

A Study on Performance of Ethical Mutual Fund in India for The Period 2009-2019

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ABSTRACT

The study measures the performance of ethical mutual funds in India. The tools used in the study were Jensen's Alpha, Sortino, Sharpe's, Treynor's Ratio and R-square. The finding of the study shows that the ethical funds are very much inconsistent as the coefficient of variance of the funds is too high. However, the downside risk of all the ethical funds when compared to the index funds is low i.e. there is a less of chance of negative returns when compared to BSE Sensex and Nifty 50. Sharpe and Treynor ratio are also negative which means the funds are not even getting returns higher than the risk-free rate of return (Rf) for the additional risk taken. so, we can conclude that the shariah-compliant funds in India are not able to generate potential returns. This could be, because the ethical funds do not invest in banking sector and they follow stringent norms. This study also had some limitations such as, the data collected was from the year 2009 to 2019 which has not covered different market cycles in India.

Keywords: Ethical Mutual Funds, Shariah Compliant Funds, Treynor's Ratio, Sortino Ratio, Sharpe's Ratio, Jensen's Alpha, R-square.

INTRODUCTION

Ethical Mutual Funds were introduced for the investors whose moral was to invest in socially responsible funds. These funds are based on Shariah norms which consider some basic criteria before investing in any securities. The Shariah norms refrain from investing in Tobacco, Alcohol, and any such businesses which will have a negative impact on the people. It refrains from investing in companies whose debt to equity ratio is equal to more than 25% and the cash reserves are more than or equal to 90%.

NEED OF THE STUDY

As the income of the people is increasing across all the countries in the world the taxation has become a major concern for many. There are many investors who have religious and ethical priorities. Those who want their money to be invested in companies which are socially responsible, there is an option of ethical mutual fund for such investors. But a question arises that whether Ethical Mutual Funds give promising results or not. Hence, to answer it a study to evaluate the performance of ethical investment has become important.

LITERATURE REVIEW

The Ethical mutual fund has a huge market in GCC Countries/South East Asia and United Kingdom in west and accordingly many studies have been done in those parts of the countries. But when it comes to India where ethical mutual fund is still at start-up stage not many studies have been done. Some of the literature reviews of the researches are as follows:

Elfakhani, S., Hassan, M. K., & Sidani, Y (2005, December) the behaviour of Islamic mutual funds does not differ from that of other conventional funds, with some Sharia compliant mutual funds over-performing their benchmarks and others under-performing them. **Kreander, N., Gray, R. H., Power, D. M., & Sindair, C. D. (2005)** it was found that neither ethical nor non-ethical funds displayed any ability to time the market. Both the funds underperformed when compared to the benchmark. When all the risk adjusted performance measures were considered their performance was similar to the market benchmarks. **Ferdian, I. R., & Dewi, M. K. (2007, August)** The Malaysian Islamic mutual funds seem to outperform the Indonesian Islamic mutual funds. This could be due to the fact that the Malaysian Islamic Capital Market is relatively more established than the Indonesian one. Also the fact that the Indonesian Islamic funds are still in their nascent stage. **Merdad, H., Hassan, M. K., & Alhenawi, Y. (2010)** the conventional funds outperform Islamic funds during the overall and bull periods using all four market indices. However, in the financial crisis period, the Islamic funds perform better than conventional ones, in the sense that they punish investor

less than conventional funds. **Mansor, F., & Bhatti, M. I. (2011, March)** there is a positive correlation between the IMFs and CMFs portfolios, with both portfolios with their market portfolio. **Mahmud, M., & Mirza, N. (2011)** Islamic mutual funds were able to perform better than the conventional mutual funds at the time of recession. But they were unable to yield similar high returns as conventional mutual funds when the market was bullish. **Razzaq, N., Gul, S., Sajid, M., Mughal, S., & Bukhari, S. A. (2012)** Islamic income fund has the highest performance value which is 0.6743 (sharp ratio), which means that the ability of their managers to diversify mutual funds is better. **Ho, C. S. F., Rahman, N. A. A., Yusuf, N. H. M., & Zamzamin, Z. (2014)** in this study it was seen that, during crisis period Islamic indices perform better than conventional ones and are less affected by the crisis providing a hedging alternative due to their lower volatility and betas. But, the results for the various indices are mixed after the Dotcom crisis where conventional Dow Jones and Swiss indices performed better than their Islamic ones but for Kuala Lumpur, Jakarta and FTSE, Islamic indices outperformed their conventional peers.

1.2 OBJECTIVES OF THE STUDY

- To understand ethical investing with special reference to Shariah Compliant Funds.
- To analyse the performance of Shariah Compliant funds for the period 2009-2019 by using Sharpe's ratio, Treynor's ratio, Jensen's Alpha, Sortino ratio, and R-Square.
- To assess the downside risk of ethical mutual funds in comparison to Nifty and Sensex.

1.3 SCOPE OF THE STUDY

Indian mutual fund industry has a wide range of schemes and investment options offered to the investor. This study only focuses on the evaluation of ethical mutual funds with special reference to Shariah compliant funds where three ethical mutual funds have been selected for analysis. The data collected is for the period of 2009-19. An analysis of the ethical fund returns and risk factor is done to explain their volatility relative to the market. The study uses NAV data and does not go into details such as exit loads, fees and other such charges.

1.4 RESEARCH METHODOLOGY

- The statistical tools used to evaluate the performance of funds are Sharpe's ratio, Treynor's ratio, Jensen's Alpha, Sortino ratio, and R-square.
- The data used in this study is secondary source of data. The NAVs of the funds are taken from INVESTWELL website. The index values of Nifty 50 Shariah, Nifty 500 Shariah, Nifty 50 are taken from NSE India website. The index value of S&P BSE 500 Shariah and BSE Sensex are taken from BSE India website.
- The rate of return of treasury bill is taken from CEIC and RBI (rbi.org.in) website.
- The factsheets of the funds are taken from FE analytics and the official website of SenSage Financial Services Pvt Ltd.

1.5 LIMITATIONS

- The data collected was from the year 2009 to 2019 which had not covered different market cycles and market situation. Hence, the performance of portfolios during the time of crisis in market has not been evaluated.
- The overall number of shariah-compliant funds in India are limited to three only.

DATA ANALYSIS**PERFORMANCE ANALYSIS OF ETHICAL MUTUAL FUNDS**

Scheme	Tata Ethical Fund	Taurus Ethical Fund	Reliance ETF Shariah BeEs
Rp	1.42	1.44	1.03
SD	3.80	4.40	3.74
Beta	0.91	0.66	0.99
Coefficient of variance	268.64	304.62	362.25
Sharpe`s Ratio	-1.52	-1.31	-1.65
Treynor`s Ratio	-6.36	-8.78	-6.26
Jensen`s Alpha	-0.43	-2.00	-0.07
Sortino Ratio	-0.80	-0.79	-0.82
R Squared	0.97	0.97	1.00
Downside risk	7.26	7.28	7.47

Rp (Returns of portfolio)

In the above table Rp is the return of portfolio which is an average of returns of 10 years i.e. from Apr 2009 to Mar 2019. There is not even a single fund which has yielded a high return. All the three funds are very much inconsistent because the coefficient of variance of funds is too high. But when comparing them with each other the Tata Ethical Fund is the most consistent of them all.

Sharpe`s Ratio

The Taurus Ethical Fund is having the lowest negative sharpe ratio when compared to Tata and Reliance Funds. The SD is also highest for Taurus fund i.e. the more the total risk is involved the chance of getting more returns is also higher. But still high risk does not always lead to high returns because, the risk may be positive as well as negative. As we can see in the above table the downside risk is the lowest in Tata ethical fund and the coefficient of variance is also low in Tata ethical fund, we can say that its performance is quite consistence among all the three ethical funds. Thus, the risk adjusted return of the ethical fund is not exceeding the risk-free rate of return.

Treynor`s Ratio

The Reliance Fund is having the lowest negative ratio when compared to Tata and Taurus Funds. Thus, the chance of getting more returns is higher. However, the Beta (Market Risk) is highest for the Reliance fund so there is more volatility involved which may lead to negative returns sometimes. For Reliance Fund the beta 0.99 which is close to the default value i.e. 1. With which we can conclude that the Reliance returns are a replica of market returns.

Jensen`s Alpha

The Jensen alpha indicates the abnormal(excess) return which we get on the additional risk we take. In the above funds as we can see the Reliance fund is having the lowest negative alpha it could be because the fund is a passive fund which replicates the market. Thus, the risk involved will also be same which leads to less chance of having an alpha.

Sortino Ratio

Sortino Ratio considers only the negative risk to evaluate the return for a given level of bad risk. It does not take the positive risk because a positive volatility leads to benefit.

The Sortino ratio for Taurus Fund has the lowest negative value which means for every unit of bad risk it takes the returns will also be more. But still for all the three funds the ratio is more or less same but the downside risk for the Tata fund is lowest.

The downside risk for Reliance Fund is the highest which means there is chance that whenever the market falters the fund may tank later on.

R-squared

The R^2 of Reliance fund is 1 which means that the Reliance fund is completely dependent on the Market index (Independent variable). That means the proportion of variance in the Reliance fund can be explained by using the Market index (Nifty 50 Shariah). The R^2 of Tata and Taurus is same (0.97) which means that they are also dependent on market index but not as much as Reliance ETF Fund.

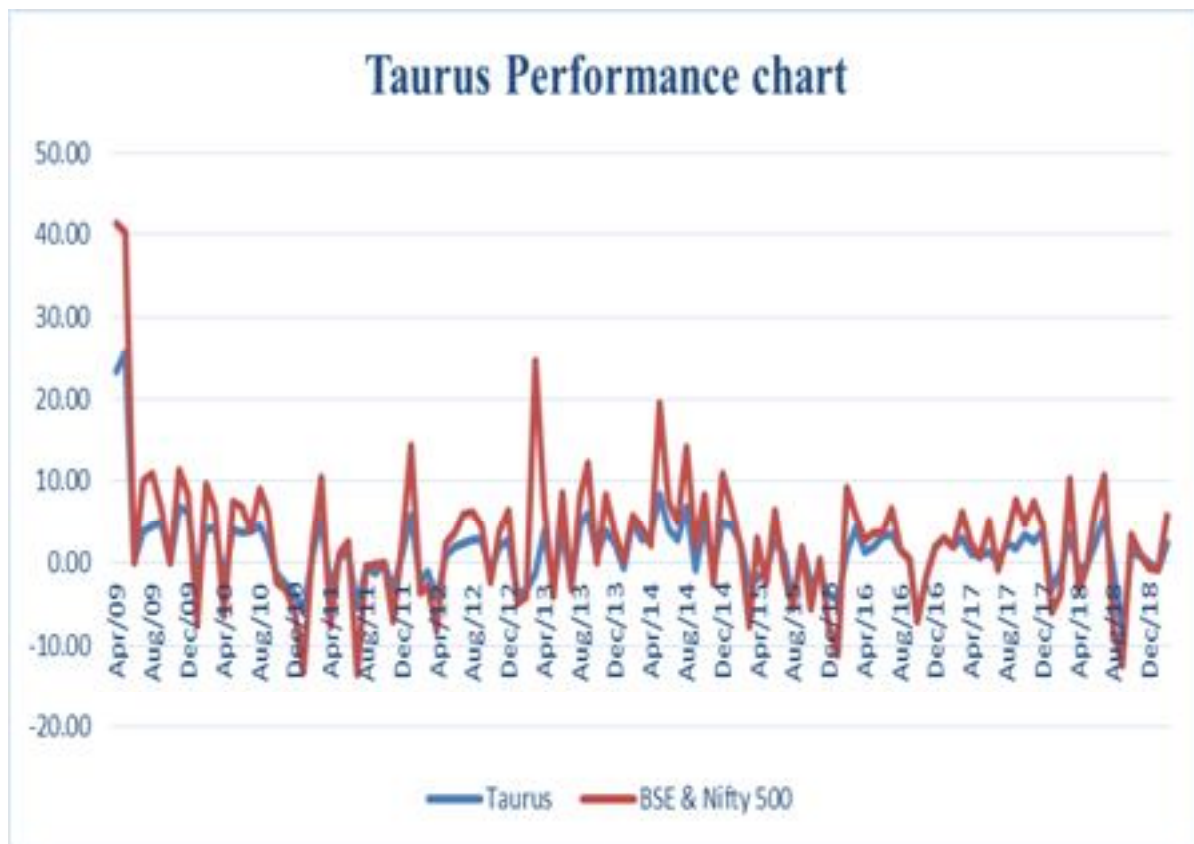
Table-4.2: Ranking based on performance:

	Tata Ethical Fund (Rank)	Taurus Ethical Fund (Rank)	Reliance ETF Shariah BeEs (Rank)
Sharpe`s Ratio	2 nd	1 st	3 rd
Treynor`s Ratio	2 nd	3 rd	1 st
Jensen`s Alpha	2 nd	3 rd	1 st
Sortino Ratio	2 nd	1 st	3 rd
R Squared	0.97	0.97	1.00
Coefficient of Variance	1 st	2 nd	3 rd

Table-4.3: Downside risk:

Schemes	Tata Ethical Fund	Taurus Ethical Fund	Reliance ETF Shariah BeEs	BSE Sensex	Nifty 50
Downside Risk	7.26	7.28	7.47	8.28	7.60

In the above table the downside risk for all the three Ethical mutual funds and market indices has been taken. We can see that the downside risk is the highest for the BSE Sensex and second highest is for the Nifty 50, and the ethical funds are having less downside risk when compared to the market indices. That means there is less chance of getting negative returns in ethical funds when compared to the market index.





FINDINGS

The following are some of the findings of the study

Firstly, the study conveys that the proportion of variance of all the three ethical funds is explained by its benchmark as the r-square of the funds is approximately 1 (Reliance-1, Tata-0.97, Taurus-0.97). The r-square of the Reliance ETF Shariah BeEs is 1. Hence the variation in its performance can be completely known with the help of Nifty 50 shariah. Similarly, in case of the other two funds as well as the r-square is close to 1.

The second finding is that the ethical funds are very much inconsistent as the coefficient of variance of the funds is too high. The downside risk of all the ethical funds when compared to the index funds is low i.e. there is a less of chance of negative returns when compared to BSE Sensex and Nifty 50.

Lastly, the Sharpe, Treynor, Jensen Alpha are negative not only for ethical funds but also for their benchmark. Here as the Jensen's Alpha is negative that means for additional risk taken the fund is not getting any excess return on it. Sharpe and Treynor ratio are also negative which means the funds are not even getting returns higher than the risk-free rate of return (R_f) for the additional risk taken. This could be because the ethical mutual fund does not invest in banking sector and it follows stringent norms.

CONCLUSION

In this study, we have used three ethical mutual funds which are shariah-compliant to evaluate their performance by using different statistical measures. After doing this study we got all the ratios and the Jensen alpha in negative so, we can conclude that the shariah-compliant funds in India are not able to generate potential returns. All the funds are giving negative alpha which means the actual return of the company is lower than the expected rate of return.

This could be due to the stringent norms that the ethical fund follows. The downside risk of ethical funds when compared to Nifty and BSE Sensex is low which means the chance for the Ethical funds to get negative returns is low.

RECOMMENDATIONS

The Investors for whom ethics are prior to profit can go for the ethical mutual fund as an investment option. But for such investors if they can bear risk, they have opportunities to invest in equities of the companies which are Shariah-compliant. Because the potential of equities to give higher returns is greater when compared to mutual funds.

SEBI has mandated that all the financial services companies should conduct investment awareness program about the different investment options available to an investor. In the same way it should stress more on the ethical funds as well, because there are many people who can become potential investors and who want to invest in companies which are socially responsible, but investors are hesitant because they lack awareness about ethical funds.

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