

Performance Comparison of Different Mutual Funds Schemes in India Through Sharpe Index Model

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INTRODUCTION

Mutual Fund is an investment company that pools money from shareholders and invests in a variety of securities, such as stocks, bonds and short term money market instruments or other securities. In a mutual fund, the fund manager trades the fund's underlying securities, realizing capital gains or loss and collects the dividend or interest income. The investment proceeds are then passed along to the individual investors. The value of a share of the mutual fund, known as the net asset value (NAV), is calculated daily based on the total value of the fund divided by the number of shares purchased by investors.

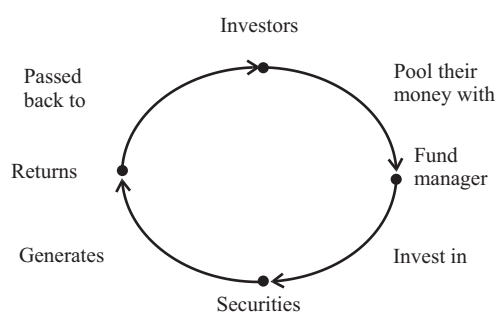


Fig. 1: Mutual Fund Concept

Calculating NAVs - Calculating mutual fund net asset values is easy. Simply take the current market value of the fund's net assets (securities held by the fund minus any liabilities) and divide by the number of shares outstanding. So if a fund had net assets of Rs.50 lakh and there are one lakh shares of the fund, then the price per share (or NAV) is Rs.50.00.

PROBLEM STATEMENT:

In the current changing international business environment, the investment avenues have been changing continuously. The mutual fund industry is one of them. The numbers of mutual fund houses are increasing, with many foreign mutual funds setting up funds in India and also the industry has witnessed several mergers and acquisitions.

This study is an attempt to analyze the growth pattern of mutual fund schemes in India. By using the Sharpe Index Model, performance evaluation of only selected ten most preferred mutual funds schemes in public and private sector has been done.

OBJECTIVES OF THE RESEARCH STUDY:

The objectives of the study was to analyse, in detail the growth pattern of mutual fund industry in India and to evaluate performance of different schemes floated by most preferred mutual funds in public and private sector. The main objectives of this project are

To study the various private and public sector mutual funds schemes in India

To study the performance of overall mutual funds schemes by analyzing the NAV and their respective returns.

SOURCES OF DATA:

The study is based on the secondary data. For studying the returns of mutual fund schemes in India, data has been collected from the various websites like

www.amfindia.com

www.Sebi.gov.in

www.Rbi.org.in

www.indobase.com/markets/index.htm

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ANALYSIS TOOLS:

In this study, we have used various statistics tools like descriptive statistics, percentage, ratio analysis, annual growth rate etc. for analysing, interpreting and comparison of different mutual fund schemes. The Sharpe Index Model is also used to analyse the performance evaluation and ranking for the different mutual funds schemes in India.

SCOPE OF THE STUDY:

The ten most preferred public and private sector mutual funds schemes have been taken for the study. These public and private mutual funds schemes were studied during the period of 1st April, 2007 to 1st April, 2008.

LIMITATIONS OF THE STUDY:

Due to shortage of time and money, we selected only ten mutual funds schemes which include public and private mutual funds. The data was collected for analysis from 1st April, 2007 to 1st April, 2008 instead of 1992. Our study is based on the limited ten mutual fund schemes only which may affect the results of the study.

PERFORMANCE EVALUATION OF MUTUAL FUNDS SCHEMES:

Portfolio managers evaluate their portfolio performance and identify the sources of strength and weakness. The evaluation of the portfolio provides a feed back about the performance to evolve a better management strategy. Even though evaluation of portfolio performance is considered to be the last stage of investment process, the managed portfolios are commonly known as mutual funds. Various managed portfolios are prevalent in the capital market. Their relative merits of return and risk criteria have to be evaluated.

The evaluation part is very important and needs a lot of concentration. The statistical tools help us in reaching suitable results. In the study, we have taken help of statistical tools like mean, standard deviation and the most important tool which evaluates the performance is the Sharpe index model.

SHARPE'S PERFORMANCE INDEX MODEL:

Sharpe's performance index gives a single value to be used for the performance ranking of various funds or portfolios. Sharpe index measures the risk premium of the portfolio relative to the total amount of risk in the portfolio. This risk premium is the difference between the portfolio's average rate of return and the risk less rate of return. The standard deviation of the portfolio indicates the risk. The index assigns the highest values to assets that have best risk-adjusted average rate of return. The Sharpe ratio provides you with a return for unit of risk measure. For example: assume equity fund one returned 20% over the last five years, with a standard deviation of 2%. The risk free rate is generally the interest rate on a government security. Assume that the average return of a risk free government bond fund over this period was 7%. The Sharpe ratio would be (the return of portfolio—the risk free rate)/ the standard deviation of the portfolio. In the case of equity fund one, the Sharpe ratio is (20% - 7%)/ 2% or 6.5%. Therefore, for each unit of risk, the fund returned 6.5% over the risk free rate.

Generally, investors evaluating the performance of the fund would compare its Sharpe ratio to a benchmark. This could include, but is not limited to, the average performance of similar funds and an equity index. For example, assume the S&P 500 was used as a benchmark. Further, assume that the return of S&P500 index fund over the last five years was 10% with a standard deviation of 2%. The Sharpe ratio for this index fund is (10%-7%)/ 2% or 1.5%. An investor doing a side by side comparison between equity fund 1 and the S&P 500 index fund would clearly prefer equity fund 1. This fund provided a higher level of excess return for each unit of risk.

Some Statistics of Sharpe Index Model:

Sharpe Index = $\frac{\text{Portfolio average return}-\text{Risk free rate of return}}{\text{Standard Deviation of the portfolio}}$

$$S_i = \frac{R_p - R_f}{\sigma_p} \quad (1.1)$$

S_i = Sharpe Index

R_p = Portfolio average return

R_d = Risk free rate of return (currently it is considered as 7%)

Standard Deviation :

$$\sigma_p = \sqrt{\frac{\sum (X - \bar{X})^2}{N}} \quad (1.2)$$

Where, X = monthly return

\bar{X} = average monthly return
 N = total number of periods

NAV and Corresponding returns of 10 mutual funds schemes:

In this study, we have selected the ten Mutual Fund Companies i.e., four public sectors and six private sectors with common liquid growth plan. Following tables gives the NAV and corresponding return of last one year starting from 1st April, 2007 to 1st April, 2008. The funds are chosen randomly from the available means.

(i) State Bank of India Mutual fund:

SBI Mutual Fund is India's largest bank sponsored mutual fund with an investor base of over 3 million. SBI Mutual Fund is a joint venture between the State Bank of India, India's largest banking enterprise and Societe Generale Asset Management of France, one of the world's leading fund management companies.

Since its inception, SBI Mutual Fund has launched thirty-two schemes and successfully redeemed fifteen of them. SBI Mutual Fund schemes have consistently outperformed benchmark indices. SBI Mutual is the first bank-sponsored fund to launch an offshore fund - Resurgent India Opportunities Fund.

Presently, SBI Mutual Fund manages over Rs. 17000 crores of assets. The fund has a network of 100 collection branches, 26 investor service centres, 28 investor service desks and 40 district organisers.

Table 1: State Bank of India Mutual Fund

Month No	Period	NAV	Return %
1	1/4/2007 to 1/5/2007	12.05 to 12.12	0.58
2	1/5/2007 to 1/6/2007	12.12 to 12.20	0.66
3	1/6/2007 to 1/7/2007	12.20 to 12.26	0.49
4	1/7/2007 to 1/8/2007	12.26 to 12.33	0.57
5	1/8/2007 to 1/9/2007	12.33 to 12.39	0.49
6	1/9/2007 to 1/10/2007	12.39 to 12.47	0.65
7	1/10/2007 to 1/11/2007	12.47 to 12.54	0.56
8	1/11/2007 to 1/12/2007	12.54 to 12.63	0.72
9	1/12/2007 to 1/1/2008	12.63 to 12.71	0.63
10	1/1/2008 to 1/2/2008	12.71 to 12.80	0.71
11	1/2/2008 to 1/3/2008	12.80 to 12.89	0.70
12	1/3/2008 to 1/4/2008	12.89 to 12.98	0.70

Data Source: www.amfindia.com

Average monthly return = 0.62 % Std. Deviation = 0.082

The State Bank of India Mutual Fund performed well in last one year. In this period, it gives the highest return in 1/11/2007 to 1/12/2007 which is 0.72 and average return given by this fund is 0.62 % per month.

(ii) Bank of Baroda Mutual Fund:

BOB Mutual Fund is sponsored by Bank of Baroda. Bank of Baroda was established in July 1908 by Maharaja of Baroda, Sir Sayajirao Gaikwad III. The bank has a 2,704 strong branch network all over the country. Bank of Baroda is one of the few Indian Banks with a formidable presence overseas with 39 branches.

BOB Mutual Fund has been established and set up as a Trust under the Indian Trusts Act, 1882 by Bank of Baroda and registered with SEBI. BOB Asset Management Company Ltd. is a wholly owned subsidiary of Bank of Baroda incorporated on November 05, 1992 acts as an Investment Manager to the BOB Mutual Fund.

Table 2: Bank of Baroda Mutual Fund

Month No	Period	NAV	Return %
1	1/4/2007 to 1/5/2007	13.41 to 13.50	0.67
2	1/5/2007 to 1/6/2007	13.50 to 13.58	0.59
3	1/6/2007 to 1/7/2007	13.58 to 13.66	0.59
4	1/7/2007 to 1/8/2007	13.66 to 13.72	0.44
5	1/8/2007 to 1/9/2007	13.72 to 13.78	0.44
6	1/9/2007 to 1/10/2007	13.78 to 13.85	0.51
7	1/10/2007 to 1/11/2007	13.85 to 13.92	0.51

Month No	Period	NAV	Return %
8	1/11/2007 to 1/12/2007	13.92 to 14.00	0.57
9	1/12/2007 to 1/1/2008	14.00 to 14.08	0.57
10	1/1/2008 to 1/2/2008	14.08 to 14.16	0.57
11	1/2/2008 to 1/3/2008	14.16 to 14.23	0.49
12	1/3/2008 to 1/4/2008	14.23 to 14.31	0.56

Data Source: www.amfindia.com

Average monthly return = 0.54 % Std. Deviation = 0.0679

The Bank of Baroda Mutual Fund performed well in last one year. In this period, it gives highest return in 1/4/2007 to 1/5/2007 which is 0.67 and average return given by this fund is 0.54 % per month and the std. deviation is 0.068.

(iii) United Trust of India Mutual Fund:

UTI Mutual Fund came into existence on 1st February 2003. Bank of Baroda (BOB), Punjab National Bank (PNB) and State Bank of India (SBI) and Life Insurance Corporation of India (LIC) are the sponsors of the UTI Mutual Fund. UTI Mutual Fund is managed by UTI Asset Management Company Private Limited (AMC). UTI AMC is a registered portfolio manager under the SEBI (Portfolio Managers) Regulations, 1993 for undertaking portfolio management services and also acts as the manager and marketer to offshore funds.

UTI Mutual Fund has a nationwide network consisting of 70 UTI Financial Centers (UFCs) and UTI International offices in London, Dubai and Bahrain. The fund has a track record of managing a variety of schemes catering to the needs of every class of citizenry.

Table 3: Unit Trust of India Mutual Fund

Month No	Period	NAV	Return %
1	1/4/2007 to 1/5/2007	21.05 to 21.21	0.76
2	1/5/2007 to 1/6/2007	21.21 to 21.37	0.75
3	1/6/2007 to 1/7/2007	21.37 to 21.47	0.47
4	1/7/2007 to 1/8/2007	21.47 to 21.55	0.37
5	1/8/2007 to 1/9/2007	21.55 to 21.67	0.56
6	1/9/2007 to 1/10/2007	21.67 to 21.80	0.60
7	1/10/2007 to 1/11/2007	21.80 to 21.94	0.64
8	1/11/2007 to 1/12/2007	21.94 to 22.08	0.64
9	1/12/2007 to 1/1/2008	22.08 to 22.23	0.68
10	1/1/2008 to 1/2/2008	22.23 to 22.36	0.58
11	1/2/2008 to 1/3/2008	22.36 to 22.50	0.63
12	1/3/2008 to 1/4/2008	22.50 to 22.64	0.62

Data Source: www.amfindia.com

Average monthly return = 0.61 % Std. Deviation = 0.11

The Unit Trust of India Mutual Fund performed well in the last one year. During this period, this fund gives the highest return in 1/4/2007 to 1/5/2007 which is 0.76 and average monthly return given by this fund is 0.61% and the std. deviation is 0.11.

(iv) LIC Mutual Fund:

LIC Mutual Fund was set up by Life Insurance Corporation of India on 19th June 1989 with a corpus of Rs. 2 crores. LIC Mutual Funds are managed by LIC Mutual Fund Asset Management Company Ltd which was formed on 20th April 1994 in compliance with the Securities and Exchange Board of India (Mutual Funds) Regulations, 1993.

Table 4: Life Insurance Corporation of India Mutual Fund

Month No	Period	NAV	Return %
1	1/4/2007 to 1/5/2007	18.42 to 21.02	14.12
2	1/5/2007 to 1/6/2007	21.02 to 21.21	0.90
3	1/6/2007 to 1/7/2007	21.21 to 21.53	1.51
4	1/7/2007 to 1/8/2007	21.53 to 21.93	1.86

Month No	Period	NAV	Return %
5	1/8/2007 to 1/9/2007	21.93 to 22.85	4.20
6	1/9/2007 to 1/10/2007	22.85 to 25.66	12.30
7	1/10/2007 to 1/11/2007	25.66 to 30.83	20.15
8	1/11/2007 to 1/12/2007	30.83 to 32.84	6.52
9	1/12/2007 to 1/1/2008	32.84 to 34.84	6.09
10	1/1/2008 to 1/2/2008	34.84 to 28.62	-17.85
11	1/2/2008 to 1/3/2008	28.62 to 26.41	-7.72
12	1/3/2008 to 1/4/2008	26.41 to 22.31	-15.52

Data Source: www.amfindia.com

Average monthly return = 2.21 % Std. Deviation = 11.36

Life Insurance Corporation Mutual Fund has a high degree of variation in the return. Sometimes, it gives negative returns and sometimes positive returns. The highest return is given in 1/10/2007 to 1/11/2007 which is 20.15 and the lowest return is given in 1/1/2008 to 1/2/2008 which is -17.85. The average monthly return is 2.21 %, so well performed in last one year and the std. deviation is 11.36.

(v) Birla Sun Life Mutual fund:

Birla Sun Life Mutual Fund is a joint venture between Aditya Birla Group and Sun Life Financial. The Aditya Birla Group is India's first truly multinational corporation. It is a dominant player in viscose staple fibre, non-ferrous metals, cement, viscose filament yarn, branded apparel, carbon black, chemicals, fertilizers, sponge iron, insulators, financial services, telecom, BPO and IT services. Sun Life Financial is a leading international financial services organization providing a diverse range of protection and wealth accumulation products. The company has operations in key markets worldwide, including Canada, the United States, the United Kingdom, Ireland, Hong Kong, the Philippines, Japan, Indonesia, India, China and Bermuda.

Table 5: Birla Sun Life Mutual Fund

Month No	Period	NAV	Return %
1	1/4/2007 to 1/5/2007	20.31 to 20.45	0.69
2	1/5/2007 to 1/6/2007	20.45 to 20.59	0.68
3	1/6/2007 to 1/7/2007	20.59 to 20.71	0.58
4	1/7/2007 to 1/8/2007	20.71 to 20.81	0.48
5	1/8/2007 to 1/9/2007	20.81 to 20.94	0.62
6	1/9/2007 to 1/10/2007	20.94 to 21.08	0.67
7	1/10/2007 to 1/11/2007	21.08 to 21.22	0.66
8	1/11/2007 to 1/12/2007	21.22 to 21.35	0.61
9	1/12/2007 to 1/1/2008	21.35 to 21.49	0.66
10	1/1/2008 to 1/2/2008	21.49 to 21.64	0.70
11	1/2/2008 to 1/3/2008	21.64 to 21.79	0.69
12	1/3/2008 to 1/4/2008	21.79 to 21.95	0.73

Data Source: www.amfindia.com

Average monthly return = 0.65 % Std. Deviation = 0.067

The Birla Sun Life Mutual Fund performed well in the last one year. During this period, this fund gives the highest return in 1/1/2008 to 1/2/2008 which is 0.70 and average monthly return given by this fund is 0.65% and the std. deviation is 0.067.

(vi) Kotak Mahindra Mutual Fund:

Kotak Mahindra Mutual Fund is sponsored by Kotak Mahindra Bank Limited, which is part of the Kotak Mahindra Group. Kotak Mahindra is one of India's leading financial institutions offering complete financial solutions ranging from commercial banking, to stock broking, to mutual funds, to life insurance, to investment banking. Kotak Mahindra Mutual Funds are managed by Kotak Mahindra Asset Management Co. Ltd., a wholly owned subsidiary of the bank.

Table 6: Kotak Mahindra Mutual Fund

Month No	Period	NAV	Return %
1	1/4/2007 to 1/5/2007	18.61 to 21.05	13.11
2	1/5/2007 to 1/6/2007	21.05 to 22.21	5.51
3	1/6/2007 to 1/7/2007	22.21 to 23.36	5.18
4	1/7/2007 to 1/8/2007	23.36 to 23.08	-1.20
5	1/8/2007 to 1/9/2007	23.08 to 23.03	-0.22
6	1/9/2007 to 1/10/2007	23.03 to 24.59	6.77
7	1/10/2007 to 1/11/2007	24.59 to 26.18	6.47
8	1/11/2007 to 1/12/2007	26.18 to 27.81	6.23
9	1/12/2007 to 1/1/2008	27.81 to 31.15	12.01
10	1/1/2008 to 1/2/2008	31.15 to 25.45	-18.30
11	1/2/2008 to 1/3/2008	25.45 to 23.18	-8.92
12	1/3/2008 to 1/4/2008	23.18 to 20.34	-12.25

Data Source : www.amfindia.com

Average monthly return = 1.20 % Std. Deviation = 9.76

Kotak Mahindra Mutual Fund has a high degree of variation in the return. Sometimes, it gives negative returns and sometimes positive returns. The highest return was given in 1/4/2007 to 1/5/2007 which is 13.11 and the lowest return was given in 1/1/2008 to 1/2/2008 which is -18.30. The average monthly return is 1.20 %, so it performed well in last one year and the std. deviation is 9.76.

(vii) Reliance Mutual Fund:

Reliance Mutual Fund (RMF) is the biggest Mutual Fund house in India. It has been sponsored by Reliance Capital Ltd (RCL). RCL has been promoted by Reliance Industries Ltd., one of India's largest private sector enterprises. Reliance Capital Asset Management Ltd manages the investments of Reliance Mutual Fund.

Table 7: Reliance Mutual Fund

Month No	Period	NAV	Return %
1	1/4/2007 to 1/5/2007	13.13 to 13.21	0.61
2	1/5/2007 to 1/6/2007	13.21 to 13.26	0.99
3	1/6/2007 to 1/7/2007	13.26 to 13.28	0.15
4	1/7/2007 to 1/8/2007	13.28 to 13.29	0.08
5	1/8/2007 to 1/9/2007	13.29 to 13.35	0.45
6	1/9/2007 to 1/10/2007	13.35 to 13.41	0.45
7	1/10/2007 to 1/11/2007	13.41 to 13.46	0.37
8	1/11/2007 to 1/12/2007	13.46 to 13.54	0.59
9	1/12/2007 to 1/1/2008	13.54 to 13.61	0.52
10	1/1/2008 to 1/2/2008	13.61 to 13.66	0.37
11	1/2/2008 to 1/3/2008	13.66 to 13.73	0.51
12	1/3/2008 to 1/4/2008	13.73 to 13.80	0.51

Data Source: www.amfindia.com

Average monthly return = 0.47 % Std. Deviation = 0.23

The Reliance Mutual Fund performed somewhat well in the last one year. During this period, this fund gives the highest return in 1/5/2007 to 1/6/2007 which is 0.99 and average monthly return given by this fund is 0.47% and the std. deviation is 0.23.

(viii) Tata Mutual Fund:

Tata Mutual Fund investments are managed by Tata Asset Management Limited. Tata Asset Management Limited offers a wide range of investment products for institutional and individual investors. The company is a part of the Tata group - one of India's largest and most respected industrial group. The Tata Group is one of India's best-known conglomerates in the private sector with a turnover of around US \$ 14.25 billion. As on April 30, 2007, Tata

Asset Management Limited had Rs. 15412.93 crores of assets under management.

Table 8: Tata Mutual Fund:

Month No	Period	NAV	Return %
1	1/4/2007 to 1/5/2007	29.96 to 33.04	10.28
2	1/5/2007 to 1/6/2007	33.04 to 34.98	5.87
3	1/6/2007 to 1/7/2007	34.98 to 36.68	4.86
4	1/7/2007 to 1/8/2007	36.68 to 36.08	-1.64
5	1/8/2007 to 1/9/2007	36.08 to 36.98	2.49
6	1/9/2007 to 1/10/2007	36.98 to 40.32	9.03
7	1/10/2007 to 1/11/2007	40.32 to 44.84	11.21
8	1/11/2007 to 1/12/2007	44.84 to 46.38	3.43
9	1/12/2007 to 1/1/2008	46.38 to 52.71	13.65
10	1/1/2008 to 1/2/2008	52.71 to 44.46	-15.65
11	1/2/2008 to 1/3/2008	44.46 to 40.74	-8.37
12	1/3/2008 to 1/4/2008	40.74 to 37.29	-8.47

Data Source: www.amfindia.com

Average monthly return = 2.23% Std. Deviation = 9.07

Tata Mutual Fund has a high degree of variation in the return. Sometimes it gives negative returns and sometimes positive returns. The highest return was given in 1/12/2007 to 1/1/2008 which is 13.65 and the lowest return was given in 1/1/2008 to 1/2/2008 which is -15.65. The average monthly return is 2.23 %, so it performed well during the last one year and the std. deviation is 9.07.

(ix) HDFC Mutual Fund:

HDFC (Housing Development Finance Corporation Limited) is one of the dominant players in the Indian mutual fund space. HDFC was incorporated in 1977 as the first specialized Mortgage Company in India. HDFC Mutual Funds are handled by HDFC Asset Management Company Limited. HDFC Asset Management Company was incorporated under the Companies Act, 1956, on December 10, 1999, and was approved to act as an Asset Management Company for the Mutual Fund by SEBI on July 3, 2000. The company also provides portfolio management / advisory services.

Table 9: HDFC Mutual Fund:

Month No	Period	NAV	Return %
1	1/4/2007 to 1/5/2007	15.64 to 15.75	0.70
2	1/5/2007 to 1/6/2007	15.75 to 15.87	0.76
3	1/6/2007 to 1/7/2007	15.87 to 15.95	0.50
4	1/7/2007 to 1/8/2007	15.95 to 16.04	0.56
5	1/8/2007 to 1/9/2007	16.04 to 16.14	0.62
6	1/9/2007 to 1/10/2007	16.14 to 16.24	0.62
7	1/10/2007 to 1/11/2007	16.24 to 16.35	0.68
8	1/11/2007 to 1/12/2007	16.35 to 16.46	0.67
9	1/12/2007 to 1/1/2008	16.46 to 16.57	0.67
10	1/1/2008 to 1/2/2008	16.57 to 16.68	0.66
11	1/2/2008 to 1/3/2008	16.68 to 16.79	0.66
12	1/3/2008 to 1/4/2008	16.79 to 16.91	0.71

Data Source: www.amfindia.com

Average monthly return = 0.65 % Std. Deviation = 0.068

The HDFC Mutual Fund performed well in the last one year. During this period, this fund gives the highest return in 1/5/2007 to 1/6/2007 which is 0.76 and average monthly return given by this fund is 0.65% and the std. deviation is 0.068.

(x) JM Finance Mutual Fund :

JM Financial Mutual Fund is one of India's first private sector mutual funds. The fund is a part of the JM Financial

Group and commenced its operations in 1993-94. JM Financial Group was founded in 1950s by the Kampani family. J.M. Financial & Investment Consultancy Services was founded on September 15, 1973. JM Financial Mutual Funds are managed by JM Financial Asset Management Private Limited which started operations in December 1994.

Table 10: JM Finance Mutual Fund:

Month No	Period	NAV	Return %
1	1/4/2007 to 1/5/2007	20.60 to 20.75	0.73
2	1/5/2007 to 1/6/2007	20.75 to 20.88	0.63
3	1/6/2007 to 1/7/2007	20.88 to 20.96	0.38
4	1/7/2007 to 1/8/2007	20.96 to 21.04	0.38
5	1/8/2007 to 1/9/2007	21.04 to 21.16	0.57
6	1/9/2007 to 1/10/2007	21.16 to 21.28	0.57
7	1/10/2007 to 1/11/2007	21.28 to 21.40	0.56
8	1/11/2007 to 1/12/2007	21.40 to 21.54	0.65
9	1/12/2007 to 1/1/2008	21.54 to 21.69	0.70
10	1/1/2008 to 1/2/2008	21.69 to 21.84	0.69
11	1/2/2008 to 1/3/2008	21.84 to 21.98	0.64
12	1/3/2008 to 1/4/2008	21.98 to 22.13	0.68

Data Source: www.amfindia.com

Average monthly return = 0.60 % Std. Deviation = 0.11

The JM Finance Mutual Fund performed well in the last one year. During this period, this fund gives the highest return in 1/4/2007 to 1/5/2007 which is 0.73 and average monthly return given by this fund is 0.60% and the std. deviation is 0.11.

Table 11: Company wise Sharpe Index Model:

Sr_No	Name of the Mutual Fund Company	Avg. Return % (Annually)	S.D	St
1	SBI	7.46	0.082	5.57
2	Bank of Baroda	6.51	0.068	-7.16
3	United Trust of India	7.3	0.11	2.8
4	LIC	26.54	11.36	1.72
5	Birla Sun Life	7.79	0.067	11.84
6	Kotak Mahindra	14.39	9.76	0.76
7	Reliance	5.6	0.23	-6.05
8	Tata	26.71	9.07	2.17
9	HDFC	7.83	0.069	12.16
10	JM Finance	7.19	0.11	1.63

The above table indicates that the value of 'St' of almost all the mutual funds is positive except Bank of Baroda and Reliance fund. According to the Sharpe index, the negative value was considered for the worst performance. It gives the least performance among the sample funds.

HDFC mutual fund has the highest 'St' value that is 12.16 among the selected 10 mutual funds in India. So according the Sharpe Index, it is the most preferred mutual fund among these. So an investor is advised to go for this fund to select it in his portfolio.

After this second choice, may be Birla Sun Life mutual fund and then State Bank of India and so on. The rest of the ranking is given below.

Table 12: Ranking of the Mutual Funds from Best to Worst :

Name of the Mutual Fund Company	Rank
HDFC	1
Birla Sun Life	2

Name of the Mutual Fund Company	Rank
SBI	3
United Trust of India	4
Tata	5
LIC	6
JM Finance	7
Kotak Mahindra	8
Reliance	9
Bank of Baroda	10

The above table indicates that the ranking of the mutual funds from best to worst. One can choose the better mutual fund scheme for investment. So an investor is advised to choose the best performing mutual funds scheme in his portfolio for better profits and less risk.

FINDINGS, SUGGESTIONS AND CONCLUSION:

Findings :

By the above study, one can have a lot of findings regarding the performance of the funds in his portfolio. The comparison in the performance of these mutual funds can be done easily. The following finding can be

1. The mutual funds performance is evaluated easily with the help of Sharpe Index Model. The fund having low 'St' value performs weakly and the fund with high 'St' performs comparatively well. It also shows the effectiveness of Sharpe Index Method.
2. With a number of mutual fund schemes existing in the market, it is very difficult by an investor to choose the best among them. This paper provides a necessary and sufficient result to help to choose the best portfolio to get maximum return with minimum risk.
3. Standard deviation and mean proves to be very useful statistical tools in order to reach to some valuable result. Without help of average and standard deviation one cannot apply Sharpe Index Method.
4. The best-performing and worst-performing funds can be easily identified. The last two tables 11 & 12 are in a good support of this study. By studying these tables one can easily interpret it. Like the HDFC mutual fund is a best-performing fund where as Bank of Baroda mutual fund is worst-performing.

Suggestions:

This study can be easily understood and help an investor in many ways. Some of the suggestions are below

1. It is not only fund or company's goodwill which can be taken into consideration while choosing a portfolio, the market factors like government policies, economics of sales and the trend in a particular sector should also be considered.
2. Today investor is having enough funds to invest in a number of schemes. He is always in search of such statistical tools which can provide him maximum return with lower risk. In this regard, mutual fund is the best choice.

Conclusion :

It is well known that now-a-days, mutual funds are the most popular and safe parameter for an investor to invest. Keeping the present and future aspects regarding the mutual funds in India, it is easily concluded that this market will give enough to an investor for long period. The Sharpe Index Model is easily understood and helps investors to decide which mutual funds are performing well and which mutual funds are not.

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