

PERFORMANCE ANALYSIS OF MUTUAL FUND: A COMPARATIVE STUDY OF THE SELECTED DEBT MUTUAL FUND SCHEME IN INDIA

Komal B. Sharma

Researcher
Ahmedabad, Gujarat.
sharma.komal0096@gmail.com

Abstract

Mutual funds playing a key role in the development of India's debt market and have emerged as a key source of funding. Mutual funds considered as one of the best investment options as compared to other alternatives, as low cost is the common feature of the mutual fund. Mutual fund schemes also provide diversified portfolio management and reducing risk and maximizing returns. Mutual fund scheme is the most ideal investment for the common man as it provides a professionally managed stock market and low risk with maximum returns. The basic need and objectives of this study are to evaluate the performance of selected debt mutual fund schemes in India and to examine the risk and return component among these mutual funds. The present study is based on secondary data of five debt mutual funds launched by the different private sector companies between the period of January 2017 to December 2019. The study used NAV and the total return of these selected funds along with different tools of study like alpha, beta, Sharpe ratio, and Jensen's ratio. The study finds out that three mutual funds have performed well and two funds had not performed well during the study period of study and the same as three mutual fund schemes have performed well in the high volatile market expect Axis corporate debt and HSBC fund. Investors are advised to consider the statistical parameter to ensure the consistent performance of the mutual fund. This study is providing some insight into the performance of mutual fund which will help them taking rational investment decisions and allocating their resources in the right mutual fund schemes.

Keywords: Mutual fund performance, Debt mutual fund schemes, return, risk.

INTRODUCTION

A mutual fund is a company that brings money from many people and invests it in stocks, bonds or other assets. The combined holdings of stocks, bonds or assets the funds own known as it's a portfolio. Each investor in the funds owns a share, which represents a part of these holdings. India boasts of a total of 44 mutual funds as of today. With permission from the RBI, the fund house has opened up and investors can now invest in foreign markets like the United States. And with such positive development, the asset classes today have also moved on from just equity and debt to gold funds, inflation and more innovative funds like arbitrage funds.

The mutual fund industry in India began in 1963 with the formation of the Unit Trust of India as an initiative of the Government of India and Reserve Bank of India under the Act of Parliament. Later, in 1987 SBI mutual fund became the first non-UTI mutual fund in India. Subsequently, the year 1993 heralded a new era in the mutual fund industry. This was marked by the entry of private companies in the sector after the Securities Exchange Board of India Act was passed in 1992. The SEBI mutual fund regulations came into beginning in 1996. Since then continued to grow exponentially with foreign institutions setting shop in India, through joint ventures and acquisitions.

As the industry expanded, a non-profit organization, the association of mutual fund in India (AMFI) was established in 1995. Its objective is to promote healthy and ethical marketing practices in the Indian mutual fund industry. SEBI has made AMFI certification mandatory for all those engaged in selling or marketing Mutual Fund products. In 2003, the UTI Act of 1963 was replaced and was divided into two separate entities- the UTI mutual fund, which is sponsored by PNB, SBI, LIC, and BOB, which are registered and compiles. The second entity is the specified undertaking of the Unit Trust of India. The bifurcation was effective from 2003.

After the global economic recession of 2009, the Indian mutual fund industry struggled to recover from these hardships and remodel itself over the next two years. Recognizing the lack of penetration of mutual fund India, SEBI launched numerous progression measures in September 2012 to bring more transparency and security for the interest of the stakeholders.

Since May 2014 the Indian mutual fund industry has experienced consistent inflow and rise in overall AUM as well as a total number of investor account (portfolio). It is estimated that Indians save approximately 20-30 lakh crores annually. Over the years this industry has evolved from being UTI dominated one to one where there is balanced participation or both public and private sector.

REVIEW OF LITERATURE

Here an attempt has been made to briefly review the work already undertaken and methodology employed. A brief review of selected studies has been presented below:-

S.M. Adhav and P Chauhan (2015) assessed the performance of mutual fund schemes of selected Indian companies in terms of risk-return relationship to compare the performance of mutual fund schemes of selected Indian companies based on benchmark index and concluded that during the last 5 year the performance of mutual fund of selected Indian companies is superior.

S. Sharma et al. (2014) compared the performance of various mutual fund schemes based on benchmark index to bring out the scheme is outperforming or underperforming the benchmark and concluded that as India has a developing economy, almost every sector is likely to within a huge growth going forward.

R. Kaur (2014) examined that the risk and return component among these mutual fund schemes and the relationship between NAV and market portfolio return with the help of various measures like standard deviation, beta, R-square, Sharpe, Treynor, Fama's measure and find that open-ended debt mutual fund not performed better than the benchmark indicator.

M. Jayalakshmi and V. Palanichamy (2020) evaluated the performance of selected HDFC mutual fund undergrowth scheme and compare the schemes return and risk with benchmark index within o the help of various measures like Sharpe, Treynor, and Jenson's investment portfolio and concluded that the Sharpe and Treynor give a positive response to the decision-making process whereas Jenson's measure gives the negative response to the same.

M. Jayadev(1996) examined the growth-oriented mutual fund are earning higher returns than the benchmark index or not with the help of Sharpe, Treynor and Jenson's portfolio investment measure and find out that growth-oriented mutual fund has not performed better than their benchmark indicator.

P Dhume and B. Ramesh(2011) evaluated the performance of the sector mutual fund in relation with the market and performance using different approaches of performance measure and study the risk-return analysis of the sector fund a concluded that all the sector funds have outperformed the market according to Sharpe and Treynor, excluded infrastructure sector.

RESEARCH GAP

Numerous studies have been conducted on various aspects performance analysis of mutual fund schemes like the comparative study of mutual fund selected Indian companies like HDFC reliance etc., Mutual fund performance evaluation based on a benchmark index, performance analysis of debt and equity mutual fund schemes, performance analysis of monthly returns. The literature review conducted for the current study makes it clear that there is further scope for studying the many more issues relating to the mutual fund schemes performance analysis. Hence it is decided to research a comparative study of the selected Debt mutual fund schemes in India.

NEED OF THE STUDY

The study of performance analysis of selected Debt mutual fund schemes in India is quite desirable as it gives a deep understanding of performance analysis of debt mutual fund schemes, as investors except for consistent return on their investment. These investors are generally confused about pick the best scheme out. This study will provide some insight into the performance of mutual fund which will help them taking rational investment decisions and allocating their resources in the right mutual fund scheme.

RESEARCH METHODOLOGY

Objective of the study

- To evaluate the performance of selected debt mutual fund schemes in India.
- To examine the risk and return component among these mutual funds.

Sources of data

The study is based on secondary data collected from historical NAV and Factsheets by Asset Management Company (AMC).

Scope of study

The present study comprises of 5 debt mutual fund schemes launched by the different Asset Management Company. The period of this research work is from January 2017 to December 2019. The NAV of the selected scheme has been compared for three years with an annual return.

Statistical tools

Alpha: Alpha is the representation of the difference between the mutual fund's actual return and the expected return. It is a measure to gauge the level of outperformance, or in simpler terms how good or bad the mutual fund has performed when compared to a benchmark. A positive alpha implies that a mutual fund has performed above its yardstick or benchmark index.

Beta: Beta is also referred to as Beta co-efficient. It is a tool to measure the volatility of a specific security or a mutual fund by comparing it to the performance of a related benchmark over some time. Beta measures the relative risk of a mutual fund or portfolio concerning the market portfolio. It reflects the systematic risk associated with the mutual fund. The market index has a beta of one. Where there is a beta higher than one, it means that the mutual fund is riskier than the benchmark. Similarly, a beta less than one indicates lesser volatility than the benchmark.

Standard deviation: A Standard deviation is a tool that measures the deviation or dispersion of the data from the mean or averages. When seen in mutual fund standard deviation tells that how much the return from mutual fund portfolio is straying from the expected return.

Sharpe ratio: The Sharpe ratio uses the standard deviation to measure mutual fund scheme risk-adjusted returns. It will tell how well the mutual fund portfolio has performed more than the risk-free return. This essentially gives an idea if returns are due to smart investment decisions or excessive risk. Higher the Sharpe's ratio better the risk-adjusted return of a mutual fund portfolio.

Debt Fund (Table 1)

No.	Fund name	NAV for 2017(₹)	Return for 2017(%)	NAV for 2018(₹)	Return for 2018(%)	NAV for 2019(₹)	Return for 2019(%)
1	BNP PARIBAS Flexi Debt Fund	29.58	2	30.62	3.5	32.98	11.49
2	Nippon India Income Fund	16.26	1.62	16.92	4.06	15.07	-7.31
3	Axis Corporate Debt Fund	10.17	1.70	10.69	5.11	11.78	15.83
4	HSBC Debt Fund	27.72	2.67	27.88	0.58	31.69	14.32
5	IDFC bond Fund	42.98	2.33	41.12	-4.33	47.33	10.12

Risk Ratio

Ratios calculated on daily returns for the last 3 years

No.	Fund name	STANDARD DEVIATION	BETA	SHARPE RATIO	JENSON'S ALPHA
1	BNP PARIBAS Flexi Debt Fund	2.71	0.81	0.56	-0.88
2	Nippon India Income Fund	3.82	1.15	0.73	-0.63
3	Axis Corporate Debt Fund	2.98	1.11	0.63	-0.94
4	HSBC Debt Fund	3.46	1.06	0.37	-1.89
5	IDFC Bond Fund	3.72	1.12	0.62	-1.01

FINDINGS

Table (1) explains the comparative NAV(Net Asset Value) for the selected mutual fund's schemes.

At the end of the year 2017 NAV & TOTAL RETURN for selected schemes (BNP Paribhas Flexi Debt Fund 29.58 & 2%, Nippon India Income Fund 16.26 & 1.62%, Axis Corporate Debt Fund 10.17 & 1.70%, HSBC Debt Fund 27.72 & 2.67%, IDFC Bond Fund 42.98 & 2.33%). At the end of the year 2018 NAV & TOTAL RETURN for selected schemes (BNP Paribhas Flexi Debt Fund 30.62 & 3.5%, Nippon India Income Fund 16.92 & 4.06%, Axis Corporate Debt Fund 10.69 & 5.11%, HSBC Debt Fund 27.88 & 0.58%, IDFC Bond Fund 41.12 & (-4.33%)). At the end of the year 2019 NAV & TOTAL RETURN for selected schemes (BNP Paribhas Flexi Debt Fund 32.98 & 11.49%, Nippon India Income Fund 15.07 & (-7.31%), Axis Corporate Debt Fund 11.78 & 15.83%, HSBC Debt Fund 31.69 & 14.32%, IDFC Bond Fund 47.33 & 10.12%).

Table (2) reveals the statistical parameters used to analyse the performance of the selected mutual fund scheme.

In BNP PARIBAS Flexi Debt Fund (Growth) it has a standard deviation of fund is 2.71 and beta value of the fund is 0.81 which means the fund is highly volatile and where it has Sharpe's Ratio of the fund is 0.56 and Jensen's Alpha of fund is (-0.88) which says that the fund is a better risk-adjusted return to benchmark indices and it has performed well by providing a better return to the investors. In Nippon India Income Fund (Growth) it has

a standard deviation of fund is 3.82 and beta value of the fund is 1.15 which means the fund is highly volatile and where it has Sharpe's Ratio of the fund is 0.73 and Jensen's Alpha of fund is (-0.63) which says that the fund is a better risk-adjusted return to benchmark indices and it has performed well by providing a better return to the investors. In Axis Corporate Debt Fund (Growth) it has a standard deviation of fund is 2.98 and beta value of the fund is 1.11 which means the fund is highly volatile and where it has Sharpe's Ratio of the fund is 0.63 and Jensen's Alpha of fund is (-0.94) which says that the fund is a poor risk-adjusted return to benchmark indices and it has not performed well by providing a poor return to the investors. In HSBC Debt Fund (Growth) it has a standard deviation of fund is 3.46 and beta value of the fund is 1.06 which means the fund is highly volatile and where it has Sharpe's Ratio of the fund is 0.37 and Jensen's Alpha of fund is (-1.89) which says that the fund is a poor risk-adjusted return to benchmark indices and it has not performed well by providing a poor return to the investors. In IDFC Bond Fund (Growth) it has a standard deviation of fund is 3.72 and beta value of the fund is 1.12 which means the fund is highly volatile and where it has Sharpe's Ratio of the fund is 0.62 and Jensen's Alpha of fund is (-1.01) which says that the fund is a better risk-adjusted return to benchmark indices and it has performed well by providing a better return to the investors.

CONCLUSION

From the foregoing performance analysis of the selected five Debt funds, it's clear that three funds have performed well and two funds had not performed well during the study period. The sharp fall in the NIFTY during the year 2019 has impacted the performance of all the selected funds. In the ultimate analysis, it may be concluded that all the funds have performed well in the high volatile market movement expect Axis Corporate Debt fund & HSBC Debt Fund. Therefore, investors need to consider statistical parameters like alpha, beta, standard deviation while investing in mutual funds apart from considering NAV and TOTAL RETURN to ensure consistent performance of mutual funds.

REFERENCE

- [1] Adhav, M. S. M., & Chauhan, P. M. (2015). Comparative Study of Mutual Funds of Selected Indian Companies. *International Journal of Science, Technology and Management*, 4(2), 44-51.
- [2] Sharma, S., Gaur, A., & Arora, N. Mutual Fund Performance Evaluation: A Benchmark Comparison. *International Journal of Multidisciplinary Consortium*
- [3] Kaur, R. (2014). Performance evaluation of debt mutual fund schemes in India
- [4] Jayalakshmi, M., & Palanichamy, V. (2020). A Study on Performance Evaluation of Hdfc Mutual Funds In India. *Our Heritage*, 68(1), 3458-3466.
- [5] Jayadev, M. (1996). Mutual fund performance: An analysis of monthly returns. *Finance India*, 10(1), 73-84.
- [6] Dhume, P., & Ramesh, B. (2011). Performance analysis of Indian Mutual Funds with a special reference to sector funds.

Websites

- [1] <https://www.sec.gov/investor/tools/mfcc/mutual-fund-help.html>
- [2] <https://m.timesofindia.com/articles/Conceptand-Evolution-of-Mutual-Funds-in-India/articleshow/22187765.cms>
- [3] <https://www.bankbazaar.com/mutual-fund/mutual-fund-industry-in-india.html>
- [4] <https://www.orowealth.com/insights/blog/history-of-mutual-funds-in-india/>
- [5] <https://www.fincash.com/l/mutual-funds-history-india>