

THE PERFORMANCE ANALYSIS OF SELECTED SBI MUTUAL FUND SCHEMES

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ABSTRACT

Mutual funds provide a mechanism to invest in the stock market without knowing the complexities of the stock market. Mutual funds provide the best option to the investors who have no knowledge of the stock market. Mutual Fund is the most suitable investment for the common man as it offers an opportunity to invest in a diversified, professionally managed basket of securities at a relatively low cost. The present study aims to evaluating the historical performance of selected SBI Growth and open ended Mutual fund schemes

Keywords: Performance evaluation, Risk – Return analysis, fund return, Market Return, Risk Adjusted Performance Measures.

INTRODUCTION

A mutual fund is a pool of money collected from many small investors, which is professionally managed by the portfolio managers. It is a type of collective investment scheme and invests it various securities such as in stocks, bonds and short-term money market instruments. The performance of the fund depends upon the economic condition of the country and the world as a whole. The Indian financial sector in general and the mutual fund industry in particular continue to take turnaround from early 1990s, when the government has opened the economy for private and foreign players. The reform process has sent signals to the waves of changes in saving and investment behavior, adding a new dimension to the growth of the financial sector. Mutual fund came out with a good investment option to medium and small investors who do not excel in the stock market due to lack of professional knowledge, limited resources and failure to diversify.

Mutual Funds can provide expert advice and portfolio management by reducing unsystematic risk, while offering good returns. They are considered to be the powerful engines and catalytic agents for resource mobilization from the common investors to the corporate sector. It provides the benefits of diversification, professional management, liquidity of investment, low initial investment, reduced risks, tax benefits etc. The mutual fund is a trust that pools the savings of a number of investors who share a common financial goal. This pool of money is invested in accordance with a stated objective. The joint ownership of the fund is thus "Mutual", i.e. the fund belongs to all investors. Investors invest money and get the units as per the unit value which can be called as Net Assets Value (NAV). The income earned



through these investments and the capital appreciations realized are shared by its unit holders in proportion the number of units owned by them. Thus a Mutual Fund is the most suitable investment for the common man as it offers an opportunity to invest in a diversified, professionally managed basket of securities at a relatively low cost.

REVIEW OF LITERATURE

Sachin Kumar Rohatgi, P.C. et al. (2020), the study evident that the ranking given by Sharpe ratio and Treynor ratio are not justified in the monthly returns. Seema Sharma (2015) attempted to assess the overall investor perspective using a research design and it was found that the Service quality and customer satisfaction have been conceptualized as distinct, but closely related constructs. There is a positive relationship between the two constructs. Veeraiah, K. and Kishore Kumar, A. (2014), compares the performance of Indian owned mutual funds by using a five year NAVs and portfolio allocation. The findings of the study reveal that, mutual funds out perform naïve investment. Mutual funds as a medium-to-long term investment option are preferred as a suitable investment option by investors. Rupeet Kaur (2013) observed that, the Oryx mutual fund has performed almost equal to the benchmark indicators. However, the average return of the schemes is less than the market index but the difference is insignificant for the study period. Vikas kumar (2011), evaluated of open ended schemes of mutual funds. It is established that the private sector players hold the greater strength in resource mobilization. On the other hand, in the public sector, UTI holds a favorable position. But in terms of performance UTI contributes in a big. Asokan (2008) through his article give a brief adscription about mutual funds, its structure, the process of mutual fund operation, history of mutual fund in India, the classification, AMFI and the steps to be taken by investors while selecting a mutual fund. Kompalli Sasi Kumar (2007), analyzed and evaluated 40 schemes of UTI schemes use as data from 1990 to 2005 and he concluded all the schemes of UTI Mutual Fund are moving in accordance with the benchmark NSE. Singh (2003) analysed in detail the growth pattern of mutual fund industry in India and tried to evaluate the performance of mutual funds in India. He found out that the tailor made product was a must for survival of the industry and regulatory bodies must function properly. Tripathy (1996) in her paper examined the importance and growth of mutual fund and evaluated the operations of mutual funds and suggested some measures to make it a successful scheme in India

Objectives of the Study

- > To examine the risk and return component among these mutual funds.
- > To study the performance of select SBI mutual fund schemes with the help of risk adjusted performance measures.



RESEARCH METHODOLOGY

Sample: The sample consists of 3 mutual fund schemes offered by SBI Asset Management Company. The total mutual fund schemes are open ended growth Schemes.

| Sl.No | Fund / Scheme Name | Туре |
|-------|------------------------|--------------|
| 1 | SBI Magnum Equity Fund | Open - ended |
| 2 | SBI Blue Chip Fund | Open - ended |
| 3 | SBI Magnum Global Fund | Open - ended |

List of Sample Selected Schemes

DATA COLLECTION:

Secondary data: Using secondary data the study analyzes the performance and characteristics of 3 actively managed equity schemes. All the sample schemes are open ended in nature and are predominantly equity based with growth as their objective.

Benchmark portfolio: The BSE Sensex has been used as the benchmark portfolio to compare with the performance of the sample schemes.

The Risk – Free Proxy: In this study 91-Days Treasury-Bills (T-Bills) will be used as a surrogate for risk free rate of return.

Time Period of the Study: The period covered by this study is 8 years, i.e., 2010 to 2018.

DATA ANALYSIS: The data collected from both sources is analyzed with the help of specific statistical and financial tools that are employed i.e., Measurement of Rate of Return, Measurement of Risk, Beta (β) Computation, Alpha, Coefficient of Correlation, Coefficient of Determination and Risk Adjusted Performance Measures.

SUMMARY

The risk adjusted performance measures of SBI Magnum Equity Fund and it is observed that the standard deviation of the fund (1.46) is lower than the benchmark standard deviation (1.58 of BSE) This indicates that the fund is associated with less risk than that of the market. But the fund has generated below average returns at 0.044 percent than the market average returns of 0.047 percent. It is evident from the analysis that the fund is generating lower returns with associated low risk. The fund returns are (92 percent) correlated with benchmark. The coefficient of determination of the fund was 0.85 which indicates 85 percent of the variation in the fund returns is due to the variation in the market and the remaining 15



percent is due to other causes. The Sharpe's ratio (-0.003) is negative but Treynor ratio (0.006) is positive and higher than the benchmark index ratio. This clearly indicates that the fund generated confusing returns compared to the market. The funds beta (0.85) clearly indicates that the fund has lower risk compared to the market as the beta is less than '1'. The disappointing observation is the negative BSE alpha, which indicates that the fund has not generated expected returns for the period of the study. However, the study clearly states that the SBI Magnum Equity Fund is capable of generating good returns compared to the market. Under the present conditions, the fund is more suitable to the investors to reap the benefits of the bullish market trends.

An analysis of the data reveals that the average returns of the fund is 0.38 percent with an average standard deviation of 1.37. The average returns and the standard deviation of the fund reflect that the fund has generated lower returns at lower risk in comparison to benchmark index. The fund returns are (95 percent) correlated with benchmark. The coefficient of determination of the fund is 0.89 which indicates 89 percent of the variation in the fund returns is due to the variation in the market and the remaining 11 percent is due to other causes. The beta value of the fund varies between 0.73 to 0.90 averaging to 0.83. The higher and lower beta values indicate that the risk associated with the fund is lower than the market risk. The Sharpe ratio (-0.003) of the fund is negative and less than the benchmark Sharpe ratio. The Treynor ratio of the fund is also less than the average Treynor ratio of the benchmark index. The disappointing observation is the negative alpha value and this indicates that the fund has not generated the expected returns for the period of the study. The Jensen Ratio is positive (0.004). However, from the analysis it is clear that the fund, SBI Blue Chip fund is not capable of generating good returns to the investors at the higher risk levels compared to the market.

From the analysis presented in the tables it is observed that the SBI Magnum Global Fund has generated average returns of 0.049 percent against the benchmark average returns of 0.047 percent. The average standard deviation of the fund is 1.26 which is lower than the average benchmark standard deviation (1.58 of BSE). Hence, the fund is able to generate higher returns at lower risk against the benchmark index. The beta value of the fund being 0.59 indicates that the fund has low risk level when compared to the market risk. The fund returns are (77 percent) correlated with benchmark. The coefficient of determination of the fund is 0.59 which indicates 59 percent of the variation in the fund returns is due to the variation in the market and the remaining 41 percent is due to other causes. The average Sharpe ratio (0.005) and the average Treynor ratio (0.013) of the fund are higher than the benchmark average Sharpe ratio (0.003) and the average Treynor ratio (0.009), due to the lower standard deviation and beta values associated with the fund. The positive alpha (0.02) and Jensen Ratio (0.03) values resembles that the fund is able to generate moderate returns than the expected returns. On the whole the fund performance is good.



CONCLUSION

The performance of mutual funds is analysed in terms of risk and returns based on riskreturns and risk-adjusted measures to achieve the first objective of the study for the time period of 01 April, 2010 to 31 March, 2018. The analysis has revealed that the SBI Magnum Equity Fund is capable of generating good returns compared to the market. Under the present conditions, the fund is more suitable to the investors to reap the benefits of the bullish market trends. But SBI Blue Chip fund is not capable of generating good returns to the investors at the higher risk levels compared to the market. And SBI Blue Chip fund is not capable of generating good returns to the investors at the higher risk levels compared to the market. Based on the findings, it is concluded that all of the selected sample schemes generated returns as per the market conditions and moved according to the market directions and movements.

References.

- 1. Sachin Kumar Rohatgi, P.C. et al., "Validation of Selection Techniques of Mutual Fund Schemes In India", International Journal of Recent Technology and Engineering (IJRTE), ISSN: 2277-3878, Volume-8 Issue-5, January 2020.
- 2. Nalina K.B., Anusha P. Kottur, "A Study on Mutual Fund Performance Evaluation", VSRD International Journal of Business and Management Research, Vol. IV, Issue III March 2014.
- 3. Veeraiah, K. and Kishore Kumar, A., "A Comparative Performance Analysis of Select Indian Mutual Fund Schemes", Asia Pacific Journal of Applied Finance, Vol. III Issue I, January 2014.
- 4. Karrupasamy, R and Vanaja, V., "A Study On The Performance Of Selected Large Cap And mall & Mid Cap Mutual Fund Schemes In India", **The International Journal of Management**, Vol 2 Issue 3, July, 2013.
- 5. Rupeet Kaur, "An Empirical Study on The Performance Evaluation of Oryx Mutual Fund In Oman", International Journal of Marketing, Financial Services and Management Research, Vol.2, No. 9, September (2013).
- 6. Lenin Kumar Nooney and Rama Devi. V, "Performance Evaluation Of Indian And Foreign Mutual Funds : A Comparative Study", International Journal of Marketing, Financial Services and Management Research, Vol.1,No.4,April 2012,
- 7. Alekhya. P, "A Study on Performance Evaluation of Public & Private Sector Mutual Funds in India", Asia Pacific Journal of Marketing and Management Review, 2012; 1 (2):147-168.
- 8. Vikas kumar, "Performance evaluation of open ended schemes of mutual funds", International Journal of Multidisciplinary Research, Vol.1, Issue. 8, December 2011.
- 9. Asokan, T., "Mutual Funds: A Global Choice of Investment", Management Innovator, 1(1), pp. 45-59, 2008.
- 10. Kompalli Sasi Kumar, "Mutual Funds in India: A Study of UTI Mutual Fund", Ph.D. Thesis submitted to Osmania University, 2007.
- 11. Singh, J., "Growth, Performance and Prospectus of Mutual Funds in India", Finance India, 18(4), 1755-1760. 2003.
- 12. Tripathy, N. P., "Mutual fund in India: A Financial Service in Capital Market", Finance India, 10(1), 85-91. 1996.

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- 13. Vasantha, Maheswari and Subashini, "Evaluating the Performance of some selected open ended equity diversified Mutual fund in Indian mutual fund Industry", International Journal of Innovative Research in Science, Engineering and Technology, Vol. 2, Issue 9, September 2013.
- 14. Bhaskar Biswas, "Investigation of Outperformance and Underperformance of Some Selected Diversified Equity Fund Schemes in Indian Mutual Fund Industry". International Journal of Marketing, Financial Services and Management Research. 2013; 3(2):96-116.
- 15. Anuj Kumar, Rahat Ali, "A comparative study of equity based mutual fund scheme of LIC and UTI", VSRD International Journal of Business and Management Research, Vol. 3, No. 3 March 2013.
- 16. Suresh Naidu and Sudhir, "Performance and Characteristics of Retail Equity Mutual Funds in India" Volume:01, Number:01, Nov-2011: **RJCBS**.
- 17. TariqZafar, Chaubey, Syed Imran Nawab Ali, "An empirical study on Indian mutual funds equity diversified growth schemes" and their performance evaluation" Volume2, Issue2, International Journal of Research in IT, Management and Engineering, ISSN: 2249-1619.
- 18. Selvavinayagam, "A study on performance evaluation of debt and equity fund in coimbatore capital limited", Asian Journal of Multidimensional Research, Vol.1 Issue 5, October 2012, ISSN 2278-4853.
- 19. Agrawal, D. (2007). Measuring Performance of Indian Mutual Funds. **PrabhandanTanikniqui**, 1, 1: 43-52.
- 20. Aneel Keswani and David Stolin, (February 2004, JEL) Determinants of Mutual Fund Performance Persistence: A Cross-Sector Analysis.
- 21. Agrawal G D (1992), "Mutual Funds and Investors' Interest", Chartered Secretary, Vol. 22, No. 1 (Jan), p. 23.
- 22. Barua, S. K., Raghunathan, V. and Verma, J. R. (1991). Master Share: A Bonanza for Large Investors. Vikalpa, 17, 1: 29-34.
- 23. Barua S K, Varma J R, Venkiteswaran N (1991), "A Regulatory Framework for Mutual Funds", Economic & Political Weekly, Review of Management & Industry, Vol. 26, No. 21, May 25, p. 55-59.
- 24. Bhole L M (1992), "Proposals for Financial Sector Reforms in India: An Appraisal (Perspectives)", Vikalpa, Vol. 17, No. 3 (Jul-Sep), p. 3-9.
- 25. Bal R K, Mishra B B (1990), "Role of Mutual Funds in Developing Indian Capital Market", Indian Journal of Commerce, Vol. XLIII, p. 165.
- 26. Sharpe, W. (1966), "Mutual Fund Performance". The Journal of Business, Vol. 39, Issues1, pp 119-138.

<u>www.mutualfundsindia.com</u>, <u>www.amfiindia.com</u>, <u>www.mutualfunds.com</u>, <u>www.moneycontrol.com</u> and <u>www.sbimf.com</u>



SBI MAGNUM EQUITY FUND

| Year | Returns (BSE) | Risk free returns | Returns (Fund) | Risk of Fund Returns | Coefficient of correlation | Coefficient of determination | Beta | Alpha | Sharpe Ratio | Treynor Ratio | Jensen Measure | Sharpe Ratio (BSE) | Treynor Ratio (BSE) |
|---------|-----------------------|----------------------|-------------------|----------------------------|----------------------------------|------------------------------|----------|---------|-----------------|------------------|-------------------|---------------------------|---------------------------|
| | R _m | R _f | R _p | $\sigma_{ m p}$ | R | \mathbf{r}^2 | β | α | S | Т | J | \mathbf{S}_{m} | T _m |
| 2010-11 | 0.06455 | 0.11499 | -0.0078 | 2.018 | 0.82291 | 0.67719 | 0.95637 | -0.0695 | -0.06084 | -0.12837 | -0.117755 | -0.02905 | -0.05044 |
| 2011-12 | 0.09007 | 0.01461 | 0.10758 | 2.04738 | 0.9195 | 0.84548 | 0.9811 | 0.01921 | 0.045407 | 0.094756 | 0.0932413 | 0.039327 | 0.075462 |
| 2012-13 | -0.1574 | -0.1341 | -0.1723 | 2.19758 | 0.92795 | 0.86109 | 0.73327 | -0.0569 | -0.01741 | -0.05218 | -0.074024 | -0.00837 | -0.02329 |
| 2013-14 | 0.26008 | -0.0323 | 0.28558 | 1.66363 | 0.94316 | 0.88955 | 0.82 | 0.07232 | 0.191086 | 0.38768 | 0.3120801 | 0.152807 | 0.292396 |
| 2014-15 | 0.04696 | 0.21424 | 0.04401 | 0.89762 | 0.93235 | 0.86928 | 0.75864 | 0.00838 | -0.18965 | -0.22439 | -0.118521 | -0.15163 | -0.16727 |
| 2015-16 | -0.0363 | 0.08637 | -0.0063 | 1.07496 | 0.95606 | 0.91405 | 0.80263 | 0.0229 | -0.08618 | -0.11542 | -0.075592 | -0.09583 | -0.12271 |
| 2016-17 | 0.03489 | -0.0379 | 0.03626 | 0.75032 | 0.87504 | 0.76569 | 0.82817 | 0.00736 | 0.098808 | 0.089519 | 0.0676288 | 0.09179 | 0.072769 |
| 2017-18 | 0.07484 | 0.07351 | 0.06542 | 1.05197 | 0.97504 | 0.95071 | 0.93492 | -0.0046 | -0.00769 | -0.00865 | -0.003307 | 0.001217 | 0.001336 |
| Average | 0.04721 | 0.037428 | 0.044056 | 1.462683 | 0.919001 | 0.84663 | 0.851888 | -0.0001 | -0.00331 | 0.005368 | 0.010469 | 3.26E-05 | 0.009782 |

Source: sbimf.com com and computed



SBI BLUE CHIP FUND

| Year | Returns (BSE) | Risk free returns | Returns (Fund) | Risk of Fund Returns | Coefficient of correlation | Coefficient of determination | Beta | Alpha | Sharpe Ratio | Treynor Ratio | Jensen Measure | Sharpe Ratio (BSE) | Treynor Ratio (BSE) |
|---------|------------------|----------------------|-------------------|----------------------------|----------------------------------|------------------------------|----------|---------|-----------------|------------------|-------------------|--------------------------|---------------------------|
| | R _m | R _f | R _p | $\sigma_{ m p}$ | R | \mathbf{r}^2 | β | a | S | Т | J | S _m | T _m |
| 2010-11 | 0.06455 | 0.11499 | 0.01071 | 1.55747 | 0.97152 | 0.94385 | 0.8714 | -0.0455 | -0.06695 | -0.11966 | -0.0894861 | -0.02905 | -0.05044 |
| 2011-12 | 0.09007 | 0.01461 | 0.06546 | 1.80038 | 0.95659 | 0.91507 | 0.89754 | -0.0154 | 0.028245 | 0.056657 | 0.05234901 | 0.039327 | 0.075462 |
| 2012-13 | -0.1574 | -0.1341 | -0.1733 | 2.13735 | 0.94829 | 0.89925 | 0.72881 | -0.0586 | -0.01836 | -0.05385 | -0.0756034 | -0.00837 | -0.02329 |
| 2013-14 | 0.26008 | -0.0323 | 0.26553 | 1.7337 | 0.96475 | 0.93074 | 0.87409 | 0.03819 | 0.171794 | 0.34074 | 0.2937709 | 0.152807 | 0.292396 |
| 2014-15 | 0.04696 | 0.21424 | 0.01799 | 1.03468 | 0.93666 | 0.87733 | 0.87852 | -0.0233 | -0.18967 | -0.22338 | -0.1702213 | -0.15163 | -0.16727 |
| 2015-16 | -0.0363 | 0.08637 | -0.0167 | 1.03676 | 0.95292 | 0.90805 | 0.77157 | 0.0113 | -0.09946 | -0.13364 | -0.0833818 | -0.09583 | -0.12271 |
| 2016-17 | 0.03489 | -0.0379 | 0.06607 | 0.67869 | 0.85872 | 0.7374 | 0.73515 | 0.04043 | 0.153167 | 0.141404 | 0.09392141 | 0.09179 | 0.072769 |
| 2017-18 | 0.07484 | 0.07351 | 0.07262 | 1.00554 | 0.94968 | 0.90189 | 0.87041 | 0.00748 | -0.00088 | -0.00102 | 0.00864023 | 0.001217 | 0.001336 |
| Average | 0.04721 | 0.037428 | 0.038548 | 1.373071 | 0.942391 | 0.889198 | 0.828436 | -0.0057 | -0.00276 | 0.000906 | 0.003749 | 3.26E-05 | 0.009782 |

Source: sbimf.com com and computed



SBI MAGNUM GLOBAL FUND

| Year | Returns (BSE) | Risk free returns | Returns (Fund) | Risk of Fund Returns | Coefficient of correlation | Coefficient of determination | Beta | Alpha | Sharpe Ratio | Treynor Ratio | Jensen Measure | Sharpe Ratio (BSE) | Treynor Ratio (BSE) |
|---------|------------------|----------------------|-------------------|----------------------------|----------------------------------|------------------------------|---------|---------|-----------------|------------------|-------------------|---------------------------|---------------------------|
| | R _m | R _f | R _p | $\sigma_{ m p}$ | r | \mathbf{r}^2 | β | α | S | Т | J | \mathbf{S}_{m} | T _m |
| 2010-11 | 0.06455 | 0.11499 | 0.06342 | 1.57733 | 0.80895 | 0.6544 | 0.73484 | 0.01599 | -0.03269 | -0.07017 | -0.0210751 | -0.02905 | -0.05044 |
| 2011-12 | 0.09007 | 0.01461 | 0.05393 | 1.81615 | 0.83004 | 0.68896 | 0.78562 | -0.0168 | 0.021649 | 0.050048 | 0.04245069 | 0.039327 | 0.075462 |
| 2012-13 | -0.1574 | -0.1341 | -0.2935 | 2.02553 | 0.85666 | 0.73386 | 0.62394 | -0.1953 | -0.07872 | -0.25554 | -0.2098605 | -0.00837 | -0.02329 |
| 2013-14 | 0.26008 | -0.0323 | 0.37257 | 1.65619 | 0.8324 | 0.6929 | 0.72047 | 0.18519 | 0.244467 | 0.561972 | 0.39585131 | 0.152807 | 0.292396 |
| 2014-15 | 0.04696 | 0.21424 | 0.02562 | 0.84303 | 0.75063 | 0.56345 | 0.57363 | -0.0013 | -0.22374 | -0.32882 | -0.0972766 | -0.15163 | -0.16727 |
| 2015-16 | -0.0363 | 0.08637 | 0.03912 | 0.87136 | 0.72225 | 0.52164 | 0.4915 | 0.05698 | -0.05423 | -0.09614 | -0.0033339 | -0.09583 | -0.12271 |
| 2016-17 | 0.03489 | -0.0379 | 0.0404 | 0.58984 | 0.57203 | 0.32722 | 0.4256 | 0.02555 | 0.132714 | 0.183927 | 0.05652133 | 0.09179 | 0.072769 |
| 2017-18 | 0.07484 | 0.07351 | 0.09649 | 0.66748 | 0.66221 | 0.43853 | 0.40288 | 0.06633 | 0.034427 | 0.057038 | 0.06687308 | 0.001217 | 0.001336 |
| Average | 0.04721 | 0.037428 | 0.049756 | 1.255864 | 0.754396 | 0.57762 | 0.59481 | 0.01708 | 0.005485 | 0.012789 | 0.028769 | 3.26E-05 | 0.009782 |

Source: sbimf.com com and computed