

AN ANALYSIS ON SELECTED SBI MUTUAL FUNDS

Shib Pada Patra*

ABSTRACT

Mutual fund is very important for domestic savings and its mobilization towards profitable investment. The scope of investment in mutual fund has increased to channelize the domestic savings into mutual funds for handsome returns on the investment in the long run. Mutual fund plays important role to develop the Indian economy. Under this backdrop, selected SBI mutual funds are taken to study the performance of the mutual fund and ability of fund manager in portfolio investment using Sharpe Ratio, Treynor Ratio, and Information Ratio, Jensen Measure. The present study is made to find the best performing mutual funds of SBI using Sharpe Ratio, Treynor Ratio, and Information Ratio, Jensen Measure.

KEYWORDS: *Information Ratio, Jensen Measure, Standard Deviation, Sharpe Ratio, Treynor Ratio.*

Introduction

Mutual fund is a financial institution that collects the savings from investors and invests public and private securities in Indian financial markets. The Financial system in India plays an important role to develop the Indian economy with development of capital and money markets in India. Mutual fund is one of the best investments as compared to the other available investments. Investment in Mutual fund is much secured and easy method in complex Indian Financial Market. Fund manager maintains the portfolio investment and looks after the risk of investment on behalf of investor. Investors invest their savings indirectly in Indian financial markets through mutual funds. Risk for investment in securities is diversified investing mutual funds across different investment securities. Investment in mutual funds is made mainly in four different schemes. These are as follows:

Investment in Mutual Fund

A mutual fund investment is made in following schemes:

- **Growth Schemes**

This is an equity scheme; it provides capital appreciation over medium to long period. Major part of this scheme is invested in equities for possible future appreciation of investment.

- **Income Schemes**

Debt scheme is known as income scheme. This provides regular income to investors investing in fixed income securities. These are bonds, corporate debentures etc.

- **Balanced Schemes**

This scheme provides growth as well as income. Under this scheme, investments are made in both shares and fixed income securities.

- **Money Market Schemes**

Easy liquidity, preservation of capital and moderate income are the main features of Money Market Schemes. Funds in this scheme are generally invested in short-term instruments. These are treasury bills, certificates of deposit, commercial paper and inter-bank call money.

* Assistant Professor, Department of Commerce, Chittaranjan College, Kolkata, West Bengal, India.

Review of Literature

In the present paper, books, articles and library resources have been studied as below:

Karmakar (2016) in his book, 'Financial Markets, Institutions & Services' stated concept of mutual funds, types of mutual funds, advantages, disadvantages and functions of mutual funds. Bhole (2004) in his book, 'Financial Institution and Markets' explained types of mutual funds, valuation of NAV, size and structure of mutual funds, UTI funds, regulatory framework. Sarkhel & Salim (2017) in their 'Indian Financial System and Market Operations' book discussed a brief note of mutual funds, UTI and its function with mutual funds. Saha (2015) in his book, 'Capital Markets & Securities Laws' discussed overview of mutual fund industry, risk factors associated with mutual funds, types of mutual funds, Indian mutual funds industry, regulatory framework of mutual funds. Panda & Panda (2012) in their article explained return on mutual funds was more than investment in insurance and mutual fund investment was more risky than investment in insurance investments and investors were more conscious to get information for their investments in insurance. Goyal & Bansal (2013) in their journal 'A Study on Mutual Funds in India' described the managers' ability for mutual fund investments. Ayaluru (2016) in the article 'Performance Analysis of Mutual Funds: Selected Reliance Mutual fund Schemes' analyzed risk return analysis of selected reliance mutual funds in Indian mutual fund industry. Agrawal & Jain (2016) in their research paper 'Investor's Performance towards Mutual Fund in Comparison to Investment Avenues' studied investor's preference to invest in mutual funds and bases of different investment avenues. Singh (2012) in his journal 'A Study on Investors' Attitude towards Mutual Funds as An Investment Option' explained impact of various demographic factors to select of funds for investment in mutual funds. Reepu (2017) in her journal 'A Study on Mutual Funds' showed different mutual fund schemes and risk factors.

Objectives of Study

The main objectives of this paper are as follows:

- To evaluate performance of selected mutual funds in terms of return for investment;
- To find the right mutual fund for investment.

Research & Methodology

As the topic is related with the risk and return of mutual funds, different types of information is used to evaluate the performance of select mutual funds.

Data Analysis

Secondary data is used to analyze the performance of four selected mutual funds.

Research Design

The performances of mutual funds have been analyzed on the basis of five years results using Jensen Measure, Sharpe Ratio, Treynor Ratio and Information Ratio.

Sample Size

For this study, data analysis is restricted to four types of mutual funds and one mutual fund is chosen from each category.

- Equity funds (SBI Magnum Equity Growth);
- Debt/Income funds (SBI dynamic bond fund Growth);
- Balanced funds or hybrid funds (SBI - Magnum Balanced Fund – Growth);
- Liquid funds/ Money market fund (SBI Magnum Insta Cash Fund - Liquid Floater Plan Growth).

Time Horizon

In this study, five years (2012-2013 to 2016-2017) secondary data are used to analyse the four mutual funds of SBI.

Limitations

This study is restricted in the following way:

- This study is restricted to secondary data available in online only;
- This study is based four mutual funds only;
- Only a limited number of tools are being used.

Analysis and Findings

In this section, Jensen Measure, Sharpe Ratio, Treynor Ratio and Information Ratio are measured on the basis of five years result of selected funds. These are analysed as follows:

Sharpe Ratio

In this model, performance of a fund is evaluated on the basis of Sharpe Ratio, which is a ratio of returns generated by the fund over and above risk free rate of return and the total risk associated with it. While a high and positive Sharpe Ratio shows a superior risk-adjusted performance of a fund; a low and negative Sharpe Ratio is an indication of unfavourable performance. Sharpe Ratio is calculated in following way:

$$\text{Sharpe Ratio} = \frac{\text{Portfolio Return} - \text{Risk-Free Rate}}{\text{Standard Deviation}}$$

Where,

Portfolio Return is Annual Return;

Risk-Free Rate is Return on 90 days Treasury Bills.

Table 1: Sharpe Ratio

Type of Fund	Name of Fund	Sharpe Ratio
Equity Funds	SBI Magnum Equity Growth	0.86
Debt/Income Funds	SBI Dynamic Bond Fund Growth	0.83
Balanced Funds Or Hybrid Funds	SBI - Magnum Balanced Fund – Growth	1.32
Liquid Funds/ Money Market Fund	SBI Magnum Insta Cash Fund - Liquid Floater Plan Growth	10.56

Source: Computed by Author

Findings

Table-1 shows that four funds is positive Sharpe Ratio but SBI Magnum Insta Cash Fund - Liquid Floater Plan Growth gives superior risk-adjusted performance as well as SBI - Magnum Balanced Fund – Growth is performing well.

Treynor Ratio

Treynor's ratio is a measurement of the returns earned in excess of what could have been earned on a riskless investment. Higher and positive the Treynor Ratio is meant the better portfolio investment in mutual funds. Treynor Ratio is measured as shown below:

$$\text{Treynor Ratio} = \frac{R_i - R_f}{B}$$

Where,

R_i is the Return on Investment;

R_f is the Risk free rate of return;

B is the beta of portfolio (Treasury bills);

Beta is a measure of the sensitivity of a fund to its index.

It shows the relation between the fund returns and that of its index.

Table 2: Treynor Ratio

Type of Fund	Name of Fund	Treynor Ratio
Equity Funds	SBI Magnum Equity Growth	8.29
Debt/Income Funds	SBI Dynamic Bond Fund Growth	0.71
Balanced Funds /Hybrid Funds	SBI - Magnum Balanced Fund – Growth	11.15
Liquid Funds/ Money Market Fund	SBI Magnum Insta Cash Fund - Liquid Floater Plan Growth	0.16

Source: Computed by Author

Findings

From the above Table-2, SBI - Magnum Balanced Fund – Growth is the best performing funds but SBI Magnum Equity Growth is performing better than SBI Dynamic Bond Fund Growth and SBI Magnum Insta Cash Fund - Liquid Floater Plan Growth.

Jensen Ratio

It measures the difference between market risk and actual performance of the fund. The positive Jensen Ratio shows that portfolio manager have the ability to provide higher returns to the investors. In other words, a positive value for Jensen's alpha means a fund manager has beat the market with his or her stock picking skills. Jensen Ratio is calculated using following formula:

$$\text{Jensen Ratio} = R(i) - (R(f) + B \times \{R(m) - R(f)\})$$

Where,

R (i) = the realized return of the portfolio or investment;

R (m) = the realized return of the appropriate market index;

R (f) = the risk-free rate of return for the time period;

B = the beta of the portfolio of investment with respect to the chosen market index.

Table 3: Jensen Ratio

Type of Fund	Name of Fund	Jensen Ratio
Equity Funds	SBI Magnum Equity Growth	1.51
Debt/Income Funds	SBI Dynamic Bond Fund Growth	-6.84
Balanced Funds Or Hybrid Funds	SBI - Magnum Balanced Fund – Growth	8.19
Liquid Funds/ Money Market Fund	SBI Magnum Insta Cash Fund - Liquid Floater Plan Growth	-2.99

Source: Computed by Author

Findings

Table-3 reports that SBI Magnum Equity Growth and SBI - Magnum Balanced Fund – Growth give positive result and stock picking skills of fund manager of SBI - Magnum Balanced Fund – Growth is the best among four mutual funds.

Information Ratio

The Information ratio is a measure of the risk-adjusted return of a financial security. The information ratio is often used to measure the skill of managers on the return on mutual funds, hedge funds, etc. A high ratio means a manager may have ability to provide higher returns to the investors. Information ratio is measured in the following way:

$$\text{Information Ratio} = \frac{\text{Alpha}}{\text{Standard Deviation}}$$

Alpha can be seen as a measure of a fund manager's performance.

Standard deviation measures the dispersion of data from its mean. Standard deviation involves both the upward as well as the downward volatility

Table 4: Information Ratio

Type of Fund	Name of Fund	Information Ratio
Equity Funds	SBI Magnum Equity Growth	0.09
Debt/Income Funds	SBI Dynamic Bond Fund	-0.02
Balanced Funds / Hybrid Funds	SBI - Magnum Balanced Fund – Growth	0.20
Liquid Funds/ Money Market Fund	SBI Magnum Insta Cash Fund - Liquid Floater Plan Growth	4.07

Source: Computed by Author

Findings

In the Table-4, SBI Magnum Equity Growth, SBI - Magnum Balanced Fund – Growth and SBI Magnum Insta Cash Fund - Liquid Floater Plan Growth show the positive result but fund manager of SBI Magnum Insta Cash Fund - Liquid Floater Plan Growth have the ability to provide higher returns to the investors.

Comparative Analysis

Under this section, a comparative study is made among Sharpe Ratio, Treynor Ratio, Jensen Ratio and Information Ratio to find the best performer of the funds.

Table 5: Comparative Study

Name of Fund	Sharpe Ratio	Treynor Ratio	Jensen Ratio	Information Ratio
SBI Magnum Equity Growth	0.86	8.29	1.51	0.09
SBI Dynamic Bond Fund	0.83	0.71	-6.84	-0.02
SBI - Magnum Balanced Fund – Growth	1.32	11.15	8.19	0.20
SBI Magnum Insta Cash Fund - Liquid Floater Plan Growth	10.56	0.16	-2.99	4.07

Source: Source: Computed by Author on the basis of Table-1, 2, 3 & 4

Findings

In the Comparative Study of Table-5, the best choice of investment in mutual funds in selected funds is SBI -Magnum Balanced Fund – Growth

Conclusion

In this study, SBI Magnum Balanced Fund -Growth is the first choice and the second choice is SBI Magnum Equity Growth for their positive results and fund manager's ability to provide the return on investments. SBI Dynamic Bond Fund growth is the worst for investor for their poor results of fund manager.

References

- ✖ Agrawal, G. & Jain, M. Investor's Performance towards Mutual Fund in Comparison to Investment Avenues, Journal of Indian Research, 2013, pp.1-17.
- ✖ Ayaluru, M. P. Performance Analysis of Mutual Funds: Selected Reliance Mutual fund Schemes, Parikalpana-KIIT Journal of Management, 2016, pp .1-11.
- ✖ Bhole, L. M. (2004). Financial Institutions and Markets. New Delhi: TATA McGraw Hill Publishing Company Limited.
- ✖ Goyel, S. & Bansal, D. A Study on Mutual Funds in India, International Journal of Scientific & Engineering research, 2013, pp. 1-6.
- ✖ Karmakar, A (2016). Financial Markets, Institutions & Services. Kolkata: Oriental Book Company Pvt. Ltd.
- ✖ Panda, B. N. & Panda, J. K. A Factoral Analysis of Mutual Fund Investment and Insurance Fund Investment: A Comparative Study, Journal of Business Management, Commerce & Research , 2012, pp. 1-11.
- ✖ Reepu . A Study on Mutual Funds. Intrnational journal of Management, 2017, PP. -7.
- ✖ Saha, S. S. (2015). Capital Markets & Securities Laws. New Delhi: Taxmann Publications (P.) Limited.
- ✖ Sarkhel, J., & Salim, S (2017). Indian Financial System and Market Operations, New Delhi: Tata McGraw Hill Education Private Limited.
- ✖ Singh, B. K. A Study on Investors' Attitude towards Mutual Funds as An Investment Option, International Journal of research Management, 2012, pp. 1-10.
- ✖ INVESTOPEDIA. <https://www.investopedia.com/terms/s/sharperatio.asp>. Retrieved from Website: <https://www.investopedia.com>
- ✖ MORNINGSTAR. <https://www.morningstar.in/mutualfunds/f0gbr06rou/hdfc-top-200-fund-growth/risk-ratings.aspx>. Retrieved from Website: <https://www.morningstar.in>
- ✖ INVESTOPEDIA. <https://www.investopedia.com/articles/mutualfund/112002.asp>. Retrieved from Website: <https://www.investopedia.com>
- ✖ MUTUALFUNDINDIA. <https://www.mutualfundindia.com/Mf/Performance/Details>. Retrieved from Website: <https://www.mutualfundindia.com>
- ✖ www.moneycontrol.com
- ✖ www.valueresearchonline.com
- ✖ www.morningstar.in
- ✖ www.mutualfundindia.com
- ✖ www.investopedia.com

