IMPACT ON MUTUAL FUNDS TOWARDS RISK AND RETURNS IN VARIOUS INVESTMENT AVENUES

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Abstract
Mutual fund is vehicle that enables a number of investors to pool their money and have it jointly managed by a professional money manager." Mutual Funds have taken many turns and now the profile of this financial institution is assuming new shape. The Mutual Fund industry, in the present context is characterized by an increasing number of players, competition between the public and private funds, and the rising popularity of the mutual fund schemes among the retail as well as corporate investors in the Indian financial market. The structural change in UTI operations is another major development in the history of mutual funds in India. The income earned through these investments and the capital appreciations realized are shared by its unit holders in proportion to the number of units owned by them. Mutual funds can be broken down into two basic categories: equity and bond funds. The collection of information of the funds shows a trend of phenomenal growth for the last three years. The most important trend in the mutual fund industry in India is the aggressive expansion of the foreign owned mutual fund companies. The mutual funds have been introducing most innovative scheme in Indian market to cater the various needs of the investors with the object of capturing greater market shares. Product innovation, focus, service and above all performance will determine the winners in future. An analysis of the best performing mutual fund schemes, based on their three year annualized returns, is done. The analysis starts with the calculation of the Sharpe ratio, Treynor's ratio, Five years annualized returns, measure of Standard Deviation, Correlation, slope and the Information ratio for all the 5 selected funds. The results thus obtained for each measure are ranked in the order of the fund's performance.

Key Words: Mutual Fund, Corporate Bond, Risk and Return.

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1. Introduction

The mutual fund industry in India is one of the emerging industries in India. Today, the Indian mutual fund industry has many players. The number of public sector players has reduced from 11 to 5. The public sector has gradually receded into the background, passing on a large chunk of market share to private sector players. The Association of Mutual Funds in India (AMFI) is the industry body set up to facilitate the growth of the Indian mutual fund industry. It plays a pro-active role in identifying steps that need to be taken to protect investors and promote the mutual fund sector. It is noteworthy that AMFI is not a Self-Regulatory Organization (SRO) and its recommendations are not binding on the industry participants. By its very nature, AMFI has an advisor's or a counselor's role in the mutual fund industry. Its recommendations become mandatory if and only if the Securities and Exchange Board of India (SEBI) incorporates them into the regulatory framework it stipulates for mutual funds.

2. FUTURE OF MUTUAL FUNDS IN INDIA

By December 2014, Indian mutual fund industry reached Rs.1,50,537 crores. It is found that by 2014 March-end, the total assets of all scheduled commercial banks are having Rs. 40, 90,000 crores. The annual composite rate of growth is expected 13.4% during the rest of the decade. In the last 5 years we have seen annual growth rate of 9%. According to the current growth rate, by year 2017, mutual fund assets will be double. Let us discuss with the following table:

Aggregate deposits of Scheduled Com Banks in India (Rs.Crore)								
Month/Year	Mar-08	Mar-09	Mar-10	Mar-12	Mar-13	Mar-14	Sep-14	Dec-14
Deposits	505419	651593	789141	1231188	1270853	-	1567251	1622579
Change in % over last yr		15	14	13	12	-	18	3

Source-AMFI

Mutual Fund AUM's Growth								
Month/Year	Mar-08	Mar-09	Mar-10	Mar-12	Mar-13	Mar-14	Sep-14	Dec-14
MF AUM's	68984	93717	83131	94017	75306	137626	151141	149300
Change in % over last yr		26	13	12	25	45	9	1

3.Literature Review:
Dietze, Oliver and Macro (2012) conducted a research to evaluate the risk-adjusted performance of European investment grade corporate bond mutual funds. Sample of 19 investment-grade corporate bond funds was used for the period of 5 years (July 2007 – June 2011). Funds were evaluated on the basis of single-index model and several multi-index and
asset-class-factor models. Both maturity-based indices and rating based indices were used to account for the risk and return characteristics of investment grade corporate bond funds.
Arugaslan and Ajay (2011) examined the risk-adjusted performance of US-based international equity funds from 1996-2005. The analysis was done for five-year period 2002-2006 and ten-year period 2001-2011. For this a sample of 50 large US-based international equity funds was taken and a new method of measurement Modigliani and Modigliani (M squared) was applied.
Boudreaux and Suzanne (2010) conducted a study to examine the risk adjusted returns of international mutual funds for the period of 2000-2009. For this purpose a sample of ten portfolios of international mutual fund was taken and risk-adjusted performance was calculated by using Sharpe (1966)'s Index of Reward to Variability ratio. US market of mutual funds was taken as the benchmark.
Leite and Cortez (2009) conducted a research to analyze the impact of using conditioning information in evaluating the performance of mutual funds. For this purpose two different samples of Portuguese-owned open end equity funds were built, over the period of June 2000 to June 2007. The first sample contained surviving 24 funds at the end of June 2007. While the second sample included all surviving and 20 non-surviving funds during the sample period.
Noulas, John and John (2008) evaluated the risk adjusted performance of Greek equity funds during the period 1997-2000. This study is based on weekly data for equity mutual funds and includes 23 equity funds that existed for the whole period under consideration. Mutual funds were ranked on the techniques used by Treynor (1965), Sharpe (1966) and Jensen. Results
showed positive returns of the stock market for the first three years and negative returns for the fourth year.
4. STATEMENT OF THE PROBLEM
In India, very little work has been done to investigate fund managers forecasting abilities. Active fund managers are expected to reward higher return. If the fund manager feels that market on the whole overvalued, then he would get out of the market. Hence the present study has the objective of finding out **the performance of mutual fund schemes in the framework of risk and return.**
5. NEED FOR THE STUDY:
The project was an attempt to explore the comparative study of mutual funds of HDFC Asset management Company Limited and aware the fund management of mutual funds and getting actual risk and return and valuate the various investments. The project was started on 8th December after knowing all the relevant information of the

company, mutual fund products and investments and its competitor's mutual fund products in accordance mentioned by management of HDFC Asset management Company Limited.

6. OBJECTIVES OF THE STUDY:
- To study about the Mutual Funds in India
- To study the various Mutual Funds schemes in India.
- To study about the risk factors involved in the Mutual Funds and How to analyze it?
- To study the performance indices that can be used for mutual fund comparison.
- To compare mutual funds of selected five companies on the basis of their return and Sharpe Index.

7. SCOPE OF THE STUDY:
- ♦ This study covers Equity Schemes of five AMC's, with special reference to HDFC Mutual Funds. Following are the five AMC's:
  - o HDFC Mutual Fund
  - o ICICI Mutual Fund
  - o Birla Sun Life Mutual Fund
  - o SBI Mutual Fund
  - o UTI Mutual Fund
- ♦ The study covers the period of past three years i.e. from 1st Jan 2012 to 31st Dec 2014.
- ♦ The study covers only open ended type.
- ♦ The study applies only three approaches to evaluate performance, namely Treynor's Index, Sharpe's Index and Jensen's Index.

Business concerns, corporate investors worldwide are using these new financial instruments; "Mutual Funds" effectively to reduce substantial loss, countries have proved that these instruments can effectively reduce risk.

There has always been high volatility in India, which leads to very high-risk levels. So there is an absolute need to develop. This concept makes all the investors aware of its advantages and makes them use these instruments according to their needs.

To study the concept of Mutual funds such as how mutual funds have come into existence, the different types of mutual funds schemes such as open ended schemes closed ended schemes, to compare the performance of different mutual funds to understand the concept of NAV and mutual funds, to identify the different players in mutual fund industry, to compare equity funds with sensex and nifty.

8. Methodology adopted:
The methodology is the plan, structure and strategy of the investigation process that sets out to obtain answer to the study. The methodology followed for the collecting information are using two sources of data namely
- Primary Data
- Secondary Data

Primary Data
The data collected first hand by the researcher concerned with the research problem refers to the Primary data.
Personal discussion was made with Unit manager and interaction with other personnel in the organization for this purpose. There is no formal design of questionnaire used in this study.

Secondary Data
The information available at various sources made for some other purpose but facilitating the study undertaken is called as Secondary Data.
The various sources that were used for the collection of secondary data are
- ✓ Various Text books were used to understand the concepts of portfolio management.
- ✓ Websites – Various sites like www.5paise.com, www. amfi.com, www.bseindia.com and other websites.
- ✓ Newspapers such as Economic Times, Financial Express.

✓ Magazines such as Business World, Business Today, Investors Guide, Capital Market.

9.LIMITATIONS OF THE STUDY:

- Limited interaction with the employees which restricted the researcher's understanding of the working of the organization.
- Time and cost constraint.
- The researcher selected only one company.

There are a lot of investment avenues available today in the financial market for an investor with an investable surplus. He can invest in Bank Deposits, Corporate Debentures, and Bonds where there is low risk but low return. He may invest in Stock of companies where the risk is high and the returns are also proportionately high.

10. DATA ANALYSIS AND INTERPRETATION

10.1 ANALYSIS AND INTERPRETATION:

The analysis and interpretation of data conducted in HDFC ASSET MANAGEMENT COMPANY LIMITED Fund, Bangalore, covers an overview of the fund segment,   other related data with percentage and narrative data, supported by charts and tables form the information collected during the project study. In this study five funds have been considered. Their relative benchmark indices are

- HDFC EQUITY FUND – GROWTH
- ICICI PRUDENTIAL EQUITY FUND – GROWTH
- BIRLA SUN LIFE EQUITY FUND – GROWTH
- SBI BLUE CHIP EQUITY FUND – GROWTH
- UTI EQUITY FUND – GROWTH

1.CALCULATION OF BETA, COVARIANCE, CORRELATION OF COEFFICIENT, SHARPE'S INDEX, TREYNOR'S INDEX, ALPHA, JENSEN'S INDEX OF HDFC EQUITY FUND – GROWTH

$$BETA = = \frac{(RA- \overline{RA})* (Rm-\overline{Rm})}{(Rm-\overline{Rm})2}$$

$$= \frac{130.5098244}{9.144E+03}$$

$$= 1.4273E-02$$

$$COVARIANCE = \quad 12 = \frac{(RA- \overline{RA})*(Rm- \overline{Rm})}{N-1}$$

$$= \frac{130.5098244}{247}$$

$$= 0.528379856$$

$$CORRELATION OF COEFFICIENT = \quad 12 = \frac{12}{1* 2}$$

$$= \frac{0.528379856}{37.08075751}$$

$$= 0.01424944$$

$$SHARPES INDEX = \quad SP = \quad RP\ -\ RF$$

$$= \frac{0.2454559}{6.094327}$$

=   0.04027612

TREYNORS INDEX = ST   = RP - RF

=   0.2454559
                 1.427E-02
=   1.720E+01

ALPHA=   P = (RA-RF)- (RM-RF)
=   (0.315456-0.07)-1.14273E-02(0.0699431-0.07)
=   0.24545665

JENSENS INDEX =   JP=   + A(RM-RF)
=   0.24545665+1.14273E-02(0.0699431-0.07)
=   0.245456

INFERENCE:

♦   The overall risk of the Fund as measured by the Standard Deviation (σ_A)
     of the total returns of the fund returns for the period from 1 Jan 2014 to 31st
     Dec 2014 is 6.094327.
♦   The Average Returns of the Fund as depicted by Arithmetic Mean (R'_A)
     for the period from 1 Jan 2014 to 31st Dec 2014 is 0.315456.
♦   The Average Returns of the Market Index – BSE 200 as depicted by Arithmetic
      Mean (R'_M) for the period from 1 Jan 2014 to 31st Dec 2014 is 0.0699431.
♦   The Systematic Risk of the Fund as given by the   coefficient for the
     period from 1 Jan 2014 to 31st Dec 2014 is 1.4273E-02.
♦   Treynor's Measure for the fund for the period from 1 Jan 2014 to 31st Dec 2014 is   1.720E+01 which
     indicates that for every one unit change in the beta there will be 1.720E+01 unit change in the returns
♦   Sharpe's Measure for the fund for the period from 1 Jan 2014 to 31st Dec 2014
     is 0.04027612which indicates that for every one unit change in the standard   deviation   there   will   be
0.04027612 unit change in the returns.
♦   Jensen's Measure for the fund for the period from 1 Jan 2014 to 31st Dec 2014 is 0.245456.

1 Graph : HDFC Equity Fund's NAV movement from 1st Jan 2014 to 31st Dec 2014
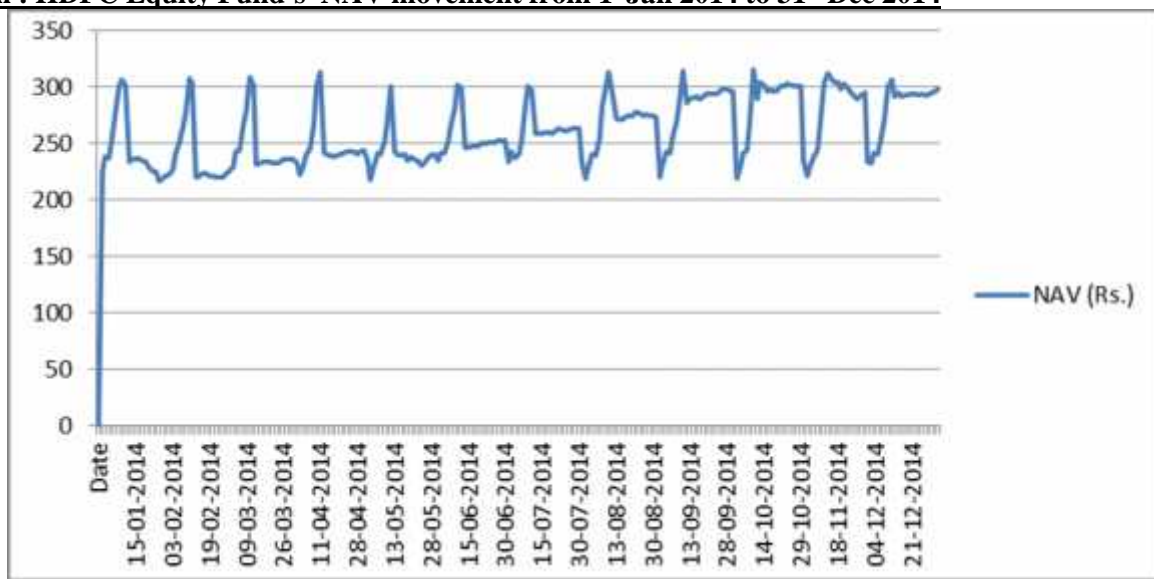
INTERPRETATIONS
1. The NAV of the fund has almost remained constant at around Rs. 262.5372 for about one year i.e. 2014.

2. Then the increasing rally started, since then expect for small falls for short periods it has increased continuously.
3. On 11th October 2014, the NAV reached high of Rs.315.35 during the period.
4. On 31 Dec 2014, its NAV was Rs. 298.5.

1. **TABLE SHOWING AVERAGE RETURN, STANDARD DEVIATION AND BETA OF HDFC EQUITY FUND AND MARKET AVERAGE RETURN FOR THREE YEARS**

	2012	2013	2014
AVERAGE RETURN	FUND= 1.118331 MARKET=-0.259564	FUND=1.819616 MARKET= 0.24861	FUND=0.315456 MARKET=0.0699431
STANDARD DEVIATION	FUND= 18.991088	FUND= 16.75854	FUND= 6.094327
BETA	2.690E-01	-1.123E-01	1.4273E-02

2 GRAPH SHOWING AVERAGE RETURN, STANDARD DEVIATION AND BETA OF HDFC EQUITY FUND FOR THREE YEARS:
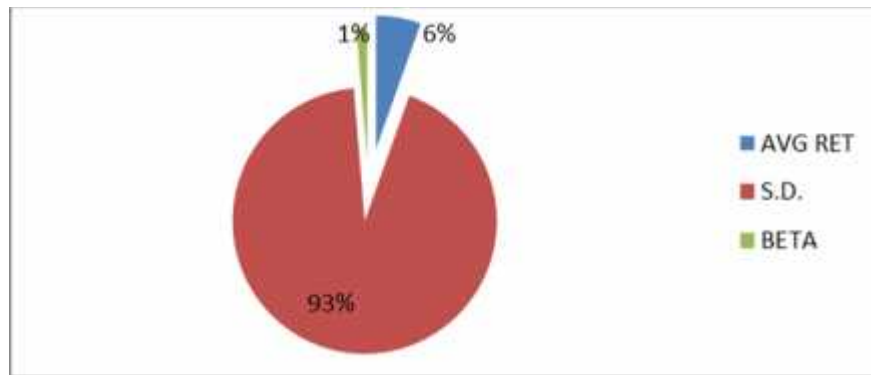
2. CALCULATION OF BETA, COVARIANCE, CORRELATION OF COEFFICIENT, SHARPE'S INDEX, TREYNOR'S INDEX, ALPHA, JENSEN'S INDEX OF ICICI PRUDENTIAL EQUITY FUND – GROWTH:

BETA= =   (RA- RA)* (Rm-Rm)
                        (Rm-R̅m)2
                =50.04741896
                 2.831E+02
                = 0.176769334

COVARIANCE =   12 =   (RA- RA)*(Rm-Rm)
                                N-1
                   =   50.04741896
                        243

$$= \quad 0.205956457$$

CORRELATION OF COEFFICIENT= $\quad$ 12= $\quad$ 12

$$1* \quad 2$$

$$= \quad 0.20595646$$
$$5.17605824$$
$$= \quad 0.039790212$$

SHARPES INDEX = $\quad$ SP = $\quad$ RP - RF

$$= \quad 0.12637065$$
$$4.795290384$$
$$= \quad 0.02822076$$

TREYNORS INDEX = ST = $\quad$ RP - RF

$$= \quad 0.12637065$$
$$0.176769334$$
$$= \quad 0.71489012$$

ALPHA= $\quad$ P = (RA-RF)- (RM-RF)
$\quad$ = $\quad$ (0.196371-0.07)-0.176760334(0.0710897-0.07)
$\quad$ = $\quad$ 0.126178374

JENSENS INDEX = $\quad$ JP= $\quad$ + A(RM-RF)
$\quad$ = $\quad$ 0.126178374+0.176769334(0.0710897-0.07)]
$\quad$ = $\quad$ 0.126371

INFERENCE

♦ The overall risk of the Fund as measured by the Standard Deviation (σ_A)
of the total returns of the fund returns for the period from 1 Jan 2014 to 31st
Dec 2014 is 4.79529.

♦ The Average Returns of the Fund as depicted by Arithmetic Mean (R'_A)
for the period from 1 Jan 2014 to 31st Dec 2014 is 0.196371.

♦ The Average Returns of the Market Index – BSE 200 as depicted by Arithmetic
Mean (R'_M) for the period from 1 Jan 2014 to 31st Dec 2014 is 0.0710897.

♦ The Systematic Risk of the Fund as given by the $\quad$ coefficient for the
period from 1 Jan 2014 to 31st Dec 2014 is 0.176769334.

♦ Treynor's Measure for the fund for the period from 1 Jan 2014 to 31st Dec 2014
is0.71489012 which indicates that for every one unit change in the beta there
will be 0.71489012 unit change in the returns.

♦ Sharpe's Measure for the fund for the period from 1 Jan 2014 to 31st Dec 2014
is 0.026353076 which indicates that for every one unit change in the standard
deviation there will be 0.026353076 unit change in the returns.

♦ Jensen's Measure for the fund for the period from 1 Jan 2014 to 31st Dec 2014
is 0.126371.

3 Graph : ICICI PRUDENTIAL Equity Fund's NAV movement from 1 Jan 2014 to 31ˢᵗ
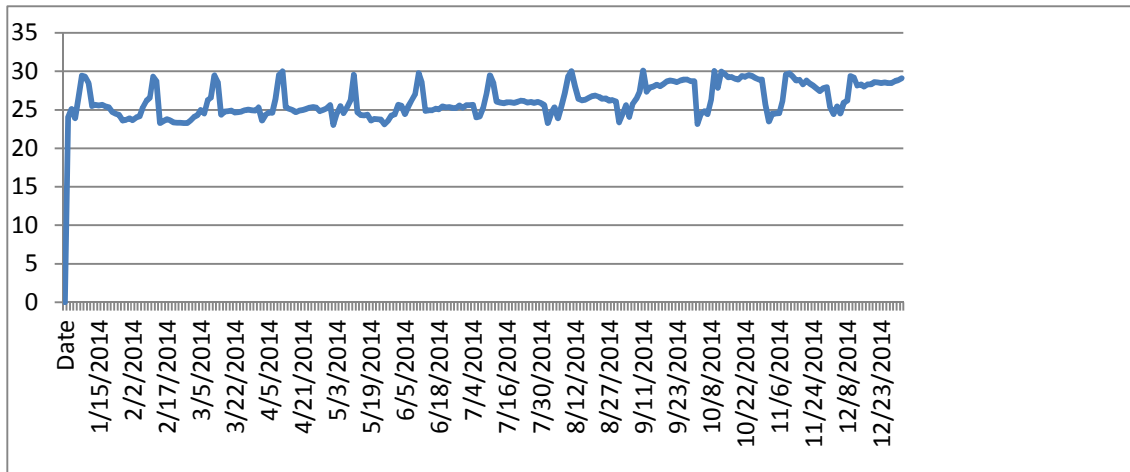

Dec2014

2. **TABLE SHOWING AVERAGE RETURN, STANDARD DEVIATION AND BETA OF ICICI PRUDENTIAL EQUITY FUND AND MARKET AVERAGE RETURN FOR THREE YEARS**

	2012	2013	2014
AVERAGE RETURN	FUND=1.80132 MARKET=-0.26171	FUND=1.207152 MARKET=0.25282	FUND=0.196371 MARKET=0.0710897
STANDARD DEVIATION	FUND= 24.64009	FUND= 14.00441	FUND= 4.79529
BETA	0.073504739	4.72E-01	0.176769334

3. **GRAPH SHOWING AVERAGE RETURN, STANDARD DEVIATION AND BETA OF ICICI PRUDENTIAL FUND FOR THREE YEARS**
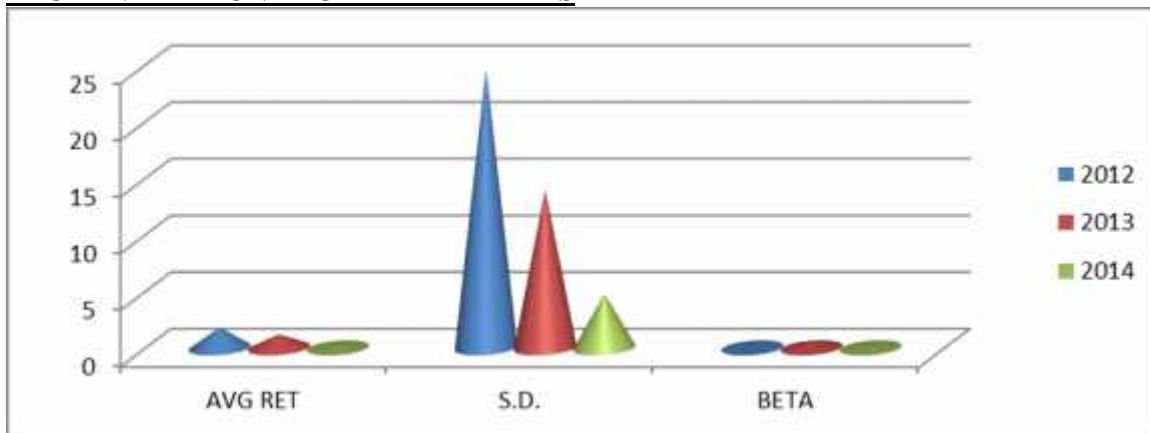
4. **CALCULATION OF BETA,COVARIANCE, CORRELATION OF COEFFICIENT, SHARPE'S INDEX, TREYNOR'S INDEX, ALPHA, JENSEN'S INDEX OF BIRLA SUN LIFE EQUITY FUND – GROWTH:**

BETA= =   (RA- RA)* (Rm-Rm)

$$(Rm-\overline{Rm})2$$
=7.248083195
2.831E+02
=   0.0256

COVARIANCE =   12 = $\dfrac{(RA- RA)*(Rm-Rm)}{N-1}$

= $\dfrac{7.248083195}{247}$

=   0.029344466

CORRELATION OF COEFFICIENT=   12= $\dfrac{12}{1* 2}$

= $\dfrac{2.9344E-02}{0.923947264}$

=   3.1760E-02

SHARPES INDEX =   SP =   RP - RF

= $\dfrac{-0.0678691}{0.862992}$

=-0.078643933

TREYNORS INDEX = ST =   RP - RF

= $\dfrac{-0.0678691}{0.025600337}$

=   -2.651102128

ALPHA=   P = (RA-RF)- (RM-RF)
=   (0.002130892-0.07)-0.025600337(0.06994-0.07)
= -0.067867571

JENSEN INDEX=   JP=   + A(RM-RF)
=   -0.067867571+0.02560037(0.06994-0.07)
=   0.067869107

INFERENCE
- ♦ The overall risk of the Fund as measured by the Standard Deviation (σ_A) of the total returns of the fund returns for the period from 1 Jan 2014 to 31st Dec 2014 is 0.862992296.
- ♦ The Average Returns of the Fund as depicted by Arithmetic Mean (R'_A) for the period from 1 Jan 2014 to 31st Dec 2014 is 0.002130892.

- The Average Returns of the Market Index – BSE 200 as depicted by Arithmetic Mean (R'_M) for the period from 1 Jan 2014 to 31st Dec 2014 is 0.06994.
- The Systematic Risk of the Fund as given by the   coefficient for the period from 1 Jan 2014 to 31st Dec 2014 is 0.025600337.
- Treynor's Measure for the fund for the period from 1 Jan 2014 to 31st Dec 2014 is-2.651102128 which indicates that for every one unit change in the beta there will be -2.651102128 unit change in the returns.
- Sharpe's Measure for the fund for the period from 1 Jan 2014 to 31st Dec 2014. Is 0.078643933 which indicates that for every one unit change in the standard deviation   there will be -0.078643933 unit change in the returns.
- Jensen's Measure for the fund for the period from 1 Jan 2014 to 31st Dec 2014 is-0.067869107.

5 Graph : BIRLA SUN LIFE Equity Fund's NAV movement from 1 Jan 2014 to 31st Dec 2014
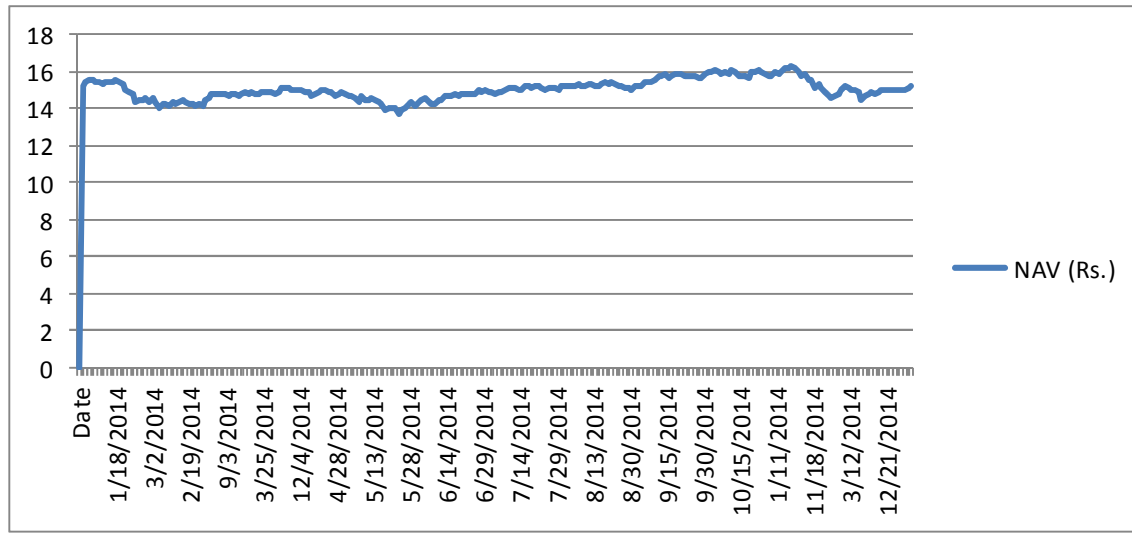
3.TABLE SHOWING AVERAGE RETURN, STANDARD DEVIATION AND BETA OF BIRLA SUN LIFE EQUITY FUND AND MARKET AVERAGE RETURN FOR THREE YEARS

	2012	2013	2014
AVERAGE RETURN	FUND= 0.27091 MARKET= -0.26063	FUND= -0.15931 MARKET= 0.24965	FUND= 0.00213089 MARKET= 0.06994
STANDARD DEVIATION	FUND= 2.04296937	FUND= 1.70103047	FUND= 0.86299229
BETA	-0.053724732	-6.11E-02	0.025600337

6 GRAPH SHOWING AVERAGE RETURN, STANDARD DEVIATION AND BETA OF BIRLA SUN LIFE EQUITY FUND FOR THREE YEARS
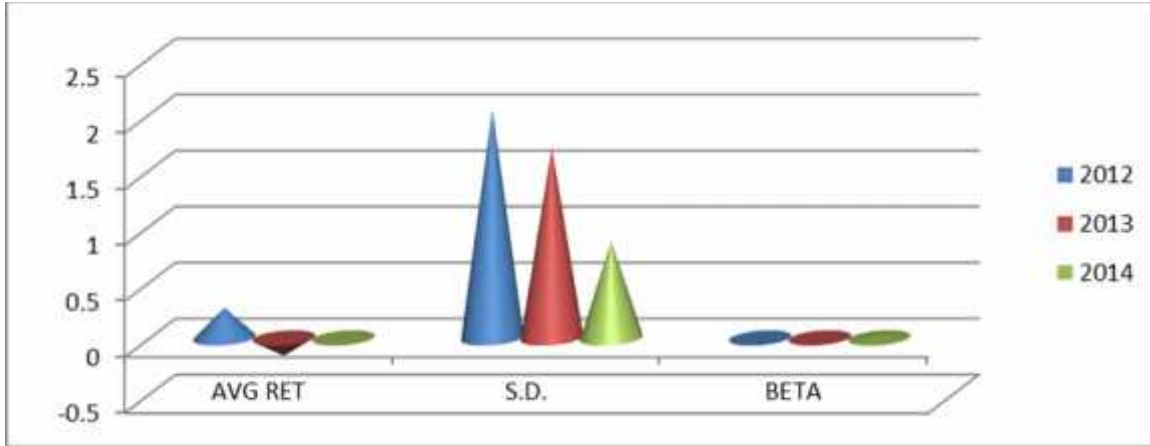
4. CALCULATION OF BETA,COVARIANCE, CORRELATION OF COEFFICIENT, SHARPE'S INDEX, TREYNOR'S INDEX, ALPHA, JENSEN'S INDEX OF SBI BLUE CHIP EQUITY FUND – GROWTH

BETA= =   (RA- RA)* (Rm-Rm)
                              (Rm-R̄m)2
                   =118.0483219
                    2.821E+02
                   =   4.184E-01

COVARIANCE =   12 =   (RA- RA)*(Rm-Rm)
                                                N-1

          =   118.0483219 / 242   =   0.487802983

CORRELATION OF COEFFICIENT=   12=   12
                                                                 1* 2
                    =   0.48780298
                              5.05374332
                    =   0.096523102

SHARPES INDEX =   SP =   RP - RF

          =   0.1320908 / 4.68061445
          =   0.02822082

TREYNORS INDEX = ST =   RP - RF

          =   0.1320908 / 4.184E-01
          =   0.315681173

ALPHA=   P = (RA-RF)- (RM-RF)
     =   (0.202091-0.07)-0.4184(0.0713822-0.07)
     =   0.131512687

JENSENS INDEX =   JP=   + A(RM-RF)

=   0.131512687+0.4184(0.0713822-0.07)]
=   0.132091

INFERENCE:

♦ The overall risk of the Fund as measured by the Standard Deviation (σ_A)
   of the total returns of the fund returns for the period from 1 Jan 2014 to 31st
   Dec 2014 is 15.97125.
♦ The Average Returns of the Fund as depicted by Arithmetic Mean (R'$_A$)
   for the period from 1 Jan 2014 to 31st Dec 2014 is 0.775152.
♦ The Average Returns of the Market Index – BSE 200 as depicted by Arithmetic
   Mean (R'$_M$) for the period from 1 Jan 2014 to 31st Dec 2014 is -0.26063.
♦ The Systematic Risk of the Fund as given by the   coefficient for the
   period from 1 Jan 2014 to 31st Dec 2014 is 0.071742293.
♦ Treynor's Measure for the fund for the period from 1 Jan 2014 to 31st Dec 2014
   Is 9.828964309 which indicates that for every one unit change in the beta there will be   9.828964309
   unit change in the returns.
♦ Sharpe's Measure for the fund for the period from 1 Jan 2014 to 31st Dec 2014.Is 0.044151351 which
   indicates that for every one unit change in the standard deviation there will be0.044151351 unit change in
   the returns.
♦ Jensen's Measure for the fund for the period from 1 Jan 2014 to 31st Dec 2014
   is 0.15977.

7 Graph : SBI BLUE CHIP Equity Fund's NAV movement from 1 Jan 2014 to 31st Dec   2014
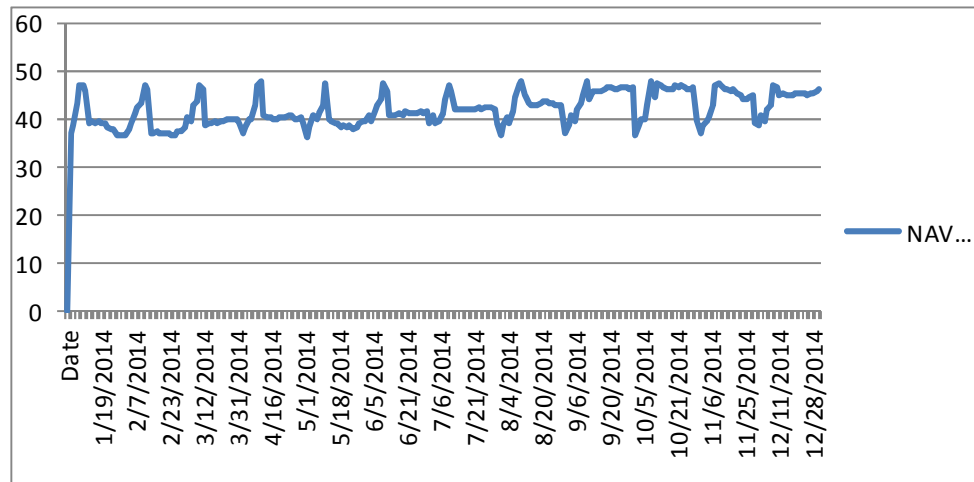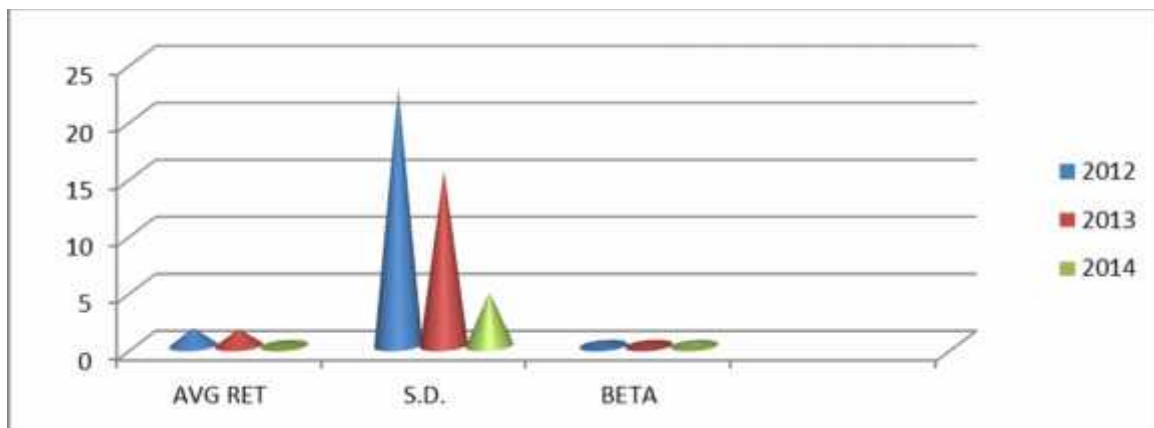

INTERPRETATIONS

1. The NAV of the fund has almost remained constant at around Rs. 42 for about one year i.e. 2014.
2. Then the increasing rally started, since then expect for small falls for short periods it has increased
   continuously.
3. On 11th April 2014, the NAV reached high of Rs.47.99 during the period.
4. On 31 Dec 2014, its NAV was Rs. 45.92.

4 TABLE SHOWING AVERAGE RETURN, STANDARD DEVIATION AND BETA OF SBI BLUE CHIP EQUITY FUND AND MARKET AVERAGE RETURN FOR THREE YEARS

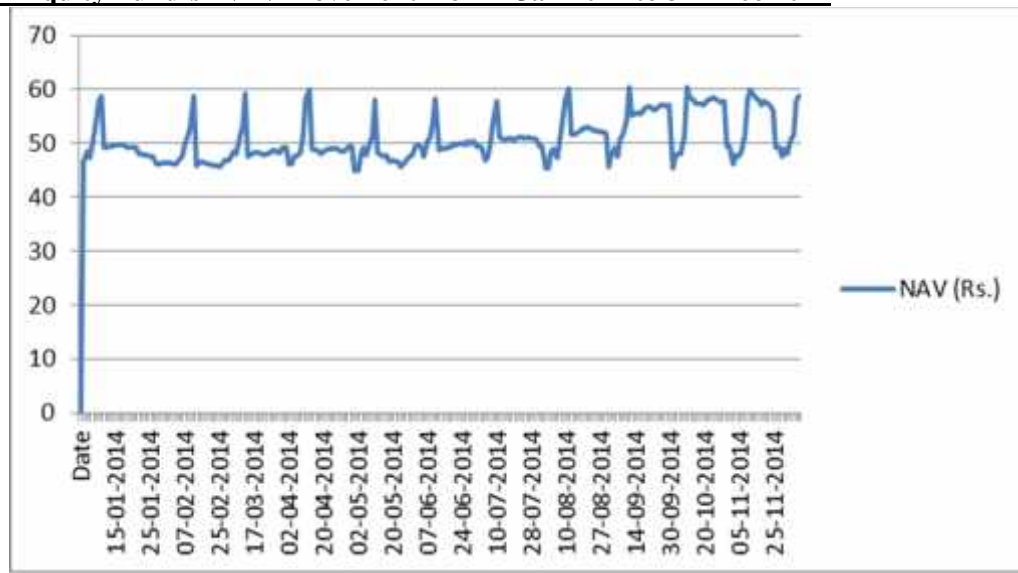|	2012	2013	2014
AVERAGE RETURN	FUND= 1.53537170 MARKET= -0.26171	FUND= 1.488656 MARKET= 0.25282	FUND= 0.202091 MARKET= 0.07138
STANDARD DEVIATION	FUND= 22.62791	FUND= 15.39763	FUND= 4.680614
BETA	0.455439739	3.52E-01	4.184E-01

8 GRAPH SHOWING AVERAGE RETURN, STANDARD DEVIATION AND BETA OF SBI BLUE CHIP EQUITY FUND FOR THREE YEARS:

INFERENCE:

- The overall risk of the Fund as measured by the Standard Deviation (σ_A) of the total returns of the fund returns for the period from 1 Jan 2014 to 31st Dec 2014 is 15.97125.
- The Average Returns of the Fund as depicted by Arithmetic Mean (R'_A) for the period from 1 Jan 2014 to 31st Dec 2014 is 0.775152.
- The Average Returns of the Market Index – BSE 200 as depicted by Arithmetic Mean (R'_M) for the period from 1 Jan 2014 to 31st Dec 2014 is -0.26063.
- The Systematic Risk of the Fund as given by the   coefficient for the period from 1 Jan 2014 to 31st Dec 2014 is 0.071742293.
- Treynor's Measure for the fund for the period from 1 Jan 2014 to 31st Dec 2014 Is 9.828964309 which indicates that for every one unit change in the beta there will be 9.828964309 unit change in the returns.
- Sharpe's Measure for the fund for the period from 1 Jan 2014 to 31st Dec 2014 is 0.044151351 which indicates that for every one unit change in the standard deviation there will be0.044151351 unit change in the returns.
- Jensen's Measure for the fund for the period from 1 Jan 2014 to 31st Dec 2014 Is 0.15977.

9 Graph :UTI Equity Fund's NAV movement from 1 Jan 2014 to 31ˢᵗ Dec 2014

5 TABLE SHOWING AVERAGE RETURN, STANDARD DEVIATION AND BETA OF UTI EQUITY FUND AND MARKET AVERAGE RETURN FOR THREE YEARS

	2012	2013	2014
AVERAGE RETURN	FUND= 0.775152 MARKET= -0.26063	FUND= 1.179456 MARKET= 0.24965	FUND= 0.228977 MARKET= 0.070226
STANDARD DEVIATION	FUND= 15.97125	FUND= 12.77364	FUND= 5.091498969
BETA	0.071742293	-1.01E-01	4.30E-02

10 GRAPH SHOWING AVERAGE RETURN, STANDARD DEVIATION AND BETA OF UTI EQUITY FUND FOR THREE YEARS:
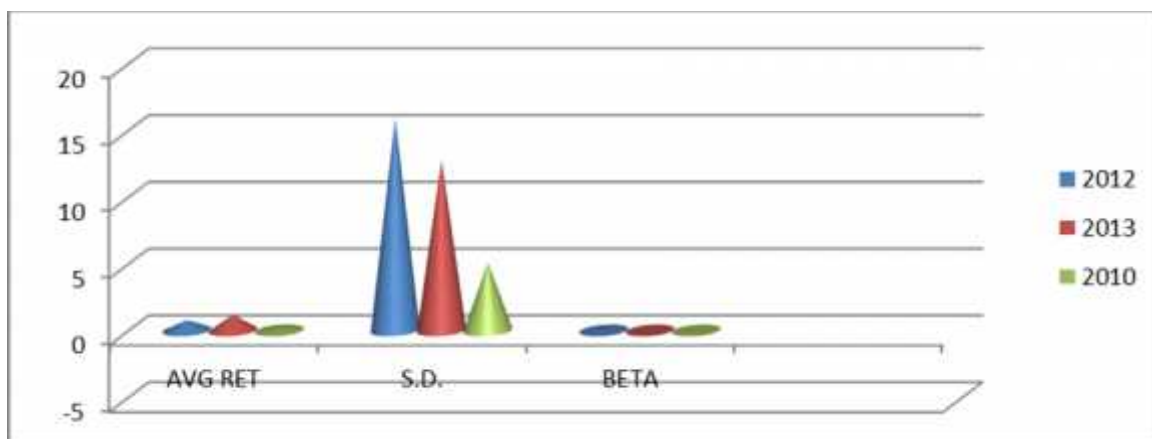
6. RANKING OF THE SELECTED LARGE CAP EQUITY FUNDS ACCORDING TO SHARPE'S RATIO

FUND NAME	SHARPE'S VALUE	RANK
HDFC EQUITY FUND-GROWTH	0.04027612	1ST
ICICI PRUDENTIAL EQUITY FUND-GROWTH	0.026353076	4TH
BIRLA SUN LIFE EQUITY FUND-GTOWTH	-0.078643933	5TH
SBI BLUE CHIP EQUITY FUND-GROWTH	0.02822082	3RD
UTI EQUITY FUND- GROWTH	0.031223918	2ND

INFERENCE:
♦ According to Sharpe's ratio HDFC Equity Fund- Growth is ranked first as it is having positive high ratio of the reward.
♦ It is ranked first because the fund is having high returns than the other funds.
♦ Here the SBI BLUE CHIP Equity fund- Growth is ranked third.
♦ The SBI BLUE CHIP Equity Fund is having better returns and the risk of this fund is also when compared is average i.e. its neither too good nor too bad.
♦ The BIRLA SUN LIFE Equity Fund is ranked fifth as its returns are very less and the amount of systematic risk involved is very high.

7. RANKING OF THE SELECTED LARGE CAP EQUITY FUNDS ACCORDING TO TRYNOR'S RATIO

FUND NAME	SHARPE'S VALUE	RANK
HDFC EQUITY FUND-GROWTH	17.20	1ST
ICICI PRUDENTIAL EQUITY FUND-GROWTH	0.71489012	3RD
BIRLA SUN LIFE EQUITY FUND- GTOWTH	-2.651102128	5TH
SBI BLUE CHIP EQUITY FUND- GROWTH	0.315681173	4TH
UTI EQUITY FUND- GROWTH	3.70	2ND

INFERENCE:
- According to Treynor's ratio HDFC Equity Fund- Growth stands rank one as it is having positive high predictability ratio.
- HDFC Equity Fund Growth is ranked first because the amount of risk involved in this fund is less compared to the risk of other funds.
- Here the SBI BLUE CHIP Equity Fund is ranked fourth.
  Here the BIRLA SUN LIFE Equity Fund is ranked fifth as it is having negative   predictability ratio and risk involved in this fund is high when compared to other funds.

11.SUMMARY OF FINDINGS, SUGGESTIONS AND CONCLUSION

FINDINGS
SUMMARY OF HDFC EQUITY FUND- GROWTH
1. The average return of the fund (R_A) is higher than that of the average market return (R_M) in all the three years which indicates that the fund is performing well as compared to the market.
2. The Standard Deviation of 18.991088 in year 2012, 16.75854 in year 2013 and 6.094327 indicates the amount of risk involved in investing in the fund which is continuously decreasing year after year.
3. The fund's beta of 2.690E-01in year 2012 and 1.4273E-02 in year 2014 is relatively higher than that of the market index (1, by definition), which gives the idea that the proportionate change in the fund resulting from the change in the market index is relatively high, and the fund's beta -1.123E-01in year 2013 is relatively lower than that of the market index (1, by definition), which gives the idea that the proportionate change in the fund resulting from the change in the market index is relatively low.

SUMMARY OF ICICI PRUDENTIAL EQUITY FUND- GROWTH

1. The average return of the fund (R_A) is higher than that of the average market return (R_M) in all the three years which indicates that the fund is performing well as compared to the market.
2. The Standard Deviation of 24.64009 in year 2012, 14.00441 in year 2013 and 4.79529 in year 2014 indicates the amount of risk involved in investing in the fund which is continuously decreasing year after year.
3. The fund's beta of 0.073504739 in year 2012 and 0.176769334 in year 2014 is relatively lower than that of the market index (1, by definition), which gives the idea that the proportionate change in the fund resulting from the change in the market index is relatively low , and the fund's beta of 4.72E-01in year 2013 relatively higher than that of the market index (1, by definition), which gives the idea that the proportionate change in the fund resulting from the change in the market index is relatively high.

SUMMARY OF BIRLA SUN LIFE EQUITY FUND- GROWTH

1. The average return of the fund (R_A) is higher than that of the average market return (R_M) in year 2012 which indicates that the fund is performing well as compared to market return and the average return is lower in the year 2013 and 2014 which indicates that the fund is not performing well as compared to the market in year 2013 and 2014.
2. The Standard Deviation of 2.04296937 in year 2012, 1.70103047 in year 2013 and 0.862992296 indicates the amount of risk involved in investing in the fund which is continuously decreasing year after year.
3. The fund's beta of -0.053724732 in year 2012, -6.11E-02 in year 2013 and 0.02560037 inn year 2014 is relatively lower than that of the market index (1, by definition), which gives the idea that the proportionate change in the fund resulting from the change in the market index is relatively low.

SUMMARY 0F SBI BLUE CHIP EQUITY FUND- GROWTH

1. The average return of the fund (R_A) is higher than that of the average market return (R_M) in all the three years which indicates that the fund is performing well as compared to the market.
2. The Standard Deviation of 22.62791 in year 2012, 15.39763 in year 2013 and 4.680614 in year 2014 indicates the amount of risk involved in investing in the fund which is continuously decreasing year after year.
3. The fund's beta of 0.455439739 in year 2012 is relatively lower than that of the market index (1, by definition), which gives the idea that the proportionate change in the fund resulting from the change in the market index is relatively low , and the fund's beta of 3.52E-01in year 2013 and 4.184E-01 in year 2014 is relatively higher than that of the market index (1, by definition), which gives the idea that the proportionate change in the fund resulting from the change in the market index is relatively high.

SUMMARY OF UTI EQUITY FUND- GROWTH

1. The average return of the fund (R_A) is higher than that of the average market return (R_M) in all the three years which indicates that the fund is performing well as compared to the market.
2. The Standard Deviation of 15.97125 in year 2012, 12.77364 in year 2013 and 5.091498969 in year 2014 indicates the amount of risk involved in investing in the fund which is continuously decreasing year after year.
3. The fund's beta of 0.071742293 in year 2012 and -1.01E-01 in year 2013 is relatively lower than that of the market index (1, by definition), which gives the idea that the proportionate change in the fund resulting from the change in the market index is relatively low , and the fund's beta of 4.30E-02in year 2014 is relatively higher than that of the market index (1, by definition), which gives the idea that the proportionate change in the fund resulting from the change in the market index is relatively high.

8.1TABLE SHOWING AVERAGE RETURN, STANDARD DEVIATION, BETA, SHARPE'S RATIO, TREYNOR'S RATIO AND JENSEN'S RATIO OF ALL THE FUNDS FOR THE YEAR 2014:

| FUNDS	Ri	SD	BETA	SHARPE'S RATIO	TREYNOR'S RATIO	JENSEN'S RATIO	RANK
HDFC EQUITY FUND	0.315456	6.094327	1.4273E-02	0.04027612	1.720E+01	0.245456	1ST
ICICI PRUDENTIAL EQUITY FUND	0.196371	4.79529	0.176769	0.02635307	0.71489012	0.126371	3RD
BIRLA SUN LIFE EQUITY FUND	0.002130892	0.8629929	0.025600337	-0.078643933	-2.651102128	-0.067869107	5TH
SBI BLUE CHIP EQUITY FUND	0.202091	4.680614	4.184E-01	0.02822082	0.315681173	0.132091	4TH
UTI EQUITY FUND	0.228977	5.0914989	4.30E-02	0.031223918	3.70E+00	0.15977	2ND

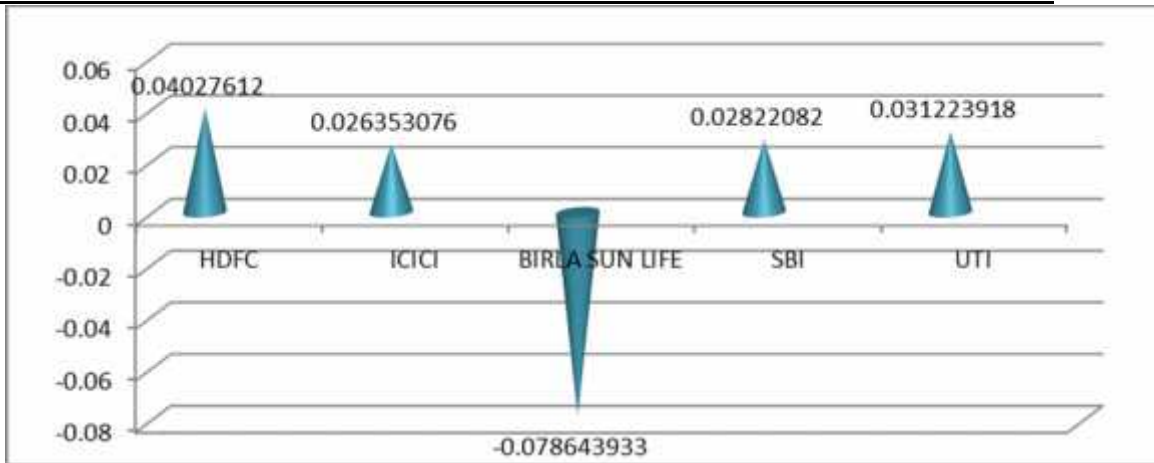**11.GRAPH SHOWING AVERAGE RETURN OF ALL THE FUNDS FOR THE YEAR 2014:**
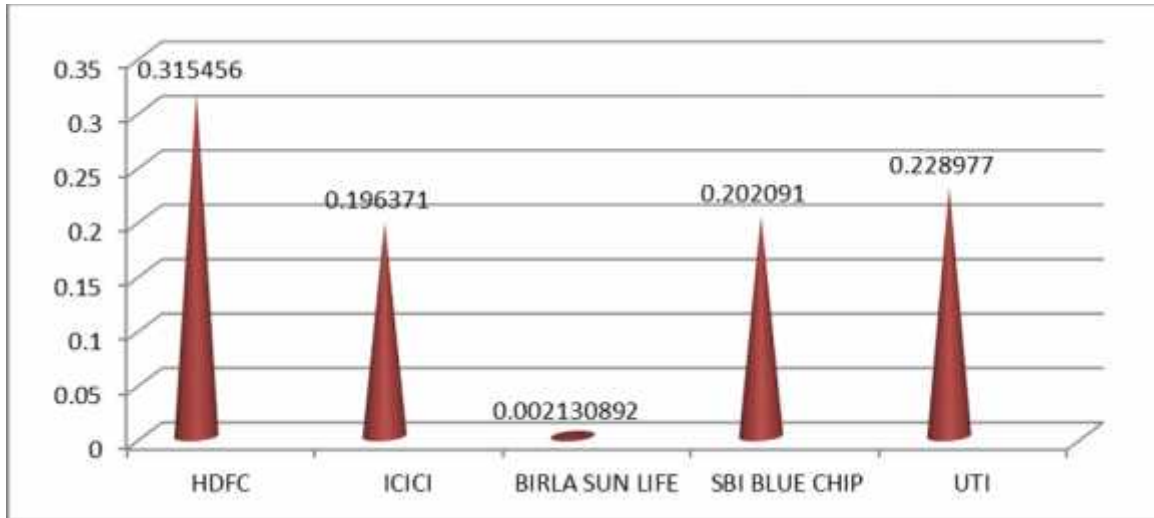
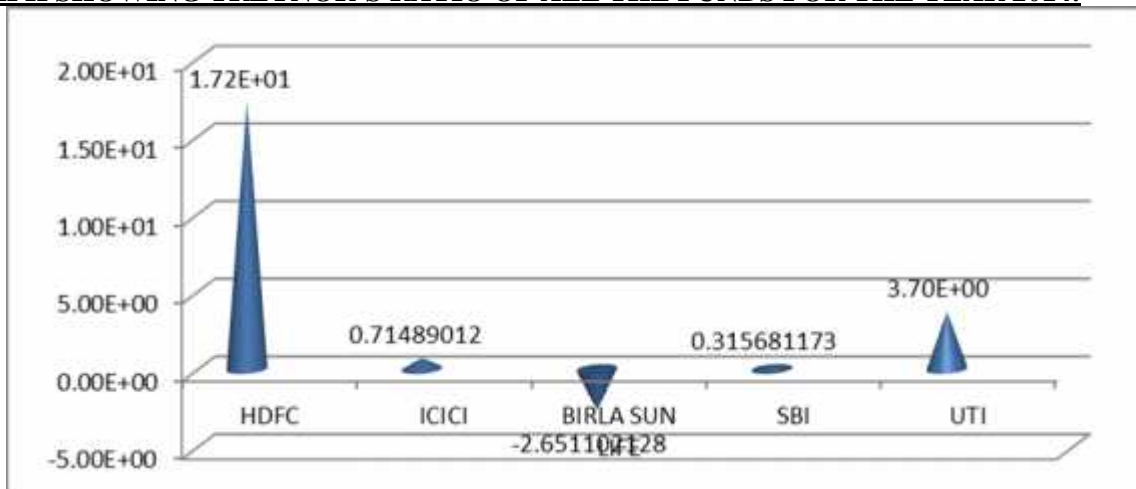**12.GRAPH SHOWING STANDARD DEVIATION OF ALL THE FUNDS FOR THE YEAR 2014:**
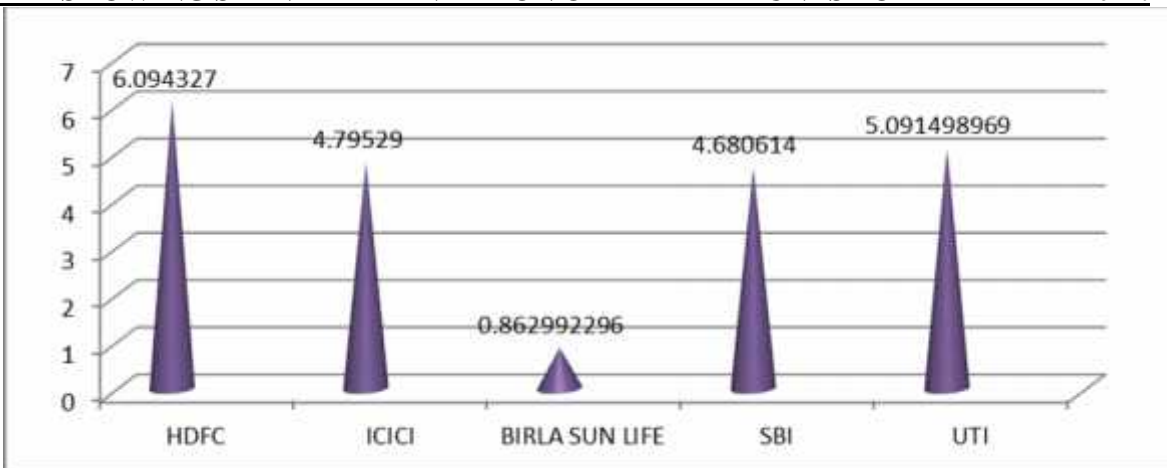
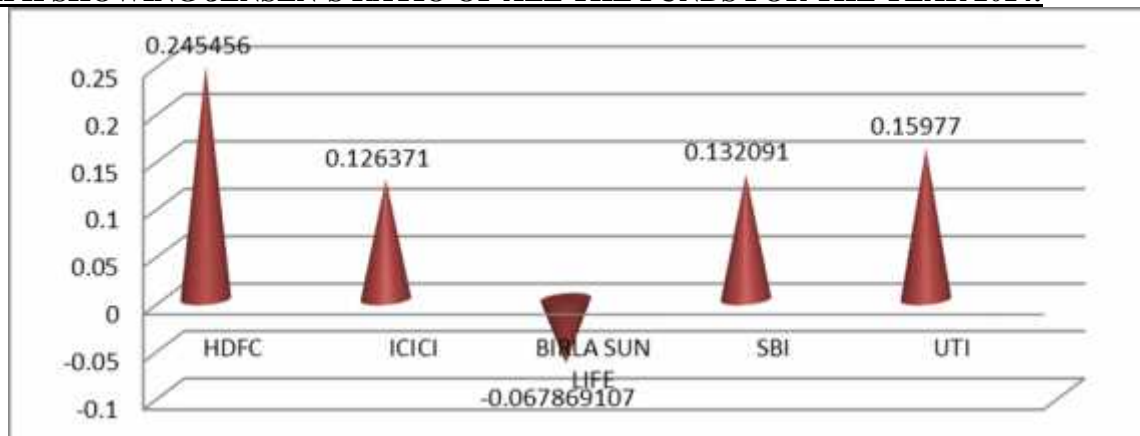**13.GRAPH SHOWING BETA OF ALL THE FUNDS FOR THE YEAR 2014:**
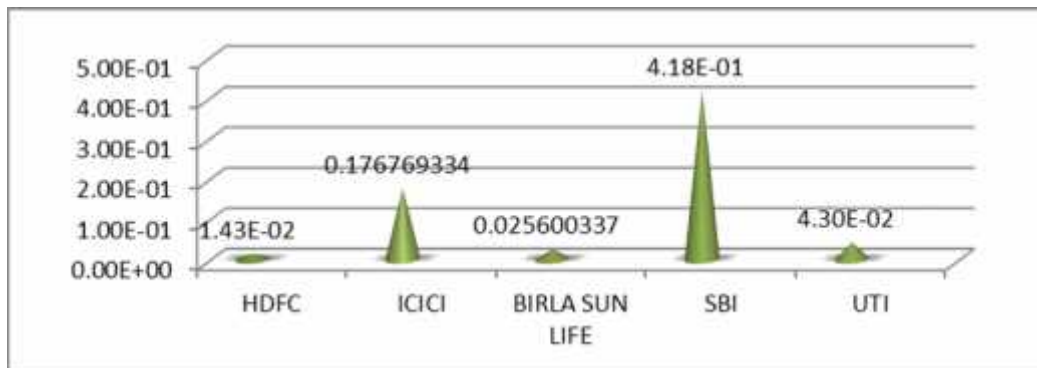
14.GRAPH SHOWING SHARPE'S RATIO OF ALL THE FUNDS FOR THE YEAR 2014:

15. GRAPH SHOWING TREYNOR'S RATIO OF ALL THE FUNDS FOR THE YEAR 2014:

16.GRAPH SHOWING JENSEN'S RATIO OF ALL THE FUNDS FOR THE YEAR 2014:

12. SUGGESTIONS

1.   When compared to other funds SBI BLUE CHIP Equity Fund has witnessed good returns over the market returns. Further the funds return can be maximized based on the funds objectives.

2.   There is a low positive coefficient of correlation between SBI BLUE CHIP Equity Fund and market. Hence there is a low impact on the fund performance .The unsystematic risk can further be reduced by revising the stocks in the fund.

3.   Sharpe's measure considers the total risk i.e. both systematic risk and unsystematic risk. According to the performance evaluation SBI BLUE CHIP Equity Fund stands rank 3 in sharpe's ratio but a corrective measure should be taken to enhance the fund returns. At the same time by minimizing the other risk factor which may affect the funds return.

4.   Treynor's measure considers only the non diversifiable risk such as inflation, market risk etc. According to this measure HDFC equity fund is ranked in first position and SBI
     BLUE CHIP Equity Fund is ranked as fourth position. Therefore the fund is affected largely by systematic risk Hence it should be taken care while deciding the stocks to be included in the fund.

5.   The predictive ability factor of SBI BLUE CHIP Equity Fund shows a promising uptrend in the future i.e. the fund has all the ability to perform better in the future.

6.   Investors are always risk averse therefore AMC's should launch more diversified funds so that she risk becomes minimum. This will lure more and more people to invest in Funds.

7.   Funds should concentrate on differentiating the portfolio of their Funds than the competitions Funds.

8.   The expectations of the people from the Funds are very high so the portfolio managers should take into consideration of people expectations.

13. CONCLUSION:

In this study an attempt was made to look into the logic behind the claims that these AMC's boldly make theoretically with a broad prospective. Broadly various concepts like the risk-return relationship and various performance evaluation methods were floated. According to me all the funds selected for the study are performing good in the market except Reliance Equity Fund- Growth. There is a tough competition among all the funds to reduce the risk i.e. both systematic risk and unsystematic risk. As well as there is a competition to perform better in market and have large returns. The predictive ability of all the funds selected are positive which indicates that in future the fund is expected to have positive returns except Reliance Equity fund- Growth which is negative and indicates that the future returns of this fund will also be negative. Based on the
Inferences from the analytical study of the performance of the fund some suggestions were made to the investor. The future of the mutual fund industry in India is very bright and is going to be very preferred investment options for an investor in the coming future. It looks to take over the other avenues of investment available to the investor due to its high returns and professional management, which is lowering the risk.

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