

Original Research Paper

Commerce

INDIAN MUTUAL FUND SCHEMES PERFORMANCE & RELEVANCE TO ITS CHARACTERISTICS

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INTRODUCTION

The Mutual Fund industry in India has emerged as a dominant financial intermediary in the Indian capital market. Today investors expect higher returns with lower risk and want to be protected against inflation, leads to depreciation of money over a time. Modern investors concentrated more on diversion of investment and mobilisation of savings from banks, insurance and other financial instruments towards stock market through mutual funds. For those who have limited or no knowledge of the stock market, it becomes difficult and challenging to gain good returns from stock market. Mutual funds offer a new path to those investors. Mutual funds are investment vehicles that act as mobilizer of savings as well as provider of capital to capital market. As fund managers have knowledge skill and experience for decisions, investors consider mutual funds less risky than stocks.

REVIEW OF RELATED LITERATURE

Sapar, Narayan Rao and Madava, Ravindran, have studied the performance evaluation of Indian mutual funds in a bear market is carried out through relative performance index, risk-return analysis, Treynor's ratio, Sharp's ratio, Sharp's measure, Jensen's measure, and Fama's measure. The data used was monthly closing NAVs. The source of data was website of Association of Mutual Funds in India (AMFI). Study period was September 98-April 02 (bear period). They started with a sample of 269 open ended scheme (out of total scheme of 433) for computing relative performance index. Then after excluding the funds whose returns were less than risk-free returns, 58 schemes were used for further analysis. Mean monthly (logarithmic) return and risk of the sample mutual funds schemes during the period were 0.59% and 7.10%, respectively, were compared to similar statistics of 0.14% and 8.57% for market portfolio. The results of performance measures suggested that most of the mutual fund schemes in the sample of 58 were able to satisfy investor's expectations by giving excess returns over expected returns based on both premiums for systematic risk and total risk.

Ananda and Murugaiah examined the components and sources of investment performance in order to attribute it to specific activities of Indian fund managers. They also attempted to identify a part of observed return which was due to the ability to pick up the best securities at given level of risk. For this purpose, Fama's methodology was adopted. The study covered the period between April 1999 and March 2003 and evaluated the performance of mutual funds based on 113 selected schemes having exposure of more than 90% of corpus to equity stocks of 25 fund houses. The empirical results revealed the fact that the mutual funds were not able to compensate the investors for the additional risk that they had taken by investing in the mutual funds. The study concluded that the influence of market factors was more severe during negative performance of the funds while the impact selectivity skills of fund managers was more than the other factors on the fund performance in times of generating positive return by the funds. It could also be observed from the study that selectivity, expected market risk and market return factors have shown closer correlation with the fund return.

Do Indian mutual fund managers contribute to better performance? In this paper, Roy, Bijan and Deb, SaikatSovan addressed this question and measured the performance of Indian mutual funds in the conditional framework advocated by Ferson and Schadt (1996); Christopherson, Ferson and Glassman (1998). They found that when the beta of the fund was conditioned to lagged economic information variables, the fund performance did not change appreciably.

OBJECTIVE OF THE STUDY

To analyse relationship of performance of schemes and its characteristics.

RESEARCH METHODOLOGY

The performance is measured by the rate of return of the Growth schemes. The fund characteristics are measured by net asset value of scheme, volatility (standard deviation) of the return (a risk measure), average net assets under management (measure of fund size), portfolio turnover ratio and benchmark returns and expenses ratio. The fund characteristic measuring variables are the explanatory variables in the analysis. The estimation procedure and significance of the fund performance measure i.e. scheme return (dependent variable) with fund characteristic measures (independent) are presented below:

Scheme Return: The performance of funds is measured from the average return generated by the funds. The average return from fund investment is calculated astoday's Net Asset Value (NAV) minus yesterday's NAV plus dividends and capital gain distributions divided by yesterday's NAV.

NAV: The NAV or the net asset value is the total asset value per unit of the mutual fund after deducting all liabilities and permissible expenses. The NAV is calculated at the end of every business day. It is the value at which the investor enters or exits the mutual fund. The NAV for an investment company is similar to the share price of a corporation. Like common stocks, the NAV of the fund shares will increase as the value of the underlying assets (fund securities) increases.

The fund size : is measured by average net assets under management. The relationship between fund return and fund size is generally influenced by the ability of the fund manager to implement a particular investment style which reflects investment quality and fund administration.

Risk: Standard deviation is measure of total risk. The square root of the variance is called the standard deviation $\sigma = Var(r)$. The standard deviation and the variance are equally acceptable and equivalent quantitative measures of an asset's total risk.

Portfolio Turnover Ratio: is the percentage of a funds assets that have changed over the course of a year.

Expenses Ratio: The expenses ratio measures the cost incurred by an investment company to operate a mutual fund. The expenses

ratio is determined by dividing the fund's operating expenses with the average assets under management. The expenses ratio is the portion of the fund's average net assets paid for management fees, trustee fees, audit fees and other administrative fee involved in fund's operations.

Benchmark Returns: A group of securities, usually a market index, whose performance is used as a standard or benchmark to measure investment performance of mutual funds, among other investments. Some benchmarks include the Nifty, Sensex, BSE 200, BSE 500, 10-Year Gsec.

Sample Size:

The dataset used in this study include the equity open-ended growth funds of Franklin Templeton. Based on convenience sampling five growth schemes i.e. Franklin India Bluechip Fund, Templeton India Growth Fund, Franklin India Prima Fund, Franklin India Flexi Cap Fund, Franklin India Opportunities Fundwith required characteristics data taken for study.

Period of Study: Six years from 2010 to 2015 is the period of study.

Statistical Technique Used: Multiple regression analysis is done to test the hypothesis.

Sources of Data:

Secondary data is extracted from fact sheets, scheme additional information(SAI) and Scheme Information Documents of Franklin Templeton mutual fund company.

HYPOTHESIS OF THE STUDY

H_o: There is no significant functional relationship between performance and selected characteristics of fund.

ANALYSIS AND INTERPRETATION OF THE DATA

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin- Watson	
1	.962ª	0.925	0.906	11.6415	2.229	
a. Predictors: (Constant). Portfolio TORatio. FundSizeAAUM.						

Benchmark Return, Expense Ratio, NAV_Growth Option, STD b. Dependent Variable: Scheme return

MODEL SUMMARY ANOVA

Mod	el	Sum of Squares	df	Mean Square	F	Sig.
	Regression	38689.2	6	6448.21	47.58	.000b
1	Residual	3117.04	23	135.523		
	Total	41806.3	29			

a. Dependent Variable: Scheme return

b. Predictors: (Constant), Portfolio TO Ratio, Fund SizeAAUM, BenchmarkReturn, ExpenseRatio, NAV_GrowthOption, STD

COEFFICIENTS

	Non- standardized Coefficients		Standar dized Coeffici ents	Т	Sig.
Model	В	Std. Error	Beta	-	
(Constant)	22.281	35.004		0.637	0.53
NAV_GrowthOption	0.042	0.019	0.158	2.241	0.04
FundSizeAAUM	-0.003	0.002	-0.11	-1.294	0.21
1 ExpenseRatio	-6.936	10.675	-0.063	-0.65	0.52
BenchmarkReturn	1.234	0.098	0.985	12.544	0
STD	-0.418	1.717	-0.025	-0.243	0.81
Portfolio TORatio	-0.047	0.031	-0.108	-1.495	0.15

a. Dependent Variable: Scheme return

Analysis:

From the above analysis, it can be observed that net asset value and benchmark return are positively correlated and the rest of the attributes such as fund size, expense ratio, total risk and portfolio turnover ratio are negatively correlated as far as data is related. The value of R-square is0.925, which means approximately 93% of the variation of invoice is explained by the independent variables. R square of model is .925 that is a good indicator of model. Adjusted R-square is the best indicator of model fit that is .906. The Significance value of F is less than 0.05(level of significance 95%). F test (P-value < .0001) indicates that the model is significant for predicting scheme returns based on a group of independent variables in the model. The Durbin-Watson Test (d) = 2.29 indicates that the residuals are uncorrelated and the independent error assumption is satisfied. Based on the above mentioned data it can be concluded that there is a significant relationship between fund performance and its attributes.

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