

AN EMPIRICAL STUDY ON MUTUAL FUND PERFORMANCE WITH REFERENCE TO SBI ASSOCIATE BANKS

¹K. Bhaskar, ²Dr. P. Krishna Moorthy, ³K. Subba Reddy

¹Assistant Professor, ²Professor, ³Assistant Professor

^{1,2,3}Department of Business Administration

^{1,2,3}Annamacharya Institute of Technology & Sciences(Autonomous), Rajampet, India

Abstract

The role of Indian mutual fund industry as significant financial service in financial market has really been noteworthy. In fact, the mutual fund industry has emerged as an important segment of financial market of India, especially in channelizing the savings of millions of individuals into the investment in equity and debt instruments. Mutual funds are seemingly the easiest and the least stressful way to invest in the stock market. Quiet a large amount of money has been invested in mutual funds during the past few years. Any investor would like to invest in a reputed Mutual Fund organization. Mutual Funds have emerged as an important financial intermediary globally, particularly in India where retail investors represent 97.7% of the 4.70 crore investor accounts. Mutual Funds protect the interest of the small investors not only from the downside market risk through the diversification of risks, but also provide the benefits from the upward market returns. It also plays a key role in the inflow of capital to the financial market. The present paper studies the evolution of mutual funds in India and the growth trend of the mutual funds industry in India.

Key Words: Financial Innovations, Sharpe's ratio, Average Maturity, Expense ratio, and Treynor's ratio.

INTRODUCTION:

In fact, the mutual fund industry has emerged as an important segment of financial market of India, especially in channelizing the savings of millions of individuals into the investment in equity and debt instruments. Mutual funds are financial intermediaries concerned with mobilizing savings of those who have surplus and the canalization of these savings in those avenues where there is a demand for funds. The Indian financial system based on four basic components like Financial Market, Financial Institutions, Financial Service, Financial Instruments. All are play an important role for smooth activities of the transfer of funds and allocation of the funds. The main aim of the Indian Financial System is that contributing efficiently services to the capital market. The Indian capital market has been growing tremendously during the second generation reforms. The first generation reform was established in 1991 with the concept of LPG.

Then after 1997 second generation reform was established,still it's going on, includes reforms of industrial investment,fiscal policy,ex-imp policy,public sector,financial sector,foreign investment through the institutional investors,banking sectors.

The spared of banking system has been a major factor in improve financial intermediation in the economy and in the growth of financial savings with progressive liberalization of economic policies ,there has been a rapid growth of capital market,money market and financial services industry including merchant banking,leasing and venture capital,hire purchasing.Compatible with the growth of financial sector and second generation reforms its need to fulfillment of the financial sector.

The main vision for the analysis of this study is to inspect the performance of five star rated mutual funds,given weight of risk,return,and assets under management, net assets value,book value and price earnings ratio.

What is a Mutual Fund?

Mutual fund is a pool of the money, based on trust who invests the savings of a number of investors who contributes a common financial goal, like capital appreciation and dividend earning.The money thus collect is then invested in capital market instruments such as shares, debentures, and foreign market.Investors invest money and get the units as per the unit value which we called as NAV (net assets value).Mutual fund is the most suitable investment for a common man as it offers an favourable to invest in diversified portfolio management, good research team, professionally managed Indian stock as well as the foreign market.The main aim of fund manager is to taking a security that have under value and future will rising, then fund manager sell out of stock.Fund manager focused on risk-return trade off, where minimize the risk and maximize the return through diversification of the portfolio.The most common features of mutual fund unit are low cost.The below mentioned how the transactions will done on mutual fund.

Types of mutual funds:

Investment companies basically are of two types. They are:

1. Closed-end Investment Companies
2. Open-end Investment Companies

Mutual funds are permitted to start both closed-end and open-end schemes by raising at least Rs. 20 crores and Rs. 50 crores respectively. If the minimum amount or 60 percent of selected amount is not collected, the entire amount is to be returned to the investors.

1. Closed-end Investment Companies:

The closed-end investment company is commonly referred to as an investment trust company. This type of company works in much the same way as any industrial company. It issues a fixed number of shares of common stock. The common stock may be listed on an exchange and may be obtained and sold like any other corporation stock. When the stock of a closed-end investment company is acquired through a broker, the broker will be paid commission. Usually, the number of shares of stock is constant in closed-end investment company.

2. Open-end Investment Companies (Mutual Funds):

The open-end investment company is usually referred to as a mutual fund. It offers new issues of shares continuously. In contrast to that of closed-end company, the stock of open-end investment company is not traded on an exchange. It is traded in the over-the-counter market by specific dealers who handle its purchase and sale. The concept of mutuality is that there is only one class of owners who share the gains or losses of the fund with all the other owners. The open-end investment company raises money from the sale of shares which is then invested directly in the securities of other companies.

The study is related to control the investment of unit holders in an efficient manner in the banking sector. The fund manager should plan their portfolio as per objectives of the fund and revise the same as per conditions prevailing in the market. This study makes an attempt here to scrutinize the impact of different factors in the growth potential of mutual funds. It is expected from mutual funds to allow better returns than to the market return. In the past years, the mutual funds industry has grown tremendously in terms of size of funds organized and number of schemes levitated in the market. It was felt important to assess the performance of mutual funds in the banking sector.

REVIEW OF LITERATURE

Dr. Singh B K (2012) detailed about the mutual fund operation, NAV calculation and further several demographic factors of investors towards their attitude of investment have also been considered. Chi-square test has been deployed in order to gain conclusions.

Dr. Vyas R. (2012) prospected that although financial markets have turned to be expensive but different financial instruments which are introduced, require unification. Author researched about factors affecting investors for investing in mutual fund. Research highlighted that mostly investors choose bank and post office deposits as one of the investment avenues, in comparison to Mutual Fund. Equity and SIP are among the priority list.

Prabhavathi Y. et al (2013) focused on understanding about the attitude, awareness and preferences of mutual fund investors. They found that mostly SIPs have been preferred and moreover, Mutual Fund is a choice of several because of better returns as well as professional fund management.

Solanki A. (2016) compared the performance of selected Reliance equity schemes from the time period of 1st April 2007 to 31st March 2016 with BSE National 100 and SENSEX returns. The study concluded that the selected schemes had higher returns than the Benchmark Index. But the study considered only the open ended schemes with only growth options undertaken.

Prof Prabhu G. et al (2016) believed that Mutual Fund Industry in India is at rapid growth rate. It is considered that Mutual Fund investments are less risky in comparison to investments in other securities. But it has been inferred from the study that still several investors have not been aware about the benefits of investing in Mutual Funds.

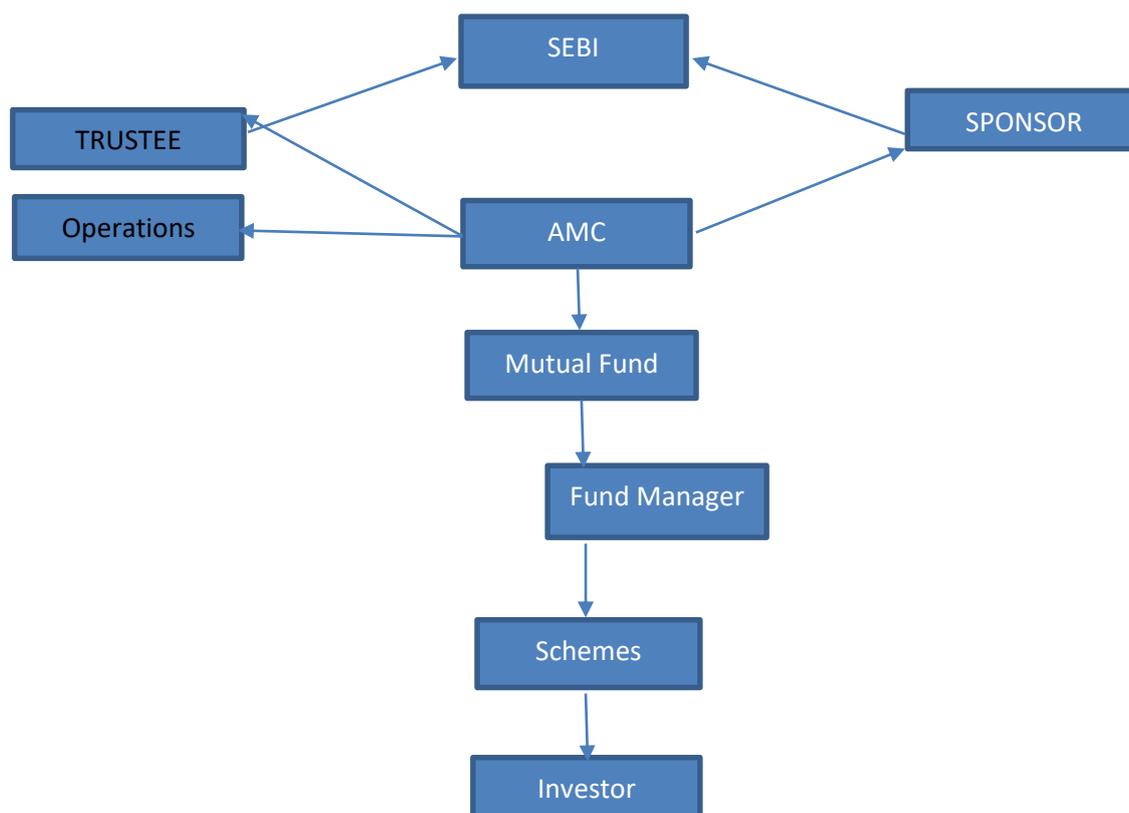
Singh and Jha (2009) conducted a study on awareness & acceptability of mutual funds and found that consumers basically prefer mutual fund due to return potential, liquidity and safety and they were not totally aware about the systematic investment plan. The investors' will also consider various factors before investing in mutual fund.

Desigan et al (2006) conducted a study on women investors perception towards investment and found that women investors basically are indecisive in investing in mutual funds due to various reasons like lack of knowledge about the investment protection and their various investment procedures, market fluctuations, various risks associated with investment, assessment of investment and redressal of grievances regarding their various investment related problems. Savings is a habit specially embodied into women.

Ramamurthy and Reddy (2005) conducted a study to analyze recent trends in the mutual fund industry and draw a conclusion that the main benefits for small investors' due to efficient management, diversification of investment, easy administration, nice return potential, liquidity, transparency, flexibility, affordability, wide range of choices and a proper regulation governed by SEBI. The study also analyzed about recent trends in mutual fund industry like various exit and entry policies of mutual fund companies, various schemes related to real estate, commodity, bullion and precious metals, entering of banking sector in mutual fund, buying and selling of mutual funds through online.

Anand and Murugaiah (2004) had studied various strategic issues related to the marketing of financial services. They found that recently this type of industry requires new strategies to survive and for operation. For surviving they have to adopt new marketing strategies and tactics that enable them to capture maximum opportunities with the lowest risks in order to enable them to survive and meet the competition from various market players globally.

Walia and Kiran (2009) studied investor's risk and return perception towards mutual funds. The study examined investor's perception towards risk involved in mutual funds, return from mutual funds in comparison to other financial avenues, transparency and disclosure practices. The study investigated problems of investors encountered with due to unprofessional services of mutual funds. The study also reported that significant relationship of interdependence exists between income level of investors and their perception for investment returns from mutual funds investment.

Conceptual Frame Work:**RESEARCH METHODOLOGY****Objectives of the Study:**

- 1.To study the mutual fund trend in SBI Associate Banks.
- 2.To study the growth and performance of mutual fund in SBI Associate Banks.

Scope of the Study:

The study is related to control the investment of unit holders in efficient manner in banking sector.The fund manager should plan their portfolio as per objectives of fund and revise the same as per conditions prevailing in the market.This study makes an attempt here to scrutinize the impact of different factors in the growth potential of mutual fund.It is expected from the mutual funds to allow better returns than to the market return.In the past years, mutual funds industry has grown tremendously in terms of size of funds organize and number of schemes levitate in the market.It was felt important to assess the performance of mutual funds in the banking sector

Need of the study:

The Indian mutual fund industry finds itself in an economic environment which has undergone rapid changes over the past three years.The industry attain a high water mark when it doubled its AUM from Rs.3.6 trillion in FY2007 to Rs.6.13 trillion in FY2010 – clocking an impressive growth rate of 16.2% pr year.Since then the Indian economy has faced a detain. From an average GDP growth rate of 8-9% during the 2008-2011 years, the Indian economy is now growing at a lackluster 4.8% growth rate in Q2 2013.Coupled with a high decline in the value of the Indian rupee, the mutual fund industry now finds itself in a unstable global economic environment.

Research Design:

The study is Descriptive Research

Data Collection:

The data is used in this project is of secondary nature. The data is collected from secondary sources such as various websites, journals, newspapers, books etc. The analysis is used in the project has been done using selective tools. In equity market, risk is analysed and trading decisions ar takn on the basis of technical analysis. It is collection of share prices of selected companies for a period of 5 years.

Tools of Analysis:**1.Sharpe Ratio:**

$$\text{Sharpe ratio} = \frac{\bar{r}_p - r_f}{\sigma_p}$$

2. Average Maturity Period:

$$\text{Yield to maturity PV} = \frac{FV}{(1+i)^n}$$

3.Expense Ratio:

$$\text{Expense Ratio} = \frac{\text{Particular expense}}{\text{Net sales}}$$

4.Exit Load:

$$\text{Exit Load} = \text{Net asset values} - \text{Current liability}$$

5.Portfolio Turn Over ratio:

$$= \frac{\text{Minimum Securities bought or sold}}{\text{Average Assets Under Management}}$$

6.Treynor's ratio:

$$\text{Treynor's ratio} = \frac{r_p - r_f}{\beta_p}$$

7.Beta:

$$\beta_p = \frac{\text{Cov}(r_p, r_f)}{\text{Var}(r_p)}$$

DATA ANALYSIS AND INTERPRETATION**Sharpe Ratio:****Table No: 1. Calculation of Rate of Return of SBI Associate Banks:**

Year	$\bar{r}_p - r_f$	σ_p	Rate of Return (%)
2013-2014	164.59	50	3.29
2014-2015	289.76	55	5.26
2015-2016	357.28	60	5.95
2016-2017	487.35	70	6.96
2017-2018	90.64	70	1.29

Source: Data is collected from BSE India.com

$$\text{Sharpe Ratio} = \frac{\bar{r}_p - r_f}{\sigma_p}$$

Where,

\bar{r}_p = Expected return of the portfolio or investment

r_f = Risk free rate

σ_p = Standard Deviation of portfolio returns

Interpretation:

From table no: 1 the Sharpe's ratio is higher in the period 2016-2017 of 6.96, which indicates good returns as that period and also in this period a higher return on a risk adjusted basis as compared to other years.

Average Maturity:**Table No: 2 Calculation of Net Cash Flows of SBI Associate Banks:**

Year	FV	$\frac{1}{(1+i)^n}$	$FV / (1+i)^n$	Net Cash flows
2013-2014	50	0.9	45	23
2014-2015	52.80	0.8	42.24	28
2015-2016	72.45	0.7	50.71	32.12
2016-2017	61.40	0.6	36.84	12.02
2017-2018	67.17	0.6	40.30	7.30

$$\text{Yield to Maturity PV} = \frac{FV}{(1+i)^n}$$

Where,

PV is the value at time = 0

FV is the value at time = n

'i' is the rate at which the amount will be compounded each period

'n' is the number of periods

Interpretation:

Average Maturity tells the period after which the securities held by a debt fund will mature. The longer the maturity, the higher is its security to interest rate movements and higher are chances of a fall in the fund NAV due to raise in interest rates. The shorter the duration, the quicker will it return an original investment. From this point in my study FY 2017-2018(7.3) followed by 2016-2017(12.02) Average maturity is low .So investors are ready to invest their money in mutual funds.

Expense Ratio:**Table No: 3 Calculation of Expense Ratio of SBI Associate Banks:**

Year	Particular expense(lacks)	Net sales(lacks)	Percentage (%)
2013-2014	17	40	0.40
2014-2015	20.53	45.54	0.45
2015-2016	30	55	0.54
2016-2017	44	77	0.57
2017-2018	7.81	12.22	0.63

$$\text{Expense Ratio} = \frac{\text{Particular expense}}{\text{Net Sales}}$$

Interpretation:

An Expense ratio is relatively high or low. But a good,low expense ratio is generally considered to be 0.5 – 0.75 % for managing funds investment. Higher the percentage of expense ratio on the high side of funds.In 2017-2018 the expense ratio is 0.63

Exit Load:**Table No:4 Calculation of Exit Load of SBI Associate Banks:**

Year	NAV(lacks)	Current liability(lacks)	Units
2013-2014	23.16	10.26	1290
2014-2015	15.03	12.55	248
2015-2016	21.05	13.46	759
2016-2017	27.61	20.14	747
2017-2018	35.99	23.12	1287

$$\text{Exit Load} = \text{Net Asset Values} - \text{Current Liability}$$

Interpretation:

Exit load is typically charged as a small percent of the Net Asset Value prevailing at the time when sell the schemes. In this, the units are selling more than 500units and the exit load is charged to more than 1 percent. In 2013-2014(1290), the exit load is more compared to other years.

Portfolio Turnover Ratio:**Table No: 5 Calculation of portfolio turnover ratio in SBI Associate banks:**

Year	Minimum securities bought or sold	Average AUM	%
2013-2014	82	90	91.11
2014-2015	77.56	118	65.72
2015-2016	49.55	135	36.70
2016-2017	5.1	182	2.80
2017-2018	3.70	2305	0.13

$$\text{Portfolio turnover ratio} = \frac{\text{Minimum securities bought or sold}}{\text{Average AUM}}$$

Interpretation:

In portfolio turnover ratio will give high returns with high turnover ratio but in sometimes high turnover will give low returns. In 2013-2014 it will have 91.11, the investor will get maximum returns in portfolio turnover ratio.

Treynor's Ratio:**Table No: 6 Calculation of Treynor's Ratio of SBI Associate banks:**

Year	$\bar{r}_p - r_f$	β_p	Rate of Return (%)
2013-2014	165	3.54	46.61
2014-2015	28.76	3.87	7.43

2015-2016	36.28	3.71	9.77
2016-2017	48.35	4.64	10.42
2017-2018	9.64	0.06	160.66

$$\text{Treynor's Ratio} = \frac{r_p - r_f}{\beta_p}$$

Where,

T = Treynor's Ratio

r_p = Portfolio Return

r_f = Risk free rate

Interpretation:

From the table 3.6, the Treynor's ratio for 2017-2018 is 160.66 and it will get maximum returns. Excess return in this sense refers to the return earned above the return that could have been earned in a risk-free investment.

Beta:

Table No: 7 Calculation of Beta of SBI Associate banks

Year	$Cov(\bar{r}_p - r_f)$	σ_m^2	Beta
2013-2014	164.85	2500	0.065
2014-2015	289.76	3025	0.095
2015-2016	357.28	3600	0.099
2016-2017	487.35	4900	0.099
2017-2018	90.64	4900	0.01

$$\text{Beta} = \frac{cov(\bar{r}_p - r_f)}{\sigma_m^2}$$

Interpretation:

If the Beta is 1, which indicates that the investment will be less volatile and the beta value in 2014-2015 and 2016-2017 is of 0.099, which is equal to 1 and indicates that the investors will have less volatile compared to other years.

FINDINGS:

1. Sharpe's Ratio: As per the Sharpe's ratio the performance in the year 2016-2017 is high compared to other years as 2013-2014(3.29), 2014-2015(5.26), 2015-2016(5.95) and 2017-2018(1.29).

2. Average Maturity: Average maturity period is low in the year 2017-2018 is 7.3, the investor will get quick returns compared to other years as 2013-2014(23), 2014-2015(28), 2015-2016(32.12) and 2016-2017(12.02).

3. Expense Ratio: Expense ratio will be high in 2017-2018 is 0.63 as compared to the other years 2013-2014(0.4), 2014-2015(0.45), 2015-2016(0.54) and 2016-2017(0.57). If the expense ratio will give high returns.

4. Exit Load: Exit load is high in the year of 2013-2014 is 1290 units as compared to 2014-2015(248units), 2015-2016(759units), 2016-2017(747units) and 2017-2018(1287units).

5. Portfolio Turnover Ratio: According to portfolio turnover ratio, the percentage of returns is more in the year of 2013-2014 is 91.11% as compared to 2014-2015(65.72), 2015-2016(36.7), 2016-2017(2.8) and 2017-2018(0.13).

6. Treynor's Ratio: In Treynor's ratio, is yielding high returns in the year of 2017-2018 is (160.66) high compared to others 2013-2014(46.61), 2014-2015(7.43), 2015-2016(9.77) and 2016-2017(10.42).

7. Beta: According to Beta calculation in 2015-2016 and 2016-2017 are same as 0.099 is high risk when compared to other years 2013-2014(0.065), 2014-2015(0.095) and 2017-2018(0.01).

SUGGESTIONS:

- Risk takers can go for SBI mutual fund which is yielding high average returns.
- Risk averages can go for SBI mutual fund because its performance is high and averages returns also moderate.
- The fund manager has to select good scripts in the portfolio for good returns.
- The investor has to think their investment objectives and to take high risk for getting high returns.

CONCLUSION:

Risk refers to the uncertainty that surrounds future events and other outcomes. It is the expression of the likelihood and impact of an event with the potential to influence the achievement of organizations objectives. Risk is unavoidable and present in virtually every human situation. It is present in our daily lives, public and private sector organizations. Mutual fund industry nowadays is one of the most favored investment options all over the world. It plays a vital role in the economic expansion of a country. Mutual funds mainly depend on capital market performance. If the market performance is good, it will give good returns and vice-versa. The study concludes that the mutual fund is a secure speculation tool. Mutual fund is the only chance many investors have for investing in an intellectual diversified approach after studying and analyzing dissimilar mutual fund schemes the subsequent conclusion can be made. The article can be concluded that the risk is less in SBI mutual fund and return is high.

REFERENCES:

1. Agapova, Anna, 2011, „The Role of Money Market Mutual Funds in Mutual Fund Families“ Journal of Applied Finance, Vol. 21, Issue. 1, pp. 87-102.
2. Agarwal, Vikas; Boyson, Nicole M.; Naik, Narayan Y, 2009, „Hedge Funds for Retail Investors? An Examination of Hedged Mutual Funds“ Journal of Financial & Quantitative Analysis Vol. 44, Issue 2, pp. 273-305.

3. A. Vennila, R. Nandhagopal(2012) "Investors' Preference towards Mutual Funds in Coimbatore City European Journal of Social Sciences ISSN 1450-2267 Vol.29 No.1 (2012), pp. 115-125
4. Binod Kumar Singh (2011) "A Study on Investors' Attitude towards Mutual Funds as an Investment Option" JOURNAL OF ASIAN BUSINESS STRATEGY, VOL. 1(2): 8-15
5. Badrinath, S.G & Gubellini, S, (2011), „On the characteristics and performance of long-short, market-neutral and bear mutual funds" Journal of Banking & Finance, Vol. 35 Issue 7, pp.1762-1776.
6. Dranikoff L, Koller, T. and Schneider, A, "Divestiture: Strategy's Missing Link", Harvard Business Review, May 2002, 80 (5).
7. Dr.Nishi Sharma (2009) "Indian Investors Perception towards mutual funds" Business Management Dynamics Vol.2, No.2, Aug 2012, pp.01-09
8. Gil-Bazo, Javier; Ruiz & Verd, Pablo, 2009, „The Relation between Price and Performance in the Mutual Fund Industry" Journal of Finance, Vol. 64, Issue 5, pp. 2153-2183.
9. Hansen M and Nohria N, "What's your Strategy for Managing Knowledge?" Harvard Business Review, March April, 1999, 77 (2).1
10. Journal of Marketing, 32 (October), 65-68, 1968.
11. Rajeswari, T.R., and V.E. RamaMoorthy, 2001, An Empirical Study on Factors Influencing the Mutual Fund Scheme Selection by Retail Investors" Retrieved on May 2010 < <http://www.uticm.com/Cmc/PDFs/2001/rajeswari.pdf>>.
12. Singh, Chander, 2004, „Performance of mutual funds in India – an empirical evidence" ICFAI journal of applied finance December, pp. 81-98.
13. Subbash C. Jain, "Marketing Planning and Strategy", South Western College Publishing, Sixth Edition, 2000
14. Singh, B. K. and Jha, A.K. 2009, „An empirical study on awareness & acceptability of mutual fund" Regional Student's Conference, ICWAI, pp. 49-55.
15. Winer, C. Strategic Thinking: An executive Perspective, Upper Saddle River, Prentice Hall, 2000.

