael J Cooper, Huseyin Gulen, P Raghavendra Rau (2005) have examined whether mutual funds change their names to take advantage of current hot investment styles, and what effects these name changes have on inflows to the funds, and to the funds' subsequent returns. They further find that the year after a fund changes its name to reflect a current hot style, the fund experiences an average cumulative abnormal flow of 28%, with no improvement in performance.

Sathy.S.D. and Bishnupriya .M.(2006) examined the performance of 23 selected growth - oriented and open-ended mutual funds, from 1996-1997 to 2004-2005. On the basis of returns they found that UTI mutual fund schemes and Franklin Templeton schemes have performed exceedingly well in public and private domain respectively.

Navdeep Aggarwal and Mohit Gupta (2007), "performance of Mutual funds in India an empirical study" The study was conducted using CAPM and FAMA French model and concluded that the value addition of the fund depends on certain factors such as excess market returns, size factor, value factor and suggest that returns earned by Mutual funds were actually due to the exposure of these factors only and fund managers did not add any value.

Soumya Guha(2008) "performance of Indian equity Mutual funds Vis-a-Vis their style benchmarks" has suggested that in her evaluation of fund managers performance found that Indian equity fund managers have not been able to beat their style benchmarks (William Sharpe ratio) on the average and pointed out the weaknesses of fund managers. Several researchers have tried to study the various factors and their impact on fund's performance.

Swinkels and Rzezniczak (2009) conducted a study on 38 Polish mutual funds over the period February 2000 to April 2007 to investigate the manager's selectivity and market timing skills. They analysed equity funds, balanced funds and bond funds. Treynor and Mazuy model and Henriksson and Merton model are used. The results conclude that mutual fund managers exhibit some positive but statistically insignificant selectivity skill, but there is no evidence of market timing skills in bonds and equity funds except balanced funds.

Mehta and Chander (2010) designed to empirically test the three factor model suggested by Fama and French on Indian stock market and to document the evidences as to how firm characteristics are used as a better way to explain the stock return behaviour. The overall findings indicated that the three factor model given by Fama and French is more powerful, than its other variants of taking one or two factors in explaining the variability in the returns of all six portfolios.

IV. Objectives:-

1. To evaluate the performance of Thematic Infrastructure Mutual fund schemes in terms of Jensen Alpha.
2. To assess the performance of Thematic Infrastructure Mutual fund schemes on the basis of stock selection Skills of fund managers.

V. Hypothesis of the Study:-

Null Hypothesis (H_0):- Fund managers of Thematic Infrastructure Mutual fund schemes doesn't Possess stock selection Skills.

Alternate Hypothesis (H_1):- Fund managers of Thematic Infrastructure Mutual fund schemes Possess stock selection Skills.

VI. Need of the Study:-

The literature review revealed that performance measures of mutual funds include rate of return, benchmark comparison, risk adjusted returns (Treynor and Sharpe's indices) 'Stock Selectivity' abilities and market timing skills of the fund managers. Lot of studies in the past has been conducted on performance of Indian Mutual funds right from doing evaluation on the returns earned & risk faced by varied types of Mutual fund schemes, but till date an empirical study on assessing Performance of Mutual Fund Managers of India are yet to be undertaken specifically on infrastructure based Equity Mutual Fund Schemes . Hence, the study is an attempt in this direction to evaluate the performance achieved by Indian Mutual fund Managers in terms of Stock Selection Skills.

VII. Significance of the Study:-

Investigating performance of any investment is essential, as such it is applicable to mutual funds also, evaluating past performance of mutual funds is important both for investors as well as for fund managers. It allow an investor to calculate as to how much return has been generated by the fund manager and what risk level has been taken in generating such returns. Further, an investor can also weigh up the comparative performance of different fund managers. Similarly fund managers would also be able to know their performance over time and also vis-a-vis that of other competitors in the industry. The evaluation also provides a mechanism for identifying strengths and weaknesses of fund managers in the investment process, which helps them to take corrective actions.

VIII. Research Methodology:-

Data: - This study examines 22 open-ended infrastructure schemes being launched by selected mutual funds namely LIC, HDFC, ICICI, Reliance and Birla Sun Life. These schemes have been selected on the basis of regular data availability during the period of January 2013 to December 2017. Annual Net Asset Value (NAV) data has been used and the period of the data considered is from the date 1st January 2013 of the scheme or from the date of availability till December 31, 2017.

Period of Study: - The growth oriented thematic infrastructure schemes, which have been floated by the selected funds during the period January 2013 to December 2017, have been considered for the purpose of the

study. Annual Net Asset Value (NAV) as declared by the relevant mutual funds from the January 1st 2013 of a particular scheme to 31st December 2017 has been used for the purpose.

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. For the present study, it has been marked as 7% (0.07) per annum.

Tools and techniques For the purpose of Return and Risk analysis, appropriate statistical and financial tools, i.e., Average Annualised Return, Jensen Alpha, and fama's Net Selectivity have been applied.

IX. Data Analysis & Interpretation:-

The measurement of the investment performance of fund managers is a perennial issue for potential and committed investors. The performance of fund managers influences the manner in which investors place their wealth. It is customary to analyze portfolio performance into main component i.e. security selection. Various methodologies have been suggested in the financial literature to test the stock selectivity skills of the fund managers. However, two models of selectivity have been empirically examined in this study namely, the Jensen Measure and Fama's Net Selectivity Model.

A) Jensen Model or Jensen Alpha:-

Jensen model is yet another risk-adjusted performance measure. This measure is developed by Michael Jensen and sometimes referred as the differential return method. This measure involves evaluation of the returns that the fund has generated vis-à-vis the return actually expected of the fund given the level of its systematic risk.

Usually, investors will aim to achieve a high return with a minimum amount of risk. So if, for example, two portfolios yielded identical returns, but one involved lower risk, the one with lower risk would rationally be the more attractive option.

Jensen's Alpha can help determine if the average return generated is acceptable based on the amount of risk involved. If the return is higher than that predicted by the CAPM, the security or portfolio is said to have a positive alpha (or an abnormal return).

Investors are always looking for opportunities where a positive alpha is involved.

B) Fama's Net Selectivity:-

Fama's measure which is also called as Eugene Fama model is an extension of Jensen model. This model compares the performance, measured in terms of returns, of a fund with the required return commensurate with the total risk associated with it. The difference between these two is taken as a measure of the performance of the fund and is called net selectivity. The net selectivity represents the stock selection skill of the fund manager, as it is the excess returns over and above the return required to compensate for the total risk taken by the fund manager.

Fama (1972) developed this methodology for evaluating investment performance of managed portfolios. He suggested that the overall performance could be broken down into several components. A comprehensive mechanism for segregation of observed investment return due to managers‟ ability to pick up the best securities at a given level of risk (selectivity) from part that is due to the prediction of general market price movements (timings). A positive net selectivity indicates superior performance for a fund.

Table 1 bestow Jensen Alpha & Fama's Net Selectivity of Selected Infrastructure Mutual Fund Schemes:-

SN	Scheme Name	Jensen Alpha	Rank	Fama's Net Selectivity	Rank
1	Birla Sun Life Infrastructure Fund	14.32	05	14.16	05
2	BOI AXA Manufacturing & Infrastructure Fund	11.83	09	11.76	08
3	Canara Robe co Infrastructure Fund - Regular Plan	13.22	06	12.84	06
4	DSP Blackrock T.I.G.E.R. Fund - Regular Plan	11.93	08	11.75	09
5	Escorts Infrastructure Fund	8.68	20	8.57	20
6	Franklin Build India Fund	21.77	01	21.19	01
7	HDFC Infrastructure Fund	10.57	14	10.21	14
8	HSBC Infrastructure Equity Fund	12.99	07	12.63	07
9	ICICI Prudential Infrastructure Fund - Regular Plan	9.42	18	9.26	18

10	IDFC Infrastructure Fund- Regular Plan	11.44	10	11.38	10
11	Kotak Infrastructure and Economic Reform Fund - Standard Plan	16.64	03	16.25	03
12	L&T Infrastructure Fund	17.92	02	17.79	02
13	LIC Nomura MF Infrastructure Fund	7.25	21	7.16	21
14	Religare Invesco Infrastructure Fund	15.97	04	15.59	04
15	Sahara Infrastructure Fund - Fixed Pricing Option	9.47	16	9.29	16
16	Sahara Infrastructure Fund - Variable Pricing Option	11.33	11	11.15	11
17	SBI Infrastructure Fund	9.44	17	9.29	17
18	Sundaram Infrastructure Advantage Fund - Regular Plan	11.26	12	11.10	12
19	Reliance ETF Infra Bees	0.48	22	0.48	22
20	Tata Infrastructure Fund - Plan A	10.68	13	10.42	13
21	Taurus Infrastructure Fund - Regular Plan	10.37	15	10.20	15
22	UTI Infrastructure Fund	8.86	19	8.66	19

Source: - Own Calculation

Interpretation: - Table 1 depicts Performance in terms of Average Annualized returns of last 5 years i.e. from 2013 to 2017 of 22 Infrastructure Mutual Fund schemes & their ranking.

On analyzing schemes, it has been found that all the schemes generate positive average returns, none of them show negative return which is a good sign for the Industry as it increases investors confidence in Mutual fund investment especially it boost the investment in Infrastructure Mutual fund schemes. Schemes that occupy top positions are Franklin Build India Fund, L&T Infrastructure Fund, Kotak Infrastructure and Economic Reform Fund - Standard Plan, Religare Invesco Infrastructure Fund, etc.

The 5th column of Table 1 shows the Jensen's alpha values .Higher alpha values indicate better performance. Among the above Equity Infrastructure Mutual fund schemes, higher alpha was found with Franklin Build India Fund followed by L&T Infrastructure Fund & Kotak Infrastructure and Economic Reform Fund - Standard Plan, while the schemes that showed lower alpha values are again Reliance ETF Infra Bees, LIC Nomura MF Infrastructure Fund which indicates that as compared to risk undertaken by the Fund managers, they are unable to generate ample returns for investors.

Table 1 also depicts value of Fama's Net selectivity in the 7th Column. Positive value of the Fama's Net selectivity measure shows superior stock selection skill of the fund manager & if the fund manager chooses best & superior stock in his portfolio, mostly fund manager can beat the market & generate more than market return.

Result shows Fama's Net selectivity measure of Franklin Build India Fund, L&T Infrastructure Fund, Kotak Infrastructure and Economic Reform Fund - Standard Plan, Religare Invesco Infrastructure Fund, are having high positive value that indicates the superior stock selection ability of Fund managers of these schemes. Whereas the Schemes that show low positive values of Fama's Net Selectivity are Reliance ETF Infra Bees, LIC Nomura MF Infrastructure Fund which means that stock selection ability of Fund managers of these schemes are not up to the Mark.

X. Limitations of the Study:-

For the purpose of evaluation of stock selection skills of Fund Managers, those schemes have been selected which are in operation since last 5 years. Theme based-Infrastructure Equity Mutual Fund schemes have been considered for the study purpose and that too open ended schemes have been taken. The study has been conducted and analysed based on set of available information, which is governed by time factor.

XI. Conclusion:-

Taking that into reflection and analyzing different Equity Infrastructure Mutual fund schemes the conclusions can be made that out of the total schemes studied, all schemes showed extraordinary Performance. Schemes such as Franklin Build India Fund followed by L&T Infrastructure Fund & Kotak Infrastructure and Economic Reform Fund - Standard Plan, Fund has performed better than the other schemes in comparison of

Jensen alpha & Fama's Net Selectivity which indicates that investors who invested in these schemes enjoyed well diversified portfolio, Great Stock Selection skills & ability of Fund manager and hence received handsome return.

The overall analysis finds Franklin Build India Fund followed by L&T Infrastructure Fund & Kotak Infrastructure and Economic Reform Fund - Standard Plan, Fund being the best performers, and Reliance ETF Infra Bees, LIC Nomura MF Infrastructure Fund showing poor below-average performance when measured on the basis of Jensen & Fama's Decomposition models during the study period. Also it has been concluded that as all the schemes show positive value of Fama's Net selectivity which means that Fund managers of all schemes possess superior stock selection skills .Hence, we accept the Alternate Hypothesis and reject the Null Hypothesis.

References:-

[1]. Henriksson, R., 1984. Market timing and mutual fund performance: an empirical investigation. Journal of Business. 57, pp. 73–96.

[2]. Shah, Ajay and Thomas Susan, (1994) "Performance in Evaluation of Professional Portfolio Management in India", A paper prepared by CMIE, 10 April.

[3]. Dellva, L.W., DeMaskey, A.L., Smith, C.A. 2001. Selectivity and market timing performance of fidelity sector mutual funds. The Financial Review 36, pp. 39-54.

[4]. Mishra, Biswadeep (2002), "Selectivity and Timings Skills of Mutual Funds in India: An Empirical Analysis", The ICFAI Journal of Applied Finance, Vol. 8, No. 5, pp 5-16.

[5]. Tripathy, Nalini Prava, (2004) "An Empirical Analysis of Performance Evaluation of Mutual Funds in India-A Study on Equity Linked Schemes" The ICFAI Journal of Applied Finance, July 2004.

[6]. Kundu, Abhijit (2009), "Stock Selection Performance of Mutual Fund Managers in India: An Empirical Study", Journal of Business and Economic Issues, Vol. 1, No. 1, pp 59-73

[7]. Kaushik, A., Barnhart, S., Pennathur, A. 2010.Market timing and the determinants of Performance of sector funds over the business cycle. Managerial Finance 36, pp. 583-602.