[1]b. Amarnath Reddy, [2]prof. A. Sreeram

Gauging Performance Of Some Mutual Funds

[1]b. Amarnath Reddy, [2]prof. A. Sreeram
[1]research Scholar, Dept. Of Finance, Hbs Business School Gitam University,
Hyderabad, India.Amarnath.B6@Gmail.Com
[2]professor In Econometrics, Hyderabad Business School (Hbs), Gitam, (Deemed To Be University), Rudraram,
Hyderabad.Sreeram. Atluri@Gitam.Edu

Abstract
In India And Internationally, The Mutual Fund Industry Is Expanding Fast. This Is Seen Every Fourth Of The Aum (Asset Under Management). Mutual Fund Investors May Not Be Subjected To The Funding Of Ideas Or Sentences. The Common Investor Has Access To A Variety Of Indices For Assessing And Deciding On The Fund's Performance. This Article Attempts To Determine If All Indexes Are Created To Enable An Investor To Make A Decision Or Contribute To Confusion.
Key Words: - Mutual Fund, Asset Under Management, Investors, Performance Of A Fund.

I Introduction

The Second Best Option Is To Invest In Mutual Funds For Investors Who Wish To Benefit From The Capital Market Benefits, Especially In A Growing Nation Such As India, But Who Are Not Willing To Risk Direct Investment. Furthermore, Most Investors Cannot Spend The Necessary Time Monitoring And Managing Their Portfolio Critically, Owing To Other Equally Important Obligations. Instead, People Prefer To Entrust Their Hard-Earned Money To A Fund Manager Whose Portfolio Management Expertise They Believe Is Sufficient And Who Is Certain They'll Appeal For Their Investment.

However, It Is Difficult For The Average Investor To Choose The Suitable Fund And Thus The Right Fund Manager Since There Is An Increase In The Number Of Players In The Mutual Fund Industry. This Study Seeks To Address The Above Problems By Evaluating The Performance Of Some Of The Major Mutual Funds In Recent Years. This Study May Also Assist Individuals Interested In A Mutual Fund Including Researchers, Academics, Sector Specialists And Students, As Well As Those Who Are Eager To Learn In The Field In General. The Study Is Mostly Focused On The Private Sector Since It Accounts For Approximately 82.25% Of The Aum (Amfi Newsletter, September 2019).

Several Assessment Indexes Were Used To Analyse The Performance Of The Funds Selected. Also Attempted Is A Comparison Analysis Of The Outcomes Of Several Performance Indicators. This Enables Us To Evaluate If All Indexes Have The Same End Result. The Risk-Free Return For The Study Should Be Based On The Average 91-Day Return On T-Bills, Which Was Further Supplemented By 7.35 Percent Between October 2018 And October 2019. (Www.Rbi.Org.In). T Bills, However, Are Not Widely Available To The Public, Therefore The Tariff On Deposits Of Nationalised Banks Should Rather Be Used As The Closest Substitute For Risk-Free Yields Rather Than Tbills (Rao & Ravindran, 2003). The Sbi Interest Rate Throughout The Study Period Was An Average Of 6.75 Percent P.A. A 90-Day Deposit Rounded Up To 7 Percent P.A (Www.Sbi.Co.In). This Was Seen As The Worth Of The Research's Risk-Free Return. According To The Current September 2019 Amfi Newsletter, The Choice Of The Mutual Fund Is Based On Its Contribution To The Whole Aum Industry.

Research Objective This Research Is Conducted For The Following Purposes:

1. To Evaluate The Performance From April 2016 To September 2019 Of The Mutual Funds Selected.

2. To Evaluate If All Performance Indices Provide The Same Result To An Investor.

Research Is Based On Secondary Information Gathered From Www.Amfiindia.Com And Some Business Publications, Such As The Economic Times, Etc. Amfi Members Give Nav Values. Due To Sebi Members' Flexibility, The Computation Of Nav Values Did Not Comply With A Uniform Standard. Ravindran & Rao, 2003. 2003. The Research Lasts From April 2016 To September 2019 For Three And A Half Years. Nav Is Considered Appropriate For Research On Open-Ended Schemes Since Purchase And Selling Prices Are Linked To Navs In This Scenario.

Ii Research Methodology

The Research Has An Empirical Nature And Is Based On The Sampling Technique. In This Case, The Sample Universe Is The Reciprocal Fund Industry Of India. The Following Techniques Of Performance Evaluation Are Utilised For Research:

• Sharpe's Ratio

• Treynor Ratio

• Alpha Jensen

• Fame Measure

• Ratio Sortino.

At 30 September 2019, The Asset Management Companies In India Has Selected Five Of The World's Top Contributors To The Total Aum With Shares Of 82,25 Per Cent Of The Total Aum. These Are Hdfc Asset Management Ltd. (12,98%), Icici Prudential Asset Management Co Ltd. (12,51%), Reliance Capital Asset Management Ltd. (11,62%), Birla Sun Life Asset Management Co Ltd. (10,14%) And Pvt Ltd. These Are As Follows: (5%) (5.88%). But Since Franklin Templeton Was A Foreign Company In India And Other Were Either Indian Or Indian Companies, It Was Decided To Remove It From The Sample And Add 4.29 Percent Of The Aum To The Sample By Kotak Mahindra Asset Management Co Ltd. The Overall Sample Contribution Is 51,54% Of The Total Aum And Comprises 62,66% Of The Private Sector Participation. The Following Table Displays The Name Of The Money Used In The Study.

Table 1: The Fund's Name Used In The Study

S No.	Asset Management Company	Mutual Fund's Name	Nature Of Fund
1.	Hdfc Asset Management Co Ltd	Hdfc Capital Builder Fund	Open Ended Growth Scheme
2.	Icici Prudential Asset Management Co Ltd	Icici Prudential Junior Index Fund-Regular	Open Ended Growth Scheme
3.	Reliance Capital Asset Management Ltd	Reliance Index Fund-Nifty Plan	Open Ended Growth Scheme
4.	Birla Sun Life Asset Management Co Ltd	Birla Sun Life Equity Fund	Open Ended Growth Scheme
5.	Kotak Mahindra Asset Management Co Ltd	Kotak Classic Equity Fund	Open Ended Growth Scheme

Iii Data Description

The Data Description Of The Nav Value Derived From The Amfi (Association Of Indian Mutual Funds) And Cnx Nifty(Benchmark) Website Is Calculated Based On The Technique Below From April 2017. Data Description

$$Return(X) = (Nav_t - Nav_{t-1})/Nav_{t-1} \times 100 \quad (1)$$

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The Following Statistical Measures Are Calculated As Follows From The Information About The Quarterly Return Generated By The Five Above Stated Mutual Funds Schemes.

Table 2: Statistical Measures

Statistical Measure	Hdfc Capital Builder Fund	Icici Prudential Junior Index Fund-Regular	Reliance Index Fund-Nifty Plan	Birla Sun Life Equity Fund	Kotak Classic Equity Fund	Cnx Nifty
Mean Return	4.76	4.75	3.21	5.53	4.04	3.07
Std. Deviation	7.18	7.89	5.31	9.26	5.67	5.29
Variance	51.59	62.33	28.17	85.77	32.18	27.97
Semi Dev.	5.79	6.63	5.83	7.44	4.44	5.30
Covariance	35.92	37.42	28.03	44.21	27.87	27.97
Beta(B)	1.28	1.34	1.00	1.58	0.99	1.00
Capm Return	3.44	3.52	3..07	3.84	3.04	3.07

Note: Two Decimal Points Above Data Were Rounded Off. At The Same Time, The Risk-Free Return Was 7% P.A, I.E. 1.75% On A Quarterly Basis.

Interpretation Of Data The Following Performance Evaluation Indicators Are Calculated, Which Are Explained Shortly Below.

Ratio Of Sharpness: The Performance Evaluation Index For Mutual Funds And Similar Diversified Portfolios Has Been Proposed By William F. Sharpe (1966). He Thought That A Small Investor Places Entire Money In The Mutual Fund Because He Does Not Grasp The Intricacies Of Market Operations, And Is Therefore Confident That The Fund Manager Would Trust And Not Manage His Own Portfolio. He Gave An Index And Named It The Following Sharp Index

$$S_p = (R_p - R_f)/\Sigma_p \qquad (2)$$

Where S_p Is The Sharpe Index

R_p Is The Portfolio Return

R_f Is The Risk Free Return

And Σ_p Is The Standard Deviation Of The Portfolio Return.

Higher Sharpe Index Shows That The Investor's Portfolio Provides A Higher Premium Per Unit Of Risk.

Treynor Ratio: The Reward To The Volatility Ratio Was A Very Comparable Index Provided By Jack Treynor (1965) For Portfolio Assessment. He Claimed That All Idiosyncratic Risks Have Already Been Removed Inside A Diversified Portfolio Such As A Mutual Fund Therefore The Systematic Portion Of The Risk The Investor Anticipates A Premium. The Treynor Ratio Thus Assesses The Risk Premium Per Unit Of Systematic Risk.

$$T_p = (R_p - R_f)/B \qquad (3)$$

Where T_p Is The Treynor Index

R_p Is The Portfolio Return

R_f Is The Risk Free Return

And B Is The Beta Coefficient Of The Portfolio.

Jensen's Alfa: Micheal C. Jensen (1968) Felt That The Actual Performance Of A Fund Might Be Assessed In Comparison With The Anticipated Return On The Basis Of The Basic Principles Of The Capm Model. He Believed That At Least Capm Returns Were Expected By Investors. The Ability Of A Fund Manager May Be Evaluated By Comparing The Return Provided By The Fund With The Minimal Anticipated Return Of The Fund. Therefore, The Measure Of Jensen Estimates The Excess Return Of The Fund Above The Minimum Anticipated Return.

$$J_p = \textit{Portfolio Return-Capm Return} = R_p - \{R_f + B(R_m - R_f)\} \quad (4)$$

Where J_p Is The Jensen's Alfa

R_p Is The Returns From The Portfolio/Mutual Fund

R_f Is The Risk-Free Return

B Is The Beta Coefficient Of The Portfolio

And R_m Is The Return Of The Market Index.

Fama's Measure: Eugene F Fama(1972) Argued That A Fund's Performance Can Only Be Judged When Its Actual Return Is Compared With Premium Expectation On Total Risk. Thus Fama's Measure Can Be Computed As Under

F_p = Portfolio Return-Risk-Free Return-Returns Due To All Risks

$$F_p = R_p - R_f - \Sigma_p/\Sigma_m(R_m - R_f) \quad (5)$$

A Positive Value Of Fama's Measure Indicates That The Fund Earned A Return Which Is Higher Than The Expected Returns And Vice-Versa.

Sortino Ratio: Briam M. Rom (1983) Stated That It Was Not Reasonable To Penalise Both Upside And Downside Unpredictability. Rather, Only The Downward Deviations Should Be Considered And Thus A New Ratio Named After Frank A Sortino Should Be Computed Accordingly

$$S_p' = R_p - R_f/\text{Semi Dev} \quad (6)$$

Where S_p' Is The Sortino Ratio

R_p Is The Returns From The Portfolio/Mutual Fund

R_f Is The Risk-Free Return

And   Semi Dev Is Semi Deviation Or The Downside Risk

The Table Below Shows The Value Of Different Indices Mentioned Above For The Selected Mutual Funds And The Cnx Nifty

Table 3: Mutual Funds And The Cnx Nifty

Performance Index	Hdfc Capital Builder Fund	Icici Prudential Junior Index Fund-Regular	Reliance Index Fund-Nifty Plan	Birla Sun Life Equity Fund	Kotak Classic Equity Fund	Cnx Nifty
Sharpe Ratio	0.42	0.38	0.27	0.41	0.40	0.25
Treynor Ratio	2.35	2.24	1.46	2.39	2.31	1.32
Jensen's Alfa	1.32	1.23	0.14	1.69	1.00	0.00
Fama's Measure	1.22	1.03	0.14	1.47	0.88	0.00
Sortino Ratio	0.52	0.45	0.25	0.51	0.52	0.25

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Iv Conclusion

As Seen In The Above Table At Sharpe Ratio, The Investor Should Invest In Hdfc Capital Builder Fund. The Investor Should, On The Other Hand, Deposit Its Hard Earned Cash In Birla Life Equity Fund, Which Depends On The Ratio Of Treynor, Jensen Alfa Or The Measure Of Fame. The Investor Will Be Indifferent Between The Hdfc Capital Builder Fund And The Kotak Classic Equity Fund If The Investment Is Based On The Results Of Sortinos's Ratio. Even Though The Investor Has So Many Performance Indicators Accessible To Analyse Mutual Fund Performance And Evaluate The Competencies Of The Fund Manager, The Issue With Investors Is Still Continuing. An Investor With Limited Exposure To Financing Conditions And Ideas To Decide To Invest His Money And Get A Maximum Return On The Minimum Risk Still Has To Develop The Performance Indicator.

Suggestion An Index Must Be Given To Assist The Average Investor In Choosing An Investment Without Any Complex Financial Concepts.

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