“A COMPARATIVE ANALYSIS ON PERFORMANCE OF MUTUAL FUNDS BETWEEN PRIVATE AND PUBLIC SECTOR”

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Abstract: The last decade has seen a tremendous growth in the mutual fund industry. Today the Indian market is flooded with more than a thousand mutual fund schemes, promising better returns than others. The collected money invest within capital market and therefore the money, which they earned, is split supported the number of units, which they hold. With the increase in domestic savings and development in employment of investment through markets, the need and scope for mutual fund operation has improved immensely. But about 70% people are still investing in Post office, MIS and bank deposit because of the lack of awareness in rural areas. For saving investors’ money, it becomes necessary to evaluate the performance of mutual fund portfolio so that investors can make their investment decisions rationally. This evaluation would help in checking the main idea of “putting all eggs in different baskets” behind mutual funds and analyzing that the idea is good for investors or not. There are many types of mutual funds. You can classify funds – based Structure (open-ended & close-ended), Nature (equity, debt, balanced), Investment objective (growth, income, money market) etc. This study of Performance would help the investors to choose the best schemes available and will also help the AUM’s in better portfolio construction and can rectify the problems of underperforming scheme. Hence in this paper an attempt has been made to evaluate the performance of various fund among SBI, UTI, BOB, LIC (public sector) and HDFC, ICICI, NIPPON INDIA, AXIS (private sector) on the basis of Yearly returns compared to benchmark returns over the period of 5 years and to appraise the performance of different category of funds using risk adjusted measures as suggested by Sharpe, Beta, Treynor and Jensen.

Keywords: Mutual Fund, Risk-Return, Sharpe ratio, Growth

I. INTRODUCTION
The first introduction of a fund in Bharat occurred in 1963, once the govt. of India India Republic of Bharat Bharath Asian country Asian nation launched unit investment trust of India (UTI). Until 1987, UTI enjoyed a monopoly within the Indian fund market. Then a bunch of different government controlled Indian monetary firms came up with their own funds. These enclosed banking concern of Bharat, geographic area Bank, and geographic area full service bank. This market was created hospitable non-public players in 1993, as a results of the historic constitutional amendments brought forward by the then Congress-led government beneath the present regime of relief, Privatization and economic process (LPG). the primary non-public sector fund to work in Bharat was Kothari Pioneer, that later united with Franklin Templeton. A fund may be a common pool of cash into that investors place their contributions that square measure to be endowed in accordance with a declared objective. The possession of the fund is therefore joint or “mutual”; the fund belongs to any or all investors. one investor’s possession of the fund is within the same proportion because the quantity of the contribution created by him or her bears to the overall quantity of the fund.

Mutual Funds square measure trusts, that settle for savings from investors and invest identical in heterogeneous monetary instruments in terms of objectives taken off within the trusts deed with the read to scale back the danger and maximize the financial gain and capital appreciation for distribution for the members. A fund may be a corporation and therefore the fund manager’s interest is to professionally manage the funds provided by the investors and supply a come on them once deducting cheap management fees. “A fund is associate investment that pools your cash with the cash of an infinite range of different investors. In return, you and therefore the different investors every own shares of the fund. The fund's assets square measure endowed in step with associate investment objective into the fund’s portfolio of investments.
II. REVIEW OF LITERATURE

Fama and French (2008): He tracked down that common asset produces portfolio closes to the market portfolio yet with significant expense of dynamic administration that appear unblenlished as lower return.

Debasish (2009): considered the exhibition of chose plans of shared supports dependent on danger and return models and measures. The study covered the time frame from April 1996 to Walk 2005 (nine years). The study uncovered that Franklin Templeton and UTI were the best entertainers and Birla Sun Life, HDFC and LIC common assets showed terrible showing.

Sathya Swaroop Debashish (2009): estimated the presentation of value based common assets in India. There was an investigation of 23 plans over a time of April 1996 to Walk 2009 (13 years) utilizing different danger changed measures.


Garg (2011): Inspected the exhibition of top ten shared supports that was chosen based on earlier years return. The examination investigated the presentation based on return, standard deviation, beta just as Treynor, Jensen and Sharpe files.

Ramesh and Dhume (2011) analyzed the performance of sector funds which were Banking, Infrastructure, FMCG, Technology and Pharmaceutical. The study focused on different performance measures.

Patel and Prajapati (2012): assessed the presentation of common assets in India utilizing relative execution lists, Treynor’s and Sharpe’s proportion, hazard return investigation, Jensen’s action, and Fama’s action and reasoned that the vast majority of the shared assets have given positive return during the time of study.

Dhanda and et al (2012): Studied the "Execution Assessment of Chose Open Finished Shared Assets in India" and assessed the exhibition of chose open finished plans as far as danger and bring relationship back. For this pace of return technique, Beta, Standard Deviation, Sharpe proportion and Treynor proportion were utilized. has been utilized as a benchmark to consider the presentation of common assets in India.

I. OBJECTIVE OF STUDY

The major objectives of the study are as follows:

1. To compare the performance of Large cap, Mid cap and Small cap schemes of the select mutual fund.
2. To analyse the relative performance of select mutual funds
3. To assess the difference in the performance of the select schemes across the public and private sector funds
4. To analyse perception of investor towards mutual funds.

Mutual fund is a very wide area in the investment and it is not an easy task to cover all aspect in the mutual fund schemes, of all those schemes researcher intends to undertake only Technology fund as a whole to know the performance, whether it is outperforming or underperforming. Thus, the study covers the Indian scenario of mutual funds in terms of gross mobilization over the study period and performance evaluation of selected companies. Year-wise return of mutual fund in India has been made and the tools for analysis is Beta, Sharpe’s Performance Index, Treynor’s Performance Index, Jensen’s Performance Index.

III. HYPOTHESIS :-

The private sector Mutual fund companies has shown very impressive growth in comparison public sector of Mutual fund organization and they have mobilized by the Mutual fund industry in India.

H0:- There is no significant difference between in the return for the select scheme between Public sector and Private sector.

H1:- There is a significant difference between in the return for the select scheme between the Public Sector and Private sector.

IV. LIMITATION OF STUDY:-

1. The study is based on top 5 mutual fund of public and private sector.
2. The study is cover only from 2018-2022 (December,22).
3. The study is based on secondary sources of information.
4. The study cover two aspect i.e growth mobilization of fund and return of mutual funds in India.

V. SOURCES OF DATA

The study is based on secondary data through observation the secondary data was collected by SEBI hand book amfindia.com, journalism publications and article.

VI. METHODOLOGY

Mutual fund performance can be analyzed through performance measurement ratios which are use in portfolio analysis. We here are using Treynor, Sharpe, and Jensen ratio to evaluate mutual funds and rank accordingly. Composite portfolio performance measures have the flexibility of combining risk and return performance into a single value. The most commonly used composite measures are Sharpe measures. While, the measures only the systematic risk summarized Sharpe concentrates on total risk of the mutual fund. The study covers a time frame the period April 2018 to 2022.
1. GROSS MOBILIZATION BETWEEN PUBLIC AND PRIVATE SECTOR

<table>
<thead>
<tr>
<th>Status of Mutual Funds for the period April 1, 2022 to December 31, 2022 (Figures in Rs. Crore)</th>
<th>Private Funds</th>
<th>Sector Mutual Funds</th>
<th>Public Funds</th>
<th>Sector Mutual Funds</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobilisation of Funds</td>
<td>A</td>
<td>56,68,002</td>
<td>B</td>
<td>21,58,936</td>
<td>A+B</td>
</tr>
<tr>
<td>Repurchase / Redemption Amt.</td>
<td>A</td>
<td>56,46,434</td>
<td>B</td>
<td>21,05,962</td>
<td>A+B</td>
</tr>
<tr>
<td>Net Inflow/ Outflow (-ve) of funds</td>
<td>A</td>
<td>21,567</td>
<td>B</td>
<td>52,974</td>
<td>A+B</td>
</tr>
<tr>
<td>Cumulative Position of net assets as on August 31, 2022</td>
<td>A</td>
<td>31,73,003</td>
<td>B</td>
<td>8,15,733</td>
<td>A+B</td>
</tr>
</tbody>
</table>

Net assets of INR 59822.11 crores pertaining to Funds of Funds Schemes for December, 2022 in the above data.

2. ANALYSING THE AVERAGE IN PUBLIC SECTOR

<table>
<thead>
<tr>
<th>Scheme Name</th>
<th>YTD</th>
<th>2021</th>
<th>2020</th>
<th>2019</th>
<th>2018</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBI</td>
<td>-0.10%</td>
<td>36%</td>
<td>19%</td>
<td>9%</td>
<td>-7%</td>
<td>11.47%</td>
</tr>
<tr>
<td>Baroda</td>
<td>-0.9%</td>
<td>33.6%</td>
<td>19%</td>
<td>11.7%</td>
<td>-11.3%</td>
<td>10.59%</td>
</tr>
<tr>
<td>LIC</td>
<td>-1.2%</td>
<td>29.5%</td>
<td>9.3%</td>
<td>14.6%</td>
<td>-4.2%</td>
<td>9.58%</td>
</tr>
<tr>
<td>UTI</td>
<td>-4.1%</td>
<td>27.5%</td>
<td>26%</td>
<td>8.9%</td>
<td>-3.2%</td>
<td>11.09%</td>
</tr>
</tbody>
</table>

3. ANALYSING THE AVERAGE IN PRIVATE SECTOR

<table>
<thead>
<tr>
<th>Scheme Name</th>
<th>YTD</th>
<th>2021</th>
<th>2020</th>
<th>2019</th>
<th>2018</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>AXIS</td>
<td>-7.2%</td>
<td>27.9%</td>
<td>22.9%</td>
<td>17.6%</td>
<td>6.5%</td>
<td>13.53%</td>
</tr>
<tr>
<td>HDFC</td>
<td>6.7%</td>
<td>28.1%</td>
<td>9.9%</td>
<td>5.0%</td>
<td>-6.1%</td>
<td>8.72%</td>
</tr>
<tr>
<td>NIPPON INDIA</td>
<td>4.5%</td>
<td>33.1%</td>
<td>11.4%</td>
<td>6.1%</td>
<td>-4.4%</td>
<td>10.14%</td>
</tr>
<tr>
<td>ICICI Prudential</td>
<td>1%</td>
<td>28%</td>
<td>17%</td>
<td>9%</td>
<td>-2%</td>
<td>10.60%</td>
</tr>
</tbody>
</table>

The above table reveals that private sector made a highest return of in the investment year 2020-22 and the public sector made a lowest return.
VII. DATA ANALYSIS

➢ TOOLS FOR ANALYSIS

• Standard deviation
• Beta
• Sharpe’s Performance Index.
• Treynor’s Performance Index.
• Jensen’s Performance Index.

1. Standard Deviation:-

Standard Deviation is a statistical tool, which measures the variability of returns from the expected value, or volatility. It is denoted by sigma (σ). It is calculated using the formula mentioned below:

\[ \sigma = \sqrt{\frac{1}{n-1} \sum (x_i - \bar{x})^2} \]

2. Beta :-

Systematic risk is measured in terms of Beta, which represents fluctuations in the NAV of the fund vis-à-vis market. The more responsive the NAV of a Mutual Fund is to the changes in the market; higher will be its beta. Beta is calculated by relating the returns on a Mutual Fund with the returns in the market. Market will have beta 1.0 Mutual fund is said to be volatile, more volatile or less volatile. If beta is greater than 1 the stock is said to be riskier than market. If beta is less than 1, the indication is that stock is less risky in comparison to market. If beta is zero then the risk is the same as that of the market. Negative beta is rare. Beta is calculated as:

\[ \beta = \frac{\text{Covariance (Rx, Rm)}}{\text{Variance (Rm)}} \]

Where, Rx is the returns on the portfolio or stock(dependent variable), Rm is the market returns or index( independent variable).Variance is the square of standard deviation. Covariance is a statistic that measures how two variables co-vary, and is given by:

\[ \text{Sharpe Index} = \frac{\text{Portfolio Average Return (Rp)} - \text{Risk Free Rate of Return (Rf)}}{\text{Standard Deviation of the Portfolio Return}} \]

3. Treynor’s Ratio

Treynor’s ratio is a measurement of the returns earned in excess of what could have been earned on a riskless investment. Higher the Treynor Ratio is meant the better portfolio.

\[ \text{Treynor Index} = \frac{\text{Portfolio Average Return(Rp)} - \text{Risk Free Rate of Return (Rf)}}{\text{Beta Coefficient of Portfolio}} \]

4. Jensen Ratio :-

It measures the difference between market risk and actual performance of the fund. Positive Jensen Ratio shows Superior Michael C. Jensen (1968) has given different dimension and confined his attention to the problem of evaluating a fund manager’s ability of providing higher returns to the investors. He measures the performance as the excess return provided by the portfolio over the expected (CAPM) returns. \( J = \text{Portfolio. Return} - \text{CAPM. Return} \)

\[ J = \alpha_P = R_P - \left[ R_f + \beta_P \left( R_M - R_f \right) \right] \]
## VIII. ANALYSIS OF PUBLIC SECTOR IN RATIO

<table>
<thead>
<tr>
<th>Scheme name</th>
<th>Standard deviation</th>
<th>Beta</th>
<th>Sharpe</th>
<th>Treynor's</th>
<th>Jensen</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBI</td>
<td>21.45</td>
<td>0.95</td>
<td>0.55</td>
<td>0.12</td>
<td>0.72</td>
</tr>
<tr>
<td>BARODA</td>
<td>20.01</td>
<td>0.88</td>
<td>0.44</td>
<td>0.1</td>
<td>0.57</td>
</tr>
<tr>
<td>LIC</td>
<td>20.19</td>
<td>0.86</td>
<td>0.32</td>
<td>0.07</td>
<td>-1.4</td>
</tr>
<tr>
<td>UTI</td>
<td>19.94</td>
<td>0.89</td>
<td>0.61</td>
<td>0.14</td>
<td>0.85</td>
</tr>
</tbody>
</table>

![PUBLIC SECTOR](chart)

## IX. ANALYSING ON PRIVATE SECTOR IN RATIO

<table>
<thead>
<tr>
<th>Scheme name</th>
<th>Standard deviation</th>
<th>Beta</th>
<th>Sharpe</th>
<th>Treynor's</th>
<th>Jensen's</th>
</tr>
</thead>
<tbody>
<tr>
<td>AXIS</td>
<td>19.31</td>
<td>0.85</td>
<td>0.41</td>
<td>0.09</td>
<td>-3.15</td>
</tr>
<tr>
<td>HDFC</td>
<td>21.98</td>
<td>0.97</td>
<td>0.44</td>
<td>0.1</td>
<td>-0.4</td>
</tr>
<tr>
<td>NIPPON INDIA</td>
<td>22.28</td>
<td>0.97</td>
<td>0.47</td>
<td>0.11</td>
<td>-0.09</td>
</tr>
<tr>
<td>ICICI PRUDENTIAL</td>
<td>20.9</td>
<td>0.94</td>
<td>0.51</td>
<td>0.11</td>
<td>0.99</td>
</tr>
</tbody>
</table>
The above Figure shows that most of the fund have high volatility measure in term of standard deviation.

According to the ratio also Private sector is best from Public sector  AXIS mutual fund and HDFC mutual fund is safe and less volatility from other fund house and its best for investment for a long term and Public sector SBI Mutual Fund and UTI mutual fund is good and less volatility

X. CONCLUSION / SUGGESTION

The study has been carried out with the objective of evaluating the performance of five different mutual fund houses and comparing it with the top five company in public and private sector mutual fund. Five years data related to returns have been used and the conclusion has been drawn using Sharpe Ratio, Treynor’s Ratio and Jenson Ratio. The results of the study reveal that using the three different ratios, Private Sector is the best performer from Public sector Mutual Fund. However, the difference in the performance of the various schemes does not turn out to be statistically significant. The findings of the study can be useful to the investors while making their investment decision. Further, considering a longer time span and taking more number of mutual fund schemes would help in getting better insight regarding the performance of different mutual fund schemes.

XI. REFERENCE

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