



A Study on Performance Evaluation of Selected Banks Equity Mutual Funds

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ABSTRACT

This article entitled "A Study on Performance Evaluation of Selected Banks Equity Mutual Funds". The main objective of the study is analyzing the risk and returns of the selected funds and find out the suitable equity fund for the investment. Mutual fund returns can be compared using Absolute Return, Annualised Return & Compounded Annual Growth Rate. Risk can be analyzed by finding out Standard Deviation. Risk Adjusted Return Key ratios like Sharpe ratio are used for Risk- Return analysis. Treynor ratio is used to calculate the funds perform over and above risk free rate of return. Jensen ratio is used to find out the level of systematic risk involved in the selected funds. Study shows that HDFC fund has outperformed the Benchmark from Sundaram Growth Funds.

Keywords : Mutual Funds Risk adjusted return, systematic risk

Introduction

Mutual Fund is an Investment Vehicle that pools together funds from investors to purchase stocks, bonds or other securities. An investor can participate in the mutual fund by buying the units of the fund. Each unit is backed by a diversified pool of assets, where the funds have been invested. A closed-end fund has a fixed number of units outstanding. It is open for a specific period. During that period investor can buy it. In the open- end schemes, units are sold and brought continuously. The price of unit is based on the net asset value of the particular. The industry broadly caters to all types of investors depending on their risk return preferences.

Recent Trends in Mutual Fund Industry

The most important trend in the mutual fund industry is the aggressive expansion of the foreign owned mutual fund companies and the decline of the companies floated by nationalized banks and smaller private sector players. Many nationalized banks got into the mutual fund business in the early nineties and got off to a good start due to the stock market boom prevailing then. These banks did not really understand the mutual fund business and they just viewed it as another kind of banking activity.

Objectives of the study

- To find out the performance of equity mutual funds in selected banks.
- To analyze the risk and return of selected banks in equity mutual funds.
- To compare the performance among the selected banks in equity mutual funds.
- To identify the suitable equity mutual fund among selected banks equity mutual funds

Types of Mutual Fund Schemes

Wide variety of Mutual Fund Schemes exists to cater to the needs such as financial position, risk tolerance and return expectations etc. The table below gives an overview into the existing types of schemes in the Industry.

Review of Literature

Review of the literature plays an important role in any research, it is considering the importance of mutual funds and

several academicians have tried to study the performance of various mutual funds. Literature on mutual fund performance evaluation is enormous. Herewith some of the research studies that have influenced the preparation of this study substantially are discussed in this section. Performance evaluation of mutual funds is one of the preferred areas of research where a good amount of study has been carried out. The area of research provides diverse views of the same.

The Study —Analysis of Performance of Equity funds(Diversified) Open-end Mutual Fund during 1997 – 2000 was performed by M.Vijay Anand in IFMR ,Chennai (June 2000).The study focused on to understand the position of the schemes of birla sunlife and the competitors schemes available in the market. The study did Analysis of Performance of Equity fund for 3 years and SWOT Analysis of Birla Sunlife by Literature survey, Delphi technique, in depth financial review to identify among the selected equity funds that earns higher returns than benchmark and competitors and concluded that Birla Sunlife performs well compared to the benchmarks and competitors.

The Research —Performance Evaluation of Franklin Templeton Mutual Funds was done by R.Nithya in the IFMR Chennai (2004). The objective of the study is to analyse the performance of all the schemes available in the Franklin Templeton Mutual funds and Emphasize the values of mutual funds to the target people by identifying Asset Management Company that is performing well and identifying the top schemes in the category such as equity, balanced, Monthly Income Plan (MIP) & Income in the AMC. The AMC chosen was Franklin Templeton Mutual funds and it performed well and met the expectations.

The Research —A study on Analysis of the performance of mutual fund with reference to HDFC was done by Prasath.R.H in Anna University (2009). The study is trying to emphasize the core values of mutual fund investment, benefits of mutual funds, types of mutual funds, etc., The study is going to conducted by taking the NAV values of different types of HDFC mutual fund 6 products. The study concludes that before choosing the mutual fund scheme, the investor should undergo fact sheet thoroughly and he has to choose the best one by cal-

culating Sharpe Ratio, Treynor's Ratio, Jensen Ratio, IR Ratio and NAV calculation. If the investor finds difficulty of getting R_p , R_f , Standard deviation, and Beta parameters, NAV calculations are the best alternative to assess the performance.

The Research on –Performance Evaluation of Indian Mutual Funds was done by Dr S Narayan Rao in IITB (2002) . The Study is conducted to understand whether most of the mutual fund schemes were able to satisfy investor's expectations by giving excess returns over expected returns .The objective of this study was to evaluate the performance of Indian Mutual Fund Schemes during bear market through relative performance index (RPI), risk- return analysis, Treynor's ratio ,Sharpe's ratio, Sharpe's measure, Jensen's measure, and Fame's measure.The research study concluded that out of 269 schemes, 49 were under performers, 102 were par performers and 118 were out performers of the market and Medium Term Debt Funds were the best .It was also concluded that 58 of 269 open ended mutual funds have provided better returns than the market during the bear period of September 98-April 2002. Some of the funds provided excess returns over expected returns based on both premium for systematic risk and total risk.

The research —Characteristics and Performance Evaluation of Selected Mutual Funds in India was done by Sharad Panwar and Dr. R. Madhumathi , in IIT, Madras (2005). The objective of the study is to identify differences in characteristics of public-sector sponsored & private-sector sponsored mutual funds and to find the extent of diversification in the portfolio of securities of public-sector sponsored and private-sector sponsored mutual funds and to compare the performance of public-sector sponsored and private-sector sponsored mutual funds using traditional investment measures. The study found that public- sector sponsored private-sector Indian sponsored and private-sector foreign sponsored mutual funds do not differ statistically in terms of portfolio characteristics such as net assets, common stock%, market capitalization, holdings, Top Ten %. Portfolio risk characteristics measured through private-sector Indian sponsored mutual funds seems to have outperformed both Public- sector sponsored and Private-sector foreign sponsored mutual funds.

Research methodology

Investors have varied objectives while choosing their investments. It is important to evaluate the risk involved in the investment, the amount of returns and amount of initial investment required.

Research design

The research design is more or less a blueprint of research. At the outset may be noted that there are several ways of studying and tackling a problem. There is no signal perfect design. The research design can be used for this study is exploratory study Exploratory research is carried out to define problems and developed hypothesis to test later. An exploratory study is generally based on the secondary data that are reading available. It does not have to change his focus of direction, depending on the availability of new ideas and relationship among variables.

Sources of Data

Secondary data are those data which are already collected by someone for some purpose and are available for the present study; secondary data are already collected by the company's records and other library's books. When the secondary data are sufficient, the researcher has to be satisfied with the primary sources of data. .

The secondary data was collected from the following sources: Fact Sheets., Nav of Sundaram growth fund, related web sites, sundarammutual.com, moneycontrol.com, nseindia.com, zeebiz.com.

Tools of the study

Sharpe's Performance Index, Treynor Performance

Index, Jensen Performance Index and standard deviation

(i) Standard Deviation

Meet the most popular of the risk measures -- one with a distinct advantage over beta. While beta compares a fund's returns with a benchmark, standard deviation measures how far a fund's recent numbers stray from its long-term average.

(ii) Sharpe's Performance Index

$$\text{Sharpe's ratio (SPI)} = (R_p - R_f) / S_d$$

It depends on total risk rate of the portfolio. Return of the security compared with risk free rate of return and the excess return of security is treated as premium or reward to the investor. The risk of the premium is calculated by comparing portfolio risk rate. If there is no premium Sharpe index shows negative value (-). In such a case the portfolio is not treated as efficient portfolio.

Where,

S_p = Sharpe measure, R_p = return of the portfolio, R_f = risk free rate of return, S_d = portfolio standard deviation.

The major advantage of this method is that it uses the volatility of the portfolio return instead of measuring the volatility against a benchmark (i.e. index). This method is also called "Reward to Variability" method. Portfolio with higher Sharpe's measure is preferred.

Return

Return may be defined to include changes in the value of the portfolio over the holding period plus any income earned over the period. in the case of mutual funds, during the holding period, cash inflows into the fund and withdrawals from the fund may occur. This element of return is the difference between the purchase price and the price.

$$R_p = \frac{(\text{NAV}_t - \text{NAV}_{t-1})}{\text{NAV}_{t-1}}$$

Risk

Risk is neither good nor bad. Risk in holding securities is generally associated with the possibility that realized returns will be less than expected returns. The difference between the required rate of returns on mutual fund investment and the risk free return is the risk premium. Risk can be measured in terms of Beta.

Beta:

Beta measures the systematic risk and shows how prices of securities respond to the market forces. It is calculated by relating the return on a security with return for the market. By convention, 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.

$$\beta = \text{cov}(FR, BM) / \text{var}(BM)$$

Where FR = Fund Return, BM = Bench Mark

(iii) Treynor Measure

Developed by Jack Treynor, this performance measure evaluates fund 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

$$\text{Treynor's Index (TPI)} = (R_p - R_f) / \beta$$

Where, R_I represents return of fund, R_f is risk free rate and β 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, low and negative Treynor's Index is an indication of unfavorable performance.

(iv) Jensen Model

Jenson's Model proposes another risk adjusted performance measure. This measure was developed by Michael Jenson and is one time 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 measure the performance of a fund compared with the actual returns over the period.

Required returns of a fund at a given level of risk (Bi) can be calculated as:

$$RI = R_f + (R_m - R_f) \cdot \beta$$

Where Rm is average market return during the given period.

Findings, Suggestions and Conclusions

In the selected equity mutual funds HDFC mutual fund equity is gave high return while comparing to other funds. According to the Sharp index ratio of the selected diversified equities the HDFC equity return is good while comparing to other equities. According to the Treynor index ratio of the selected diversified equities HDFC equity return over the bench mark and the systematic risk (beta) is good while comparing to other equities. According to the Jensen ratio of the selected diversified equities the HDFC equity bench mark risk is low while comparing to other equities.

Suggestions:

Mutual Fund is subject to market risk, analyzing particular fund before investing. For high return invest in diversified funds. While investing the main things are that has to be noted that the fluctuations are there are and how the fund is doing from the inception period. As per my opinion, investor should avoid ICICI, and Bank of Baroda. From the above study suggests that the investor should invest around 45% in financial sector on growth fund scheme.

Conclusion:

To got insight knowledge about mutual fund. To know the Mutual fund performance level in the present Market. Mutual fund investments are not short term investment avenues but they are more of a long term investment avenue. In today's world, investors are showing more trust in mutual fund than any other financial product. There is no need of a financial consultant, if you have good knowledge of mutual funds and their type to invest. Mutual fund is subject to market risk, despite of that it have low risk than stock market. Performance evaluation measurement ratios i.e. Treynor's, Sharpe's and Jensen's are used by fund managers to take decision of investment and to diversify portfolio.

Comparison of last five years Equities Returns Table: 1

Fund	FD return in %
BOI	0.1943
Bank Of Baroda	0.1435
ICICI	0.0742
SBI	0.2139
HDFC	0.2732
CANARA	0.1656

Source: Calculated Value

Comparison of last five years Equities Returns Chart: 1



Inference:

The above table shows the returns of the selected banks equities are BOI is 0.1943%, Banks of Baroda return is 0.1435%, ICICI bank return is 0.0742%, SBI bank return is 0.2139%, HDFC bank return is 0.2732%, and Canara bank return is 0.1656%. According to the returns of the selected diversified equities the HDFC equity return is good while comparing to other equities.

Selected Banks equities Sharpe Ratio Table: 2

Fund	FD return in %
BOI	1.402
Bank Of Baroda	0.772
ICICI	-2.277
SBI	1.691
HDFC	1.892
CANARA	1.078

Source: Calculated Value

Selected Banks equities Sharpe Ratio Chart: 2



Inference:

The above table shows the Sharp index ratio of the selected banks equities are BOI is 1.402%, Banks of Baroda return is 0.772%, ICICI bank return is -2.277%, SBI bank return is 1.691%, HDFC bank return is 1.892%, and Canara bank return is 1.078%. According to the Sharp index ratio of the selected diversified equities the HDFC equity return is good while comparing to other equities.

Selected Banks Equities Treynor Ratio Table: 3

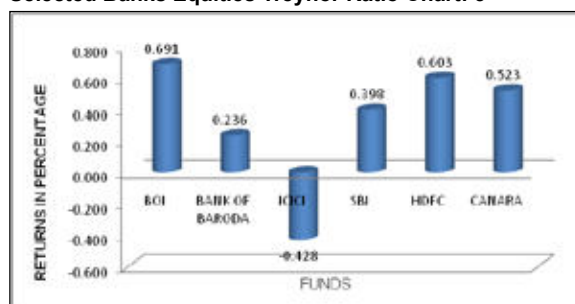
Fund	FD return in %
BOI	0.691
Bank Of Baroda	0.236
ICICI	-0.428
SBI	0.398
HDFC	0.603
CANARA	0.523

Source: Calculated Value

Inference:

The above table shows the Treynor index ratio of the selected banks equities are BOI is 0.691%, Banks of Baroda return is 0.236%, ICICI bank return is -0.428%, SBI bank return is 0.398%, HDFC bank return is 0.603%, and Canara bank return is 0.523%. According to the Treynor index ratio of the selected diversified equities the HDFC equity return over the bench mark and the systematic risk (beta) is good while comparing to other equities.

Selected Banks Equities Treynor Ratio Chart: 3



Selected Banks equities in Jensen Ratio Table: 4

Jensen Ratio	
Fund	FD return in %
BOI	0.078
Bank of Baroda	0.074
SBI	0.0839
ICICI	0.071
Canara	0.078
HDFC	0.067

Source: Calculated Value

Inference:

The above table shows the Sharp index ratio of the selected banks equities are BOI is 0.078%, Banks of Baroda return is 0.0740%, ICICI bank return is 0.0839%, SBI bank return is 0.071%, Canara bank return is 0.0780%, and HDFC bank re-

turn is 0.0670%. According to the Jensen ratio of the selected diversified equities the HDFC equity bench mark risk is low while comparing to other equities.

Selected Banks equities in Jensen Ratio Chart: 4

