An Exploration of the Assessment of Risk and Return within SBI's Equity Mutual Funds

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ABSTRACT

The mutual fund industry in India originated in 1963 with the establishment of the Unit Trust of India, a collaborative effort between the Indian government and the Reserve Bank of India. In recent times, mutual funds have gained substantial prominence, not only on a global scale but notably within India as well. Mutual fund companies are consistently introducing innovative strategies to appeal to a broader customer base. This research paper seeks to offer a comprehensive understanding of mutual funds, their diverse array of investment options, and an in-depth analysis of the associated risk and return factors like mean return, standard deviation and Sharpe ratio. Additionally, it focuses on the performance evaluation of specific SBI Equity Mutual Fund schemes, which play a significant role in the Indian economy. In summary, this paper explores the historical evolution of the mutual fund sector in India, the contemporary trends in the industry, and the specific focus on SBI Equity Mutual Fund schemes in terms of their performance and impact on the Indian financial landscape.

Keywords: Risk, Return, SBI equity mutual fund, financial landscape, Standard deviation, Sharpe ratio.

INTRODUCTION

In today's world, everyone is familiar with financial transaction. In the realm of banking and other financial institutions it is observed huge financial transaction compare to other fields. There are numerous opportunities to do holdings in different industry, different companies and many more. One such way to enter into the financial market is capitalizing in mutual funds. There are multitudes of asset management companies delivering services for mutual funds. India's 1st non-UTI mutual fund was launched by SBI Mutual Fund in July 1993. SBI is the first bank in the realm of finance to start the Mutual Funds in India. The SBI Mutual Fund have a huge customer from the home country as well as Host Country from the customer's loyalty and trust, there was a huge investor to put money into Managed Funds from host and home country.

NEED FOR THE STUDY

- Understanding the risk-return profile of these funds can provide insights into their role in India's economic development.
- Assessing the historical performance and risk factors of these funds can assist in long-term financial planning.
- Knowing the risk and return characteristics of SBI's equity mutual funds can aid in effective asset allocation.
- A study of this nature can serve as an educational resource, enhancing investor knowledge about the intricacies of mutual fund investments, risk assessment, and return expectations.
- This study can help tailor investment strategies to suit different investor profiles by using risk assessment methods like standard deviation and Sharpe ratio.

OBJECTIVES

To study the performance of SBI equity fund with standard deviation and Sharpe ratio.

HYPOTHESIS FOR THE STUDY

Null Hypothesis (H0) - There would be no significant relationship in the performance of SBI equity mutual fund scheme by calculating Standard deviation and Mean return during the study interval.

Alternative Hypothesis (H1) - There would be a significant relationship in the performance of SBI equity mutual fund scheme by calculating Standard deviation and Mean return during the study interval.

REVIEW OF LITERATURE

Mrs. P. Kalpana, Kunchala Hema (2023), it determine whether mutual funds, encompassing both the private and public sectors, exhibit consistent returns even when considering the element of risk.

T. Kusuma (2022), it assessed the past performance of these schemes using indicators like Treynor ratio, Sharpe ratio, and Jensen's ratio. The results, all positive, the Sharpe ratio indicated that these mutual funds performed at or above the risk-free rate.

Dr.J.Murthy (2022), it's essential for both current and prospective investors to take into account parameters like Sharpe ratio, Treynor ratio, beta, and standard deviation. These metrics provide comprehensive performance evaluations from multiple angles, beyond just considering NAV and total return, ensuring the steady performance of mutual funds in India.

L.V.Kamala Devi (2020), it concludes that the superior performance of these select schemes compared to the benchmark is primarily due to their consistent long-term performance rather than diversification.

Panigrahi, C. M. A., Mistry, M., Shukla, et al. (2020), The goal of this study is to assess the performance of the top five ELSS of altered mutual funds in India using a variety of riggings such as Beta, Sharpe ratio, Jensen ratio, and others. It also suggests suitable ELSS for investors to meet their investment goals.

Research gap

The exploration is undertaken because the financial markets are dynamic and constantly changing. After reviewing the literature, it was encountered that many practitioners had studied investment decisions and numerous options, but very few had studied equity mutual funds. When deciding whether to invest in SBI mutual fund in the near future, investors can use the study as a guide. The methods used for the exploration would indicate clearly the investment on this would be beneficial

SCOPE OF THE STUDY

The research is grounded in diverse capital allocation and financial reserves strategies, presenting a multitude of opportunities for investors to choose plans that prove beneficial for their interests as well as for the overall outcome.

STATEMENT OF THE PROBLEM

A financial institution is a company that manages and conducts various financial and monetary activities, including receiving deposits, providing loans, making investments, and facilitating currency exchange. They assist in regulating the economy and financial practices. Market risk in mutual fund securities is subject assortment of risk, it results from fluctuations of lending rates and commodity prices in the market and it affects the sum total of money may be invested in a mutual fund scheme.

This research was initiated to know more about the returns and risk associated in equity mutual funds. Investors are reluctant to make investments since the profits from the equity mutual funds are somewhat risky. As Investors prioritize elevated returns along with minimal risk, the uncertainty risk has a greater impact on the discharge of Pooled Investment Funds.

SBI Mutual Fund stands as a prominent Asset Management Company (AMC) in India, holding a significant 63% ownership stake. This company is affiliated with the most extensive public sector bank in India. This research is grounded in an assortment of savings and investment schemes, providing numerous choices for selecting advantageous investment plans to both individuals and businesses in the market, this study will also prosper to the financial advisors.

LIMITATION OF THE STUDY

This exploration is constrained for certain period and it is restricted to only equity mutual funds.

RESEARCH METHODOLOGY

Descriptive research: The research adopts a quantitative approach, incorporating a range of numerical data and statistics to facilitate drawing conclusions through the utilization of statistical tools and methods. As such, the nature of the study can be categorized as descriptive.

This study analyzes historical performance data; risk measures, and evaluate performance metrics using the numerical facts and figures and data is collected by observation, so it is described as descriptive research.

The techniques used for the present study are Mean return, Sharpe ratio and Standard deviation.

This study is based on the secondary information is procured from source like annual reports, fact sheets, reference books and newspapers, journals, prospectus, magazines and from www.amfiindia.com & economic times.

DATA ANALYSIS AND INTERPRETATION

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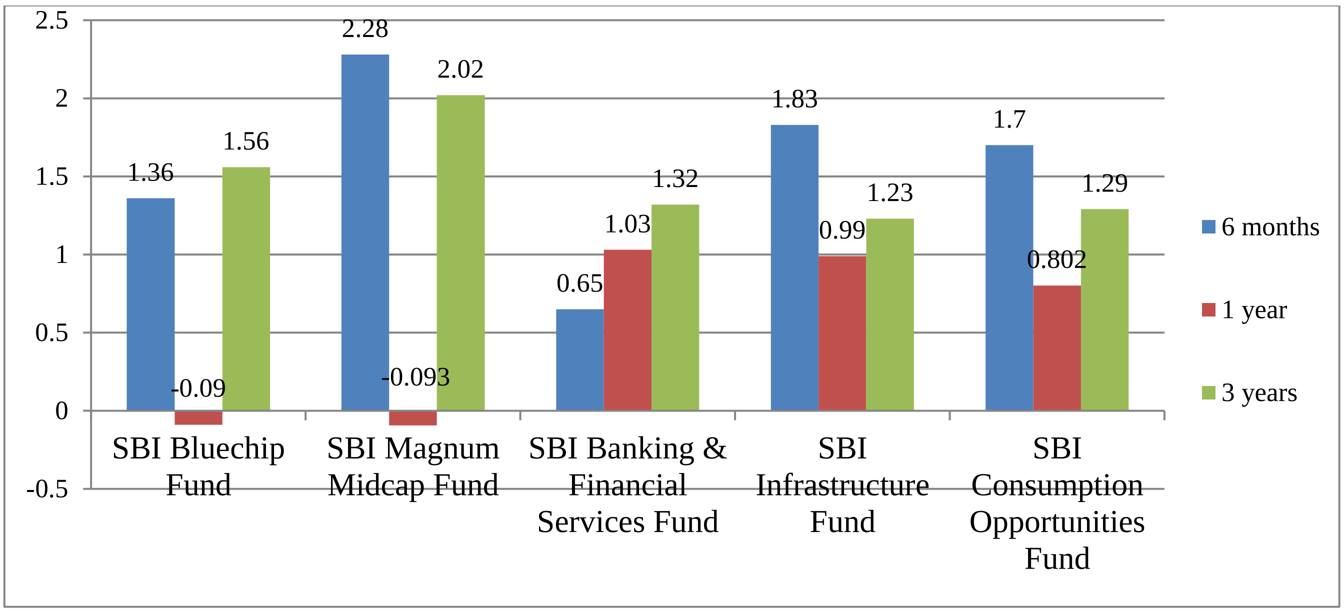
Table 1: Table showing the SBI Equity Mutual Funds Mean Returns based on NAV returns.

Schemes	6 months	1 year	3 years
SBI Bluechip Fund	1.36	-0.090	1.56
SBI Magnum Midcap Fund	2.28	-0.093	2.02
SBI Banking & Financial Services Fund	0.65	1.030	1.32
SBI Infrastructure Fund	1.83	0.990	1.23
SBI Consumption Opportunities Fund	1.70	0.802	1.29

Graph 1: Graph showing the SBI Equity Mutual Funds Mean Returns based on NAV returns.



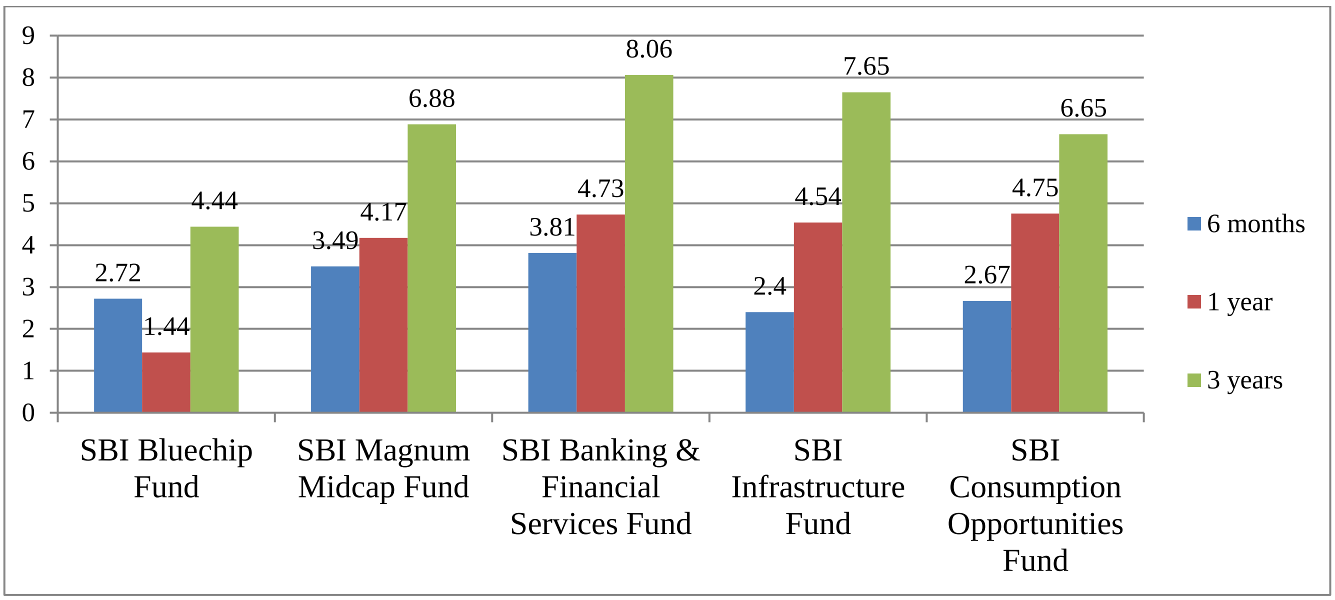
Interpretation

Overall, the SBI Magnum Midcap Fund has historically provided the highest average returns among the listed funds .The SBI Banking & Financial Services Fund suggesting, it has historically offered the lowest average returns. In the one year period both the SBI Bluechip Fund and the SBI Magnum Midcap Fund have experienced negative average returns, the SBI Banking & Financial Services Fund have generated positive returns with highest returns. In the three years performance it is identified that the SBI Magnum Midcap Fund has the maximum mean return, the minimum mean return of the SBI Infrastructure Fund.

Table 2: Table showing the SBI Equity Mutual Funds Standard deviation based on NAV returns.

Schemes	6 months	1 year	3 years
SBI Bluechip Fund	2.72	1.44	4.44
SBI Magnum Midcap Fund	3.49	4.17	6.88
SBI Banking & Financial Services Fund	3.81	4.73	8.06
SBI Infrastructure Fund	2.40	4.54	7.65
SBI Consumption Opportunities Fund	2.67	4.75	6.65

Graph 2: Graph showing the SBI Equity Mutual Funds Standard deviation based on NAV returns.



Interpretation

The SBI Banking & Financial Services Fund which has the highest standard deviation, indicating that it has been the most volatile among the listed funds in terms of fluctuating returns. The other all fund, indicating similar moderate market sensitivity. On the other hand, the SBI Infrastructure Fund has the lowest Standard deviation. In the one year period both the SBI Consumption Fund have experienced, higher volatility or larger standard deviation, whereas the SBI Bluechip Fund has lowest standard deviation compared to other funds in one year. For the three years the standard deviation of the Banking & Financial Services Fund has highest volatility compared to all other listed funds and the Bluechip Fund has less deviation compared to other listed funds, it indicates moderate fluctuations, moderate volatility and risk.

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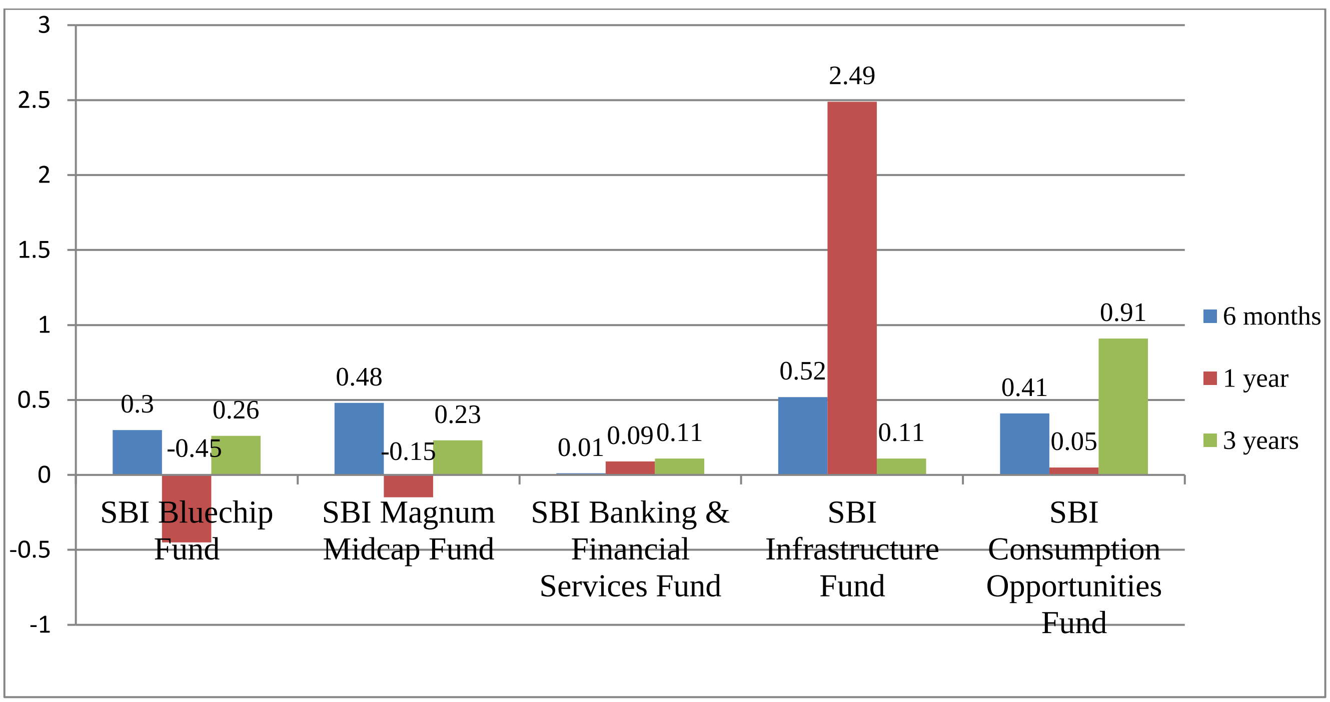
Table 3: Table showing the SBI Equity Mutual Funds Sharpe Ratio based on NAV returns.

Schemes	6 months	Ranking	1 year	Ranking	3 years	Ranking
SBI Bluechip Fund	0.30	4	-0.45	5	0.26	2
SBI Magnum Midcap Fund	0.48	2	-0.15	4	0.23	3
SBI Banking & Financial Services Fund	0.01	5	0.09	2	0.11	4
SBI Infrastructure Fund	0.52	1	2.49	1	0.11	4
SBI Consumption Opportunities Fund	0.41	3	0.05	3	0.91	1

Graph 3: Graph showing the SBI Equity Mutual Funds Sharpe Ratio based on NAV returns.



Interpretation

The SBI Infrastructure Fund stands out with the highest Sharpe ratio, indicating better risk-adjusted returns compared to the other funds listed and also higher Sharpe ratio implies that the fund has been able to generate relatively higher returns for each unit of risk taken. The SBI Banking & Financial Services Fund has a least Sharpe ratio, indicating that its risk-adjusted performance has not been favorable, and it might have incurred losses or underperformed compared to its risk level. In the one year time period the SBI Infrastructure Fund stands out with the highest ratio among the listed funds. Whereas, both the SBI Bluechip Fund have negative as well as least Sharpe ratios, the negative ratio indicates that the mean return is lower than the risk-free rate and suggesting unfavorable risk-adjusted performance. The above graph represents the three years performance of all the listed SBI mutual fund schemes have positive Sharpe ratios, it indicates that they have provided good fund returns for the level of risk taken. The Consumption Opportunities Fund has the highest Sharpe ratio whereas all other fund has comparatively less Sharpe ratio.

HYPOTHESIS TESTING

Significant relationship in the performance of SBI equity mutual fund scheme by calculating Standard deviation and Mean return during the study interval.

	6 months		**1 year**		**3 years**	
Schemes	**Mean returns**	**Standard deviation**	**Mean returns**	**Standard deviation**	**Mean returns**	**Standard deviation**
SBI Bluechip Fund	1.36	2.72	-0.09	1.44	1.56	4.44
SBI Magnum Midcap Fund	2.28	3.49	-0.09	4.17	2.02	6.88
SBI Banking & Financial Services Fund	0.65	3.81	1.03	4.73	1.32	8.06
SBI Infrastructure Fund	1.83	2.4	0.99	4.54	1.23	7.65
SBI Consumption Opportunities Fund	1.7	2.67	0.80	4.75	1.29	6.65
Total	7.82	15.09	2.64	19.63	7.42	33.68
Co-relation Method $\rho_{xy} = \sum(X-\bar{X})(Y-\bar{Y})$	**1.48**		**2.26**		**4.76**	

$\sqrt{(\sum(X-\bar{X})2\sum(Y-\bar{Y})2}$			

Interpretation

The positive value indicates that there would be a significant relationship in the performance of SBI equity mutual fund scheme by calculating Standard deviation and Mean return during the study interval.

It indicates accept the alternative hypothesis H1 and reject the null hypothesis H0.

In all the time period alternative hypothesis has been accepted indicating that the SBI equity mutual fund is yielding well with moderate risk.

CONCLUSION

According to the study the global mutual fund business is currently one of the most popular investment options. It is essential to a nation's economic development. It will yield strong profits if the market performs well and vice versa. Majority of the schemes have high risk and high returns. It can be said that SBI Magnum Equity Mutual Fund has outperformed with the high risk over the past years as well as in the present six months period it can be observed that the higher returns often come with higher risk. Financial advisors can examine and help investors to choose the best equity diversified funds to achieve risk adjusted returns by using Sharpe Ratio as a technique. An investment in equity mutual fund offers investors a long-term capital gain and the security of their money.

This study concludes that the mutual fund is a safe tool for speculating and it's essential to consider the investment goals, risk tolerance, and time horizon when selecting a mutual fund.

Historical performance does not guarantee future results, and diversifying across different funds and asset class can help manage risk in the investment portfolio. Many investors' sole opportunity to invest in an intellectually diversified way is through mutual funds. After the several study and research and analysis the following outcomes can be drawn: The SBI Infrastructure Direct Growth Fund has performed well with the moderate risk and returns in the short-term investment for the period of six months in 2023 and also SBI Banking & Financial Services Fund performed good with respect to returns with moderate risk in the duration of one year. The SBI Bluechip Fund has performed well in the past three years with the moderate risk and returns.

SUGGESTIONS

- To get high returns, the investors have to think their investment objectives to take high risk. To manage risk the necessary steps to be taken by the fund manager. To manage risk effectively, diversify the investment across multiple funds. The higher authority should focus on the schemes which are under performed and should plan efficient strategies to manage the fund performance.
- To obtain growth returns, the fund manager should take a proactive role in the investment scenarios. The funds with higher standard deviations are generally riskier investments, while those funds with lower standard deviations are considered less risky. It is essential to consider risk tolerance and financial goals before entering to make investment in mutual funds.
- Investors who look for more returns and good yield should consider the SBI Magnum Midcap Fund and the SBI Infrastructure Fund for the short-term investment. Financial advisors can suggest SBI Magnum Midcap Fund for the investors for both long term and short-term investment as it performs well with the moderate risk.

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