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RESEARCH ARTICLE

PERFORMANCE EVALUATION OF MUTUAL FUNDS WITH SPECIAL REFERENCE TO SELECTED EQUITY DIVERSIFIED MUTUAL FUNDS

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ABSTRACT

India capital market has provide a various investment opportunities to the investors, for helping them to invest in various industries and to get the profitable return. Through this various financial products, mutual fund ensure the minimum risks and maximum return to the investors, in the Indian capital market Growth and developments of various mutual funds products has show to be one of the most catalytic instruments in make a momentous investment growth in the capital market. In this con mutual funds text, close monitoring and evaluation of mutual funds has become essential. Therefore, choosing profitable mutual funds for investment is a very important question. This study, basically, deals with the equity mutual funds that are offered for investment by the various fund houses in India, This study mainly focused on the performance of selected equity diversified mutual fund schemes in terms of risk- return relationship. The main objectives of this research work is to analysis performance of selected mutual fund schemes through the statistical parameters such as alpha ,beta, standard deviation, r-squared, Sharpe ratio. The findings of this research study will be help full to investors for his to take future investment decisions.

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INTRODUCTION

A mutual fund is a professionally managed type of collective investment scheme that pools money from many Investors and invests in stocks, bonds, short term money market instrument and other securities. Mutual funds have become a widely popular and effective way for investors to participate in financial markets in an easy, low cost fashion, while muting risk features by spreading the investment across different types of securities, also called as diversification. Mutual funds have played important role in financial market in recent decades so it is pertinent to study the performance of mutual funds. The investment performance of mutual funds has been extensively examined for the development of capital market.

Equity funds

Equity funds have the objective to provide capital appreciation over a long term. A major portion of their investments is in equities which provide potentially superior returns than other avenues of investment. Equity schemes offer potentially the best possible returns among all mutual fund schemes but carry the highest risk as well.

Performance Evaluation of Equity Mutual Funds The equity funds are high on the risk scale as the share prices are volatile. These funds try to reduce the risk by diversifying the investments in different types of shares. One of the greatest advantages of equity funds is instant diversification. Also, it is usually easier and less expensive to invest in equity funds than to buy each and every stock in a fund's portfolio. Equity funds are also cheaper -- they're a way to avoid the often higher transaction costs and lower liquidity associated with trading individual stocks.

Review of literature

A large number of studies have been done on the growth and financial performance of mutual funds

Barua, Raghunathan and Varma (1991) evaluated the performance of Master Share during the period 1987 to 1991 using Sharpe, Jensen and Treynor measures and concluded that the fund performed better than the market, but not so well as compared to the Capital Market Line.

Mishra and Mahmud (2002) measured mutual fund performance using lower partial moment. In this paper, measures of evaluating portfolio performance based on lower partial moment are developed. Risk from the lower partial

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moment is measured by taking into account only those states in which return is below a pre-specified "target rate" like risk-free rate.

Rao and Ravindram (2002) suggested that most of the mutual fund schemes in the sample of 58 were able to satisfy investor's expectation by giving excess returns over expected returns based on both premiums for systematic risk and total risk, Shukla and Singh (1997) suggested that the global equity mutual funds were superior performers compared to global benchmark (MSCI).

Panwar Sharad and Madhumathi (2006) found that public sector sponsored funds do not differ significantly from public sector sponsored funds in terms of mean returns percentage. There was a statistical difference between sponsorship classes in terms of E SDAR (excess standard deviation adjusted returns) as a performance measure.

Santos, Costa, Tusi and Silva (2005) examined mutual fund performance in Brazil over from April 2001 to July 2003 by taking into account 307 Brazilian stock mutual funds. They applied the stochastic frontier approach in their study. The study reported that fund efficiency depends on management skills and properly managed funds can outperform the market.

Objectives

- 1) To know the performance of a growth scheme of a selected mutual funds
- 2) To study the return from the selected mutual fund.
- 3) To know whether the mutual funds are proficient to provide return to variability and volatility
- 4) To recognized security market return with fund return.

Scope of the study

The present study comprises of 5 mutual fund schemes launched by different private sector. The research work is during the time period from Jan1st 2012 to Dec 2014. The NAV of the selected scheme have been compared for three years with an annual return. And it is compared with the benchmark return to evaluate the performance of these schemes.

Data collection

The required data study is collected based on secondary source which is collected from various sources like published annual reports of the sponsoring agencies, online bulletins, journals books, magazines, brochures, newspapers and other published and online material.

Research methodology

The present study made an effort to analyze the performance of the selected mutual fund schemes with the market during the period of the study, to achieve the objectives an analysis has been made to compare these schemes with the market on the basis of risk and return. Different statistical tools are used to evaluate the performance of these mutual fund schemes under the present study. These tools and techniques include standard deviation, beta, alpha, R squared, Sharpe ratio.

Statistical tools

Beta: Beta is a measure of the volatility of a particular fund in comparison to the market as a whole, that is, the extent to which the fund's return is impacted by market factors. Beta is calculated using a statistical tool called regression analysis.

Table 1. Comparative statement of NAV and total return for the selected mutual fund schemes

Name of the scheme	NAV for 2012	Total return for 2012(%)	NAV for 2013	Total return for 2013(%)	NAV for 2014	Total return for 2014(%)
HDFC Top 200	226.24	32.43	235.40	5.709	344.90	39.912
Sahara Tax Gain Fund	40.903	12.48	43.458	-6.14	61.47	15.458
Reliance Vision Fund	226.29	29.98	269.88	30.26	292.26	33.16
HDFC equity fund	293.42	60.462	304.63	0.27	468.44	43.211
Kotak Opportunities	50.067	22.26	52.321	5.34	78.45	41.72

Table 2. Performance Analysis Based on Statically Parameters

Name of the scheme	Beta	Standard Deviation	R- Squard
HDFC Top 200	0.7651	16.271	0.96
Sahara Tax Gain Fund	0.557	11.225	0.89
Reliance Vision Fund	0.767	16.56	0.98
HDFC equity fund	1.219	17.18	0.92
Kotak Opportunities	0.99	14.106	0.93

Table 3. Performance Analysis Based on Sharpe Ratio Analysis and Ranking

Name of the scheme	Sharp Ratio	Ranking
HDFC Top 200	15.87	1
Sahara Tax Gain Fund	6.66	2
Reliance Vision Fund	2.43	4
HDFC equity fund	1.228	5
Kotak Opportunities	2.843	3

Table 4. Comparative Analyses between Fund and Bench Mark Return

Name of the scheme	Benchmark	3 Yrs Return	Benchmark Return
HDFC Top 200	CNX Nifty	31.92	5.531
Sahara Tax Gain Fund	CNX Nifty	15.458	13.23
Reliance Vision Fund	CNX Nifty	33.16	32.83
HDFC equity fund	CNX Nifty	43.211	45.53
Kotak Opportunities	CNX Nifty	41.72	16.25

'By definition, the market benchmark index of Sensex and Nifty has a beta of 1.0. Conservative investors should focus on mutual funds schemes with low beta. Aggressive investors can opt to invest in mutual fund schemes which have higher beta value for higher returns taking more risk.

Standard Deviation (SD): The total risk (market risk, security-specific risk and portfolio risk) of a mutual fund is measured by 'Standard Deviation'(SD). In mutual funds, the standard deviation tells us how much the return on a fund is deviating from the expected returns based on its historical performance.

Sharpe Ratio: Sharpe ratio (SR) is another important measure that evaluates the return that a fund has generated relative to the risk taken. Risk here is measured by SD. It is used for funds that have low correlation with benchmark index. This ratio helps an investor to know whether it is a safe bet to invest in this fund by taking the quantum of risk. The higher the Sharpe ratio (SR), the better a fund's return relative to the amount of risk taken. In other words, a mutual fund with a higher SR is better because it implies that it has generated higher returns for every unit of risk that was taken.

R-squared: R-squared measures the relationship between a portfolio and its benchmark. It can be thought of as a percentage from 1 to 100. R-squared is not a measure of the performance of a portfolio. A great portfolio can have a very low R-squared. It is simply a measure of the correlation of the portfolio's returns to the benchmark's returns. R-squared can be used to ascertain the significance of a particular beta or alpha. Generally, a higher R-squared will indicate a more useful beta figure

Findings of the Study

1. Table (1) explains about the comparative NAV for the selected mutual funds schemes. At the end of the year 2012 NAV & total Return for selected schemes HDFC Top200, 226.24 & 32.43, Sahara TaxGain, 40.903 & 12.48, Reliance Vision, 226.29 & 29.98, HDFC equity, 293.42 & 60.462, Kotak Opportunities, 50.067 & 22.26 In the year 2012 Jan 02 the opening point of CNX Nifty were 4640.20, Dec 31 2012 closing point of CNX Nifty were 5905.10, hence there was an increasing point in CNX Nifty were 1269.90 this happens mainly due to changes in finance minister post and changes in political conditions of a country hence there was a boom in the stock market and this predict the rise in the NAV & Total Return in the selected schemes schemes HDFC Top200, 235.40 & 5.70, Sahara TaxGain, 43.458 & 6.14, Reliance Vision, 269.88 & 30.26, HDFC equity, 304.63 & 0.27, Kotak Opportunities, 52.321 & 5.34 and in the year 2014 the returns are HDFC 344.90 & 39.912 Sahara TaxGain Fund 61.47 & 15.458, Reliance Vision & 292.26 & 33.16, HDFC equity 468.44 & 43.21, Kotak Opportunities 78.45 & 41.72. Table 2 reveals about the statistical parameters used to analyze the performance of the selected mutual fund scheme.
2. In HDFC Top 200, Fund it has beta value of fund 0.7651 and it is which says that the fund is less volatile to benchmark indices and it has performed well by providing a better return to the investors where else it has an standard

- deviation of fund is 16. it shows that the funds risk factor is below average and overall the fund has performed well, R-Squared value of fund is 0.96 hence the fund has good correlation between funds return with its benchmark return
3. In Sahara Tax Gain Fund it has beta value of fund is 0.557 and. where it has an standard deviation of fund is 11.225 that means the fund has high risk factor and also provided high return to the investors, R-Squared value of a fund is 0.98 it has good correlation with its benchmark return.
 4. In Reliance Vision fund (growth) it has beta value of Vision 0.767 and where standard deviation of fund is 16. that means the fund is high risky, R-Squared value of a fund is 0.98 it has good correlation with its benchmark return but has only above average return to the investors.
 5. In HDFC Equity Fund it has beta value of Vision 1.219 and it is more volatile and where standard deviation of fund is 17.18 that means the fund is high risky, R-Squared value of a fund is 0.92 it has good correlation with its benchmark return but has only above average return to the investors.
 6. Kotak Opportunities it has beta value of 0.99 and where standard deviation of fund is 14.106 that means the fund is average risk and provided better return to the investors. R-Squared value of a fund is 0.93 it has good correlation with its benchmark return.

Table 3 explains about the performance of a selected fund based on Sharpe ratio and ranking of the fund is made on their highest ratio. A higher Sharpe ratio is therefore better as it represents a higher return generated per unit of risk. In HDFC TOP 200 fund ratio were 15.87 which gives good return at high risk and have 1st rank where HDFC Equity Fund has only 1.228% which has high risk with below average return having 5th rank. Where other funds have Kotak Opportunities have 2.843 and rank as 3rd, Sahara Tax Gain Fund have 6.660% and rank as 2nd, Reliance Vision Fund 2.43% and rank as 4th.

Conclusion

The performance analysis of the selected five equity large cap funds, it's clear that all the funds have performed well during the study period. In the ultimate analysis it may be concluded that all the funds have performed well in the high volatile market movement expect Reliance vision. Therefore it is essential for investors to consider statistical parameters like Return, beta, standard deviation while investing in mutual funds apart from considering NAV and total Return in order to ensure consistent performance of mutual funds.

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