A Comparative Study on Performance Analysis of Debt and Equity Schemes at HDFC Mutual Funds with Reference to Birla Sun Life and ICICI Prudential Debt and Equity Mutual Funds

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Abstract:
Mutual funds accumulate the reserves of various investors & invested in equity & debt market in the form of fund. On the basis of money invested, investors get the number of units Our mutual fund industry has flourished at a CAGR of 20% in terms of assets under management due to strong measures introduced by SEBI, supportive tax policies, coming of new schemes, rising reserves among people. Availability of the huge variety of mutual funds had made it arduous for the investors to choose between the equity & debt schemes .If one scheme in the portfolio performs badly, it will affect the investment decision of investors. To save the investors from such problem, it had become imperative to appraise the performance of mutual fund portfolio so that investors can judge their investment decision accordingly. The present study is made with this framework. This paper had made a comparative study on performance analysis of debt & equity schemes at HDFC with reference to Birla sun life & ICICI mutual fund schemes by taking their daily returns & to know the category of funds where the investor would like to invest in.15 schemes had been included in the research. The timeline for the research work is from 1st Jan 2009 to 31st Dec, 2013. Different tools used for rating include Sharpe, beta, average, NAV and standard deviation. The results showed that of all schemes, HDFC infrastructure fund, short term plan & long term gilt fund are proficient. Birla Sun life Tax saving fund & Index fund are also excellent than HDFC & ICICI.

Keywords: Mutual fund, equity schemes, debt schemes, Sharpe, beta, investors

1. Introduction

In Mutual Funds, reserves of various investors are accumulated and invested in equity or equity market in the form of fund. On the basis of money invested, investors get the number of units. It is very easy to sell the units. Sponsor, trustees, asset management Company (AMC) and custodian together form a trust to set up mutual fund. The sponsor contributes capital and is responsible for listing of mutual fund with SEBI. He appoints the trustee who shields the interest of investors. All the investments of various schemes of mutual funds are done by AMC. Its performance is overseen by the trust. These are helped by custodian and registrar. They have to comply with SEBI regulations. All securities of mutual funds are put under the safe custody of custodian. They make sure about various payments, collections and deliveries of various securities.

After the establishment of UTI in 1963, Mutual Fund came into existence. Only RBI has power to control Mutual Funds. It instigated UTI64 as its prime scheme. Instead of RBI, IDBI was handed over its managing and official control in 1978. Non-UTI public sector mutual funds entered in 1987 and instigated SBI Mutual Fund and many other public sector Mutual funds followed after that. In 1993, Indian investors got a overarching choice with the arrival of private sector funds. The first private sector mutual Fund was Kothari Pioneer which has now merged with Franklin Templeton. SEBI passed various regulations under which every mutual fund in India except UTI were needed to be enrolled and governed which got revised in 1996. In Feb, 2003, UTI got estranged into Specified Undertaking of UTI and UTI Mutual Fund due to which the spate of mergers among the private sector players in the mutual Fund industry has started a new phase of consolidation and growth.

On August22, 1995, Association of Mutual Funds of India (AMFI) embarked upon, as a non-profit organisation. Its members are all the 44 Asset Management Companies that are enrolled with SEBI.   Various communication practices, sales and distribution of its members are monitored by him. Codes behaviour which has to be followed in Indian Mutual Fund Industry is developed by AMFI.

2. Mutual Fund as Investment

Among all investment options, mutual funds are one of the best alternatives for the people lacking professional knowledge and time to invest in stock, bonds and other directly. Investors can choose from large number of schemes offered by mutual funds. It improves the risk return profile of the portfolio by reducing capital depreciation and poor dividends. It is pliable and involves less transaction cost. Investment can be sold any time without daunting and we can get cash. They provide array of tax benefits. Moreover mutual fund prices are shown daily so it is more transparent.

Nowadays MFs have emerged after long years. It didn't gained trust of investors in the beginning that used to invest in stock directly and suffered a loss. But slowly investors realised that by investing in mutual funds, their risks is reduced. Our industry has grown due to strong measures introduced by SEBI, supportive tax policies, coming of new schemes, rising reserves among people. A mutual fund has expanded his product portfolio. During the FY05 TO FY12, the Indian Mutual fund Industry flourished at a CAGR of more than 20% in terms of assets under management.

3. Literature Review

- Tkac P. (2001) included all international mutual funds for study under the period of 1990-1999. He concluded that international open ended mutual funds are more heterogeneous than well diversified funds. Regional or country funds do not outperform due to the lack of skills & abilities of the managers. Emerging market funds showed lower returns than developed market funds. These results to continue in future depend upon various economic factors.
- R.Otten & D. Bams (2002) aims to measure the performance of 506 European mutual fund schemes of 5 AMC companies and used Car hart 4-factor asset pricing model. They indicated that value is added by small cap funds. If the management fees are added back four companies exhibit good performance.
- Bauer R. Et al (2006) investigated the performance of 143 New Zealand mutual funds for the duration of 1990-2003. He come up with the conclusion that these funds were not able to out-perform the market and suggested that they should not be much related to load charges & should be more related to fund size & expense ratio.
- Panwar & Madhumati (2006) identified the performance of 6 public sectors, 7 private sectors Indian sponsored & 5 private sectors foreign sponsored mutual funds of different net assets for the span of may 2002 to may 2005. They concluded that public & private (both Indian & Foreign) mutual funds vary statistically in terms of standard deviation, average variance & average COV.
- Subha & Jaya B. (2007) checked out performance of mutual fund schemes of 1 year i.e.1st October 2004 to 30th September, 2005. They reported that all the schemes showed mixed performance. Majority of schemes performed better according to Sharpe where as only few schemes showed better performance according to trey nor. Almost all schemes performed better on the basis of Jenson's.
- Duggimpudi et.al (2010) attempted to measure the performance of 17 mutual funds schemes from 2000 to 2009 by using Sharpe, Jenson & Trey nor techniques. They concluded that both risk & return of these schemes is higher than market returns. Beta values are also not more than one.
- Bawa & Brar(2011) conducted a study from 1st April 2000 to 31st March 2010 to compare the performance of public & private sector income mutual funds of 5 AMCs- ICICI, HDFC, SBI, UTI, Reliance. On the basis of data gathered, they concluded that private sector won the race on account of average annual NAV & its percentage growth rate. In terms of returns, ICICI Prudential Income fund (growth option) was leading of all. Public sector income schemes are more unpredictable when it comes to assessing returns
- Soongswang & Sanohdontree (2011) carried out the evaluation of 17 asset management companies having 138 open-ended equity mutual fund schemes in Thailand. The study period is 2002-07. They found that schemes showed good performance by using Sharpe, Jenson and Trey nor but showed different results on different time periods by using Data Envelopment Analysis (DEA) Technique.
- S. Poongavanam (2011) evaluated the performance of public & private sector mutual funds. 340 schemes were covered for the period of 2003-07 relating to debt, money market, equity & balanced category to measure the risk & return. While conducting hypothesis testing she found that returns of public equity funds are less than private equity funds. The returns of private debt funds are the lowest. Public balanced funds have lowest risk return per unit return ratio & public debt category has the highest.
- Vikas K.(2011) studied 20 open-ended schemes of 5 AMCs i.e. HDFC, ICICI, Birla Sun Life, Reliance & LIC for the duration of Jan 2000 to Jan 2009. He end up saying that out of 20, only 5 schemes namely Reliance Growth Fund, Reliance Vision Fund, ICICI Prudential Tax Plan, HDFC Top 200 and Birla Sun Life Equity Fund are able to show good results due to less risk & more returns as compared to Benchmark index.
- Zulfiqar B. Et Al. (2011) conducted a study to analyze the performance of 22 mutual funds listed at Karachi stock exchange during normal, boom & depression. The period of the study is 1999 to 2009 and showed that least performance under different states of stock market is given by Pakistani close end mutual funds due to the bad performance of fund managers.
- Gade S. & Ram P.(2012)compared the performance of 15 equity & debt schemes of mutual funds of Birla Sun Life with reliance & ICICI Prudential from 2007 to 2010. They concluded that Birla Sun Life Tax Plan , Diversified Growth Type & Short term Fund performed better than ICICI & Reliance. In sector schemes, Reliance Pharma Fund was Better than ICICI & Birla Sun Life.

- Lenin K.N. & Rama D. (2012) evaluated Foreign & Indian mutual funds performance. 340 mutual funds schemes were covered for the period of 2003-07 relating to debt, money market, equity & balanced category. ANOVA was used to calculate its returns and found that there returns vary from each other. Returns of foreign mutual fund schemes within same category do not contradict. There is no resemblance in the returns of same Indian mutual fund categories.
- P ALEKHYA(2012) aims to compare the performance of Public & private mutual fund equity scheme from 2009 to 2011 of SBI, UTI, HDFC & JM Financial and realized that by comparing al the schemes .i.e., SBI, UTI and HDFC, JM financial funds, all the schemes are doing better in one category as compared to other.
- Rao & Ravindranan (2012) carried out the performance analyses of 58 schemes of Indian Mutual funds in a bear market through risk return analysis & benchmark index. The results suggested that out of all 58 schemes, return of most of the schemes is better than the performance index based on both premium for systematic risk & total risk.
- Sandeep, et al. (2012) compared the performance of 12 mutual fund schemes from May 2005 to April 2009 to know which scheme is performing well or not performing. Sharpe was used to investigate its performance and they concluded that only H D F C Liquid Fund (Growth), L & T Liquid Fund (Regular Plan Cumulative), and U T I Bond Fund (Dividend) did not showed negative Sharpe index in comparison to others. Birla Sun Life Basic Inds. Fund (Dividend), Reliance Growth Fund (Growth) and followed by Morgan Stanley Growth Fund (Growth) are more speculative than market portfolio.
- Annapoorna & Gupta (2013) evaluated the returns of mutual fund schemes ranked 1 by Crisil. By using simple statistical techniques like averages & returns for the interest of investors, concluded that most of the schemes have failed to give returns more than SBI term deposits.
- JACOB T. et.al (2013) checked the best mutual fund scheme of UTI & SBI and advised the investors to invest in SBI FMCG Fund and UTI floating fund as these funds have the highest risk & returns.
- *Poonam L. (2013)* measured the 5 growth schemes each of private & public mutual funds to know which growth fund is performing better than the other. The duration of the study is 1st march 2011-29th Feb 2012. She summed up by applying 1-tailed test & said that market index returns are less than all funds. Also, average monthly returns of both public & private funds bears resemblance K.Selvavinayagagam (2012) attempted to analyze the highest return yielding fund in Coimbatore Capital Ltd. by comparing debt & equity schemes. The span for study is 5 years i.e. 2007-2011. While comparing these schemes, the results showed that out of all only HDFC TOP 200 FUND and HDFC EQUITY FUND are good performers in the market due to their high risk & high return.
- Dhimen J. & Rajeev J.(April 2014) compared the three schemes of Birla Sun life, ICICI & HDFC for the span of one year only i.e. Jan 2013- Dec 2013 by using Sharpe ratio & comparing with market return. They found that on the basis of Sharpe, only ICICI top 100 is not negative. Birla sun life top 100 and ICICI top 100 has performed better than market return
- Lilly & D. Anusuya (2014) - Weighed the performance of 49 open ended tax saving ELSS schemes for April 2008 to March 2013 & used Sharpe ratio, Trey nor ratio, Sortion ratio and Jensen's Alpha and found that out of all, LIC Nomura MF growth & dividend are risk borne & showed better returns than the market.
- Pal B. (2014) studied the risk return relationship of 14 equity mutual fund schemes of various AMCs. The duration of study was 3rd January 2011 to 1st October, 2013. With the help of beta, Sharpe, trey nor and Jensen alpha he concluded that ICICI Pru exp & other services fund outperformed and kotak nifty ETF & ICICI Pru Infrastructure fund showed the least performance.
- Rupneet K. (2014) examined 23 open-ended debt schemes in India. In order to evaluate the returns of these schemes, Fama's model has been used. The term of study is from 1st July, 2010 – 30th June, 2011. She concluded that bench mark index has performed better than these schemes. These schemes are less volatile than market & less diversified. This may be due to adopting market or selecting under priced securities.
- Qamruzzaman (2014) compared the monthly returns with benchmark returns of 32 growth oriented mutual funds in Bangladesh. By applying various measures i.e. Jenson's, beta etc he showed that in the study period only few mutual fund schemes were best performers as compared to market returns.

4. Need of the Study
The basic need of the study is to evaluate the performance of Equity and Debt schemes of HDFC Mutual Funds and to know the Category of funds where the investor would like to invest.

5. Objectives of the Study
- To put emphasis on debt and equity schemes briefly.
- To evaluate the performance of debt and equity schemes of HDFC MF company over a period of 5 years with reference to Reliance and Industrial Credit and Investment Corporation of India MFs...
- To examine the funds sensitivity to the market fluctuations in terms of beta.

6. Scope of the Study
- This study is to know the importance of mutual funds in the present world.
- This study will discuss the theoretical concept of debt and equity schemes in HDFC Mutual fund.

- To evaluate the performance of debt and equity schemes of HDFC MF company over a period of 5 years with reference to Reliance and Industrial Credit and Investment Corporation of India MFs. and to give solutions for the same
- This study is only for five years.
- This study will help the investor to select and evaluate schemes in terms of risk and return.

7. Methodology of the Study
The present study is based on secondary data. The data collected is refined carefully and the necessary information is taken. It comprises of 3 equity schemes & 2 debt schemes each of Birla Sun Life, HDFC & ICICI. The time period for the research work is 1st Jan 2009 to 31st Dec 2013. The daily returns are compiled on the basis of NAV. 91 days Treasury bill rate is taken as risk free rate. BSE SENSEX has been taken as bench mark Index. Different parameter has been used to evaluate the performance of mutual funds.

8. Evaluation Parameters
Below are the evaluation parameters on the basis of which the scrutiny and comparison of various equity schemes has been done.
1. Net Asset Value(NAV)
2. Assets under management
3. Standard deviation
4. Sharpe ratio
5. Beta

8.1. Net Asset Value (NAV)
NAV are like stock prices in that they measure the value of one share of a fund. NAV is equal to market value of all securities held by fund and cash & its equivalents less fund liabilities divided by total fund shares outstanding. The fund NAV will change daily.

8.2. Asset under Management
It is a measure to judge the size of a mutual fund. It is used by mutual funds to correlate against their opponents and to assess their victory in terms of proceeds. The two AUM may differ in their balances because of rise or fall in capital, fluctuations in currency exchange rate and arrival or discharge of assets.

8.3. Standard Deviation
Standard deviation assesses average returns of a fund during a particular period which keeps on fluctuating. It tells how it will affect the NAV in a short period. Whether NAV will rise or fall. Thus, we can Judge the total risk.

8.4. Sharpe Ratio
Sharpe Ratio is a ratio of return versus risk which can be used by an investor to see how well a mutual fund has performed based upon its risk level. Risk means fund's standard deviation. If we correlate the two funds with same level of risk and different Sharpe ratio, the fund which gives more proceeds is better.

8.5. Beta
Beta tells us how much a mutual fund will change if there is change in the market. It is calculated using regression analysis. If the Sensex change by 25%, fund's return will change more than or less than this can easily be calculated from beta number. If the beta is higher than one, the investment price will be extra unstable than market or vice versa.

8.6. Limitations of the Study
- Insufficient time to cover and present all schemes of HDFC Mutual Fund.
- It is restricted to Debt and equity schemes.
- Technical tools have some disadvantages which have impact on debt and equity schemes.
- There is no guess or estimate of selected schemes in this study.

8.6.1. Equity Funds
Equity funds are more risky and provide more returns in comparison to other type of funds. They invest mainly in equity securities of various companies. They are highly diversified and it is easy and economical to invest in equity mutual funds then to buy each and every stock in fund's portfolio. It is managed by well qualified people who watches and act on the market on behalf of the person who is investing. Such schemes provide better returns when invested for long term i.e. for 3 years or more. There are different types of equity funds each falling into different risk bracket. These are:-
1. Aggressive growth Funds
2. Growth funds
3. Specialty Funds
4. Diversified Equity
5. Equity Index Funds

6. Value funds
7. Equity Income or Dividend Yield Funds

8.6.2. Debt Funds
Debt funds put their money in securities which provides stable earnings. Those who want stable proceeds can pick debt funds. They provide balanced but low income as compared to equity. They have fixed maturity date and pay fixed rate of interest. In order to minimise the risk of default, debt funds usually invest in securities who are rated by credit rating agencies like CARE, CRISIL, FITCH, and ICRA. Base on their different investment objectives, there can be following types of debt funds:
1. Diversified debt funds
2. Focussed debt funds
3. High yield debt funds
4. Assured return
5. Fixed Term Plan series

8.7. About HDFC
On Dec10, 1999 HDFC AMC was started. It was permitted by SEBI on 3 July, 2000. HDFC acquired the business of Zurich Insurance Co. Due to which various schemes of ZIC shifted to HDFC Mutual fund on June 19, 2003. It offer large number of schemes relating to monthly income plans, treasury funds, term plan, sector specific fund, tax saver, debt and balanced funds, gilt funds etc.

9. Data Analysis

HDFC Tax Saver					
	2009-10	2010-11	2011-12	2012-13	2013-14
NAV	197.021	249.066	192.725	243.978	256.398
AVERAGE	-3.70599	-5.40256	-7.99641	-8.40575	-8.61327
STANDARD DEVIATION	0.629713	1.125375	0.589216	0.311648	1.271835
SHARPE	-5.8852	-4.80067	-13.5713	-26.9719	-6.77231
BETA	0.458232	0.732363	0.682403	0.780911	0.458232

Table 1: Performance Analysis of Equity Schemes of HDFC Mutual Fund

9.1. Interpretation
In HDFC tax saver plan, NAV was in increasing trend from 197.021 to 256.398, Sharpe ratio has decreased from-5.8852 to -6.77231 in all 5 years, Standard deviation increased from 0.629713 to 1.271835,whereas Average was decreased from -3.70599 to -8.61327 and Beta has increased from 0.458232 to 0.458232.

HDFC Index Fund Sensex Plan					
	2009-10	2010-11	2011-12	2012-13	2013-14
NAV	145.8555	171.4724	128.3197	162.3592	178.6957
AVERAGE	-3.70624	-5.40293	-7.99673	-8.40578	-8.61297
STANDARD DEVIATION	0.630438	1.124727	0.589177	0.311957	1.271064
SHARPE	-5.87883	-4.80377	-13.5727	-26.9453	-6.77619
BETA	0.728185	1.001435	0.994669	0.996265	0.99034

Table 2

9.2. Interpretation
In HDFC Index Fund Sensex plan under Equity Scheme, Performance of NAV was in increasing from 145.8555 to 178.6957, Sharpe ratio has decreased from -5.87883 to -6.77619 in all 5 years, Standard deviation increased from 0.630438 to1.271064, whereas Average was decreased from -3.70624 to -8.61297 and Beta has increased from 0.728185 to 0.99034.

HDFC Infrastructure Fund					
	2009-10	2010-11	2011-12	2012-13	2013-14
NAV	11.049	12.731	8.126	11.004	9.416
AVERAGE	-3.70896	-5.40283	-7.99759	-8.40587	-8.61319
STANDARD DEVIATION	0.630209	1.125384	0.59009	0.31164	1.270563
SHARPE	-5.88529	-4.80088	-13.5532	-26.973	-6.77904
BETA	0.587292	0.860776	0.830691	1.169204	1.118626

Table 3

9.3. Interpretation

As per the above table ,Performance analysis of HDFC Infrastructure Fund NAV (11.049 to 9.416),Standard Deviation (0.630209 to 1.270563),Beta (0.587292 to 1.118626) has increased in 2013-14, whereas Average
(-3.70896 to -8.61319) and Sharpe Ratio (-5.88529 to -6.77904) has decreased in the same period.

HDFC Gilt Fund- Long Term Plan					
	2009-10	2010-11	2011-12	2012-13	2013-14
NAV	18.4954	19.5847	20.5765	22.8436	23.1101
AVERAGE	-3.7099	-5.40607	-8.00044	-8.40032	-8.62818
STANDARD DEVIATION	0.627796	1.132727	0.590497	0.307305	1.283126
SHARPE	-5.9094	-4.77261	-13.5487	-27.3355	-6.72434
BETA	0.061	-0.01033	-0.0127	-0.00763	0.17692

Table 4: Performance Analysis of Debt Schemes of HDFC Mutual Fund

9.4. Interpretation

As per the Related Table of HDFC Gilt Fund Long term Plan, NAV has increased from 18.4954
To 23.1101 in the Year 2010-2014, Standard Deviation varied from 0.627796 to 1.283126 in the related years, same increasing effect on beta from 0.061 in 2010 to 0.17692 in 2014.but as regard Average has decreased from -3.7099 to -8.62818 and in Sharpe Ratio decreased from -5.9094 to -6.72434.

HDFC Short Term Plan					
	2009-10	2010-11	2011-12	2012-13	2013-14
NAV	17.7293	18.6357	20.2198	22.1601	23.7571
AVERAGE	-3.70952	-5.41335	-8.00038	-8.4005	-8.6281
STANDARD DEVIATION	0.627054	1.136098	0.590515	0.307233	1.282942
SHARPE	-5.9158	-4.76486	-13.5481	-27.3425	-6.72524
BETA	0.012113	0.005907	0.001272	0.001654	0.035884

Table 5

9.5. Interpretation

In the Performance analysis of HDFC Short term Plan Debt Scheme NAV position has increased from 17.7293 to 23.7571, Average has decreased from -3.70952 to -8.6281, as regard Standard deviation again in decreasing trend from 0.627054 to 1.282942, Sharpe Ratio effects are -5.9158 to -6.72524 and Beta Position has increased from 0.012113 to 0.035884.

ICICI FMCG Fund Growth Regular Plan					
	2009-10	2010-11	2011-12	2012-13	2013-14
NAV	52.58	65.69	75.52	106.34	116.2
AVERAGE	-3.70795	-5.40619	-7.99525	-8.40523	-8.61309
STANDARD DEVIATION	0.631384	1.126512	0.589243	0.311282	1.273136
SHARPE	-5.87273	-4.79905	-13.5687	-27.002	-6.76525
BETA	0.356082	0.520599	0.512801	0.403169	0.666307

Table 6: Performance Analysis of Equity Schemes of ICICI Mutual Fund

9.6. Interpretation

As per the above ICICI FMCG Fund Growth Regular Plan ,NAV has increased from 52.58 to 116.2,average Decreased from -3.70795 to -8.61309, Standard Deviation increased from 0.631384 to 1.273136,Sharpe has also decreased as like average from -5.87273 to -6.76525 and beta position has also been improved from 0.356082 to 0.666307

ICICI Prudential Index Plan- Regular Plan					
	2009-10	2010-11	2011-12	2012-13	2013-14
NAV	47.9931	56.9843	43.5232	55.0566	59.4319
AVERAGE	-3.70687	-5.40603	-7.99684	-8.40524	-8.61314
STANDARD DEVIATION	0.630042	1.125643	0.589445	0.311676	1.272261
SHARPE	-5.88353	-4.80262	-13.5667	-26.9679	-6.76995
BETA	0.983714	1.015125	0.965874	0.996595	0.983714

Table 7

9.7. Interpretation
In ICICI Prudential Index Plan under regular equity scheme, NAV was in increasing trend from 47.9931
To 59.4319, Sharpe ratio has decreased from-5.88353 to -6.76995 in all 5 years, Standard deviation increased from 0.630042 to 1.272261, whereas Average was decreased from -3.70687 to -8.61314 and Beta has increased from 0.983714 to 0.983714.

ICICI Tax Plan-Growth-Regular Plan					
	2009-10	2010-11	2011-12	2012-13	2013-14
NAV	121.69	151.03	114.85	158.07	174.12
AVERAGE	-3.70699	-5.37127	-7.99688	-8.40492	-8.61307
STANDARD DEVIATION	0.631533	1.225418	0.58966	0.3116	1.271616
SHARPE	-5.86982	-4.38321	-13.5619	-26.9734	-6.77333
BETA	1	5.512487	0.777531	0.75197	0.748706

Table 8

9.8. Interpretation
In ICICI Tax Plan Growth regular plan under Equity Scheme, Performance of NAV was in increasing from 121.69 to 174.12, Sharpe ratio has decreased from-5.86982 to -6.77333 in 5 years, Standard deviation increased from 0.631533 to 1.271616, whereas Average was decreased from -3.70699 to -8.61307and Beta has decreased from 1 to 0.748706.

ICICI Long Term Gilt Fund-Growth-Regular Plan					
	2009-10	2010-11	2011-12	2012-13	2013-14
NAV	31.35	33	34.96	38.81	38.93
AVERAGE	-3.70035	-5.40567	-8.00035	-8.40033	-8.62845
STANDARD DEVIATION	0.621502	1.132904	0.590394	0.307228	1.280545
SHARPE	-5.95389	-4.77152	-13.5509	-27.3423	-6.73811
BETA	0.028207	0.000273	-0.01423	-0.00597	0.171064

Table 9: Performance Analysis of Debt Schemes of ICICI Mutual Fund

9.9. Interpretation
As per the Related Table of ICICI Long Term Gilt fund Growth regular plan under Debt schemes, NAV has increased from 31.35 to 38.93 in the Year 2010-2014, Standard Deviation varied from0.621502
 to 1.280545 in the related years in increasing form, same increasing effect on beta from 0.028207 in 2010 to 0.171064 in 2014.but as regard Average has decreased from -3.70035 to -8.62845 and in Sharpe Ratio decreased from -5.95389 to -6.73811.

ICICI Short Term Plan					
	2009-10	2010-11	2011-12	2012-13	2013-14
NAV	18.83	19.65	21.37	23.4	25.1
AVERAGE	-3.69557	-5.40035	-7.58975	-8.40036	-8.62818
STANDARD DEVIATION	0.618591	1.13383	6.425969	0.307219	1.280243
SHARPE	-5.97418	-4.76293	-1.18111	-27.3433	-6.73949
BETA	0.015129	0.00209	24.06499	-0.00127	0.050063

Table 10

9.10. Interpretation
In the Performance analysis of ICICI Short term plan Debt Scheme NAV position has increased from 18.83
To 25.1 , Average has decreased from -3.69557 to -8.62818, as regard Standard deviation in increasing trend from 0.618591to 1.280243, Sharpe Ratio effects are -5.97418 to -6.73949 and Beta Position has increased from 0.015129 to 0.050063.

Birla Sunlife MNC Fund-Growth-Regular Plan					
	2009-10	2010-11	2011-12	2012-13	2013-14
NAV	162.85	216.18	187.64	267.14	294.26
AVERAGE	-3.712701768	-5.0327	-8.02177	-8.40197	-8.62303
STANDARD DEVIATION	0.632743034	1.001526	0.581041	0.311188	1.277
SHARPE	-5.867629616	-5.02503	-13.8059	-26.9997	-6.75257
BETA	0.457495	0.535904	0.440819	0.456658	0.407733

Table 11: Performance Analysis of Equity Schemes of Birla Sun life (BSL) Mutual Fund

9.11. Interpretation

As per the above Birla Sun Life Growth Regular plan, NAV has increased from 162.85 to 294.26,average Decreased from -3.712701768 to -8.62303, Standard Deviation increased from 0.632743034 to 1.277, Sharpe has also decreased as like average from -5.867629616 to -6.75257 and beta position has also been improved from 0.457495 to 0.407733

Birlasunlife Index Fund-Growth-Regular Plan					
	2009-10	2010-11	2011-12	2012-13	2013-14
NAV	51.5594	60.9539	45.4733	57.7413	61.9024
AVERAGE	-3.7148	-5.0333	-8.38538	-8.40261	-8.62259
STANDARD DEVIATION	0.631704	1.000399	0.92069	0.311467	1.275952
SHARPE	-5.88061	-5.03129	-9.10772	-26.9776	-6.75777
BETA	0.955525	1.016705	34.87546	1.030721	1.006488

Table 12

9.12. Interpretation

In Birla Sun Life Index Fund Growth regular plan under equity scheme, NAV was in increasing trend from 51.5594 to 61.9024, Sharpe ratio has decreased from--5.88061 to -6.75777 in all 5 years, Standard deviation increased from 0.631704 to 1.275952 ,whereas Average was decreased from --3.7148 to -8.62259 and Beta has increased from 0.955525 to 1.006488.

Birla Sunlife Tax Savings Fund-Growth-Regular Plan					
	2009-10	2010-11	2011-12	2012-13	2013-14
NAV	25.52	32.13	25.28	30.39	31.26
AVERAGE	-3.70673	-5.40222	-7.99699	-8.40584	-8.6132
STANDARD DEVIATION	0.631998	1.12548	0.5895	0.311752	1.271041
SHARPE	-5.86509	-4.79993	-13.5657	-26.9632	-6.77649
BETA	0.729588	0.819873	0.767641	0.806747	0.943086

Table 13

9.13. Interpretation

In BSL Tax saving fund Growth regular plan under Equity Scheme, Performance of NAV was in increasing from 25.52 to 31.26, Sharpe ratio has decreased from-5.86509 to -6.77649 in 5 years, Standard deviation increased from 0.631998 to 1.271041 ,whereas Average was decreased from-3.70673 to -8.6132 and Beta has decreased from 0.729588 to 0.943086.

Birla Sunlife Short Term Fund-Growth-Regular Plan					
	2009-10	2010-11	2011-12	2012-13	2013-14
NAV	33.769	35.0751	38.4163	42.4705	46.0453
AVERAGE	-3.702041232	-5.39341648	-8.001740292	-8.39756	-8.635751801
STANDARD DEVIATION	0.621000467	1.133913298	0.591098386	0.307536	1.282776932
SHARPE	-5.961414568	-4.756462852	-13.53707011	-27.306	-6.732076002
BETA	0.042393301	-0.00638	-0.00069	-0.40559	0.022517

Table 14: Performance Analysis of Debt Schemes of Birla Sun Life (BSL) Mutual Fund

9.14. Interpretation

As per the Related Table of BSL Short Term Fund Growth regular plan under Debt schemes, NAV has increased from 33.769 to 46.0453 in the Year 2010-2014, Standard Deviation varied from 0.621000467 to 1.282776932 in the related years in increasing form, decreasing increasing effect on beta from 0.042393301 in 2010 to 0.022517 in 2014.but as regard Average has decreased from -3.702041232 to -8.635751801 and in Sharpe Ratio decreased from -5.961414568 to -6.732076002

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Birla Sunlife Government Securities-Long Term Plan					
	2009-10	2010-11	2011-12	2012-13	2013-14
NAV	25.66	28.06	30.01	33.38	34.39
AVERAGE	-3.702041232	-5.39341648	-8.001740292	-8.39756	-8.635751801
STANDARD DEVIATION	0.621000467	1.133913298	0.591098386	0.307536	1.282776932
SHARPE	-5.961414568	-4.756462852	-13.53707011	-27.306	-6.732076002
BETA	0.042393301	-0.00638	-0.00069	-0.40559	0.022517

Table 15

9.15. Interpretation
In the Performance analysis of BSL Government Securities long term plan Debt Scheme NAV position has increased from 25.66 to 34.39, Average has decreased from -3.702041232 to -8.635751801, as regard Standard deviation in increasing trend from 0.621000467to 1.282776932, Sharpe Ratio effects are -5.961414568 to -6.732076002 and Beta Position has increased from 0.042393301to 0.022517.
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10. Findings

10.1. Index Type
- HDFC: NAV, Standard Deviation, Beta has increased. But average and Sharpe ratio decreased.
- ICICI: NAV, Standard Deviation, Beta has increased, whereas all other ratios has been decreased.
- BIRLA SUN LIFE: NAV, Standard Deviation, Beta has increased, other ratios have negative values.

10.2. Sector Type
- HDFC: Standard Deviation, Beta has increased other ratios as per calculations have negative impact.
- ICICI**:** NAV, Standard Deviation, Beta has increased, where as other decreased.
- BIRLA SUN LIFE: NAV, Standard Deviation, Beta has increased and other decreased.

10.3. Tax Saving Plan
- HDFC: NAV, Standard deviation has increased other Showing negative value.
- ICICI: NAV, Standard deviation has increased but Beta, Average Sharpe decreased.
- BIRLA SUN LIFE: NAV, Standard Deviation, Beta has increased whereas other has negative value as per Calculations.

10.4. Short Term Fund
- HDFC: NAV, Standard Deviation, Beta has increased. But average and Sharpe ratio decreased
- ICICI: NAV, Standard deviation has increased other Showing negative value.
- BIRLA SUN LIFE: NAV, Standard deviation has increased but Beta, Average Sharpe decreased.

10.5. Long Term Fund
- HDFC: NAV, Standard Deviation has increased other Calculated as negative.
- ICICI: NAV, Standard Deviation has increased others impact negatively.
- BIRLA SUN LIFE: NAV, Standard Deviation has increased rest ratios have decreased.

11. Conclusions
Technology Advancement is very helpful for investors. All Required information is easily available with the Technology up gradation, with the help of websites the investors can find the all data related to Mutual Funds (Affordable Investment for Investors).For the growth of mutual funds Stock market and economy are the biggest contributors. SEBI must promote savings with the help of banks and post offices for the investors of rural areas. On the basis of Tax Saving Schemes performance of BSL Tax saving fund Growth regular plan is higher than the HDFC and ICICI. Based on Index fund Schemes Birla Sun Life Index Fund Growth regular plan have higher performance as compared to others. According to sector wise Analysis HDFC Infrastructure Fund is ranked first when compared to Birla sun life and ICICI schemes. While Comparing Debt long term schemes HDFC and ICICI both ranked well as compared to Birla Sun Life. As per Short term debts schemes HDFC Short term plan considered better as compared to Birla sun Life and ICICI. So, as a result HDFC Mutual funds Schemes in form of Debts and Equity have efficient results as compared to BSL and ICICI in most selected schemes.

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