A COMPARATIVE STUDY ON DEBT SCHEME OF MUTUAL FUND OF RELIANCE AND BIRLA SUNLIFE

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Abstract

Mutual funds are key contributors to the globalization of financial markets and one of the main sources of capital flows to emerging economies**.** This study provides an overview of the performance of debt scheme of mutual fund of Reliance, and Birla Sunlife with the help of Sharpe Index after calculating Net Asset Values and Standard Deviation**.** This study reveals that returns on Debt Schemes are close to Benchmark return (Crisil Composite Debt Fund Index: 4.34%) and Risk Free Return: 6% (average adjusted for last five year). The Sharpe's Index shows that the return of the selected Debt Fund Schemes is less than even from Risk-free-return rate and the Benchmark Index. Performance of Debt Scheme of Reliance is better than the performance of Debt Scheme of Birla Sunlife on the basis of data studied in this report. The average returns of about 60% selected schemes are more than the average market return or Benchmark return.

Key words: Mutual Fund, Performance Evaluation, Risk-Return Analysis, Net Asset Value, Asset Under Management.

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Introduction

A mutual fund is just the connecting bridge or a financial intermediary that allows a group of investors to pool their money together with a predetermined investment objective. The mutual fund will have a fund manager who is responsible for investing the gathered money into specific securities (stocks or bonds). When you invest in a mutual fund, you are buying units or portions of the mutual fund and thus on investing becomes a shareholder or unit holder of the fund.

Mutual funds are considered as one of the best available investments as compare to others they are very cost efficient and also easy to invest in, thus by pooling money together in a mutual fund, investors can purchase stocks or bonds with much lower trading costs than if they tried to do it on their own. But the biggest advantage to mutual funds is diversification, by minimizing risk & maximizing returns. Thus a mutual fund is the most suitable investment for the common man as it offers an opportunity to invest in a diversified, professionally managed basket of securities at a relatively low cost.

WORKING OF MUTUAL FUNDS

Fig: Working of Mutual FUND

The mutual fund collects money directly or through brokers from investors. The money is invested in various instruments depending on the objective of the scheme. The income generated by selling securities or capital appreciation of these securities is passed on to the investors in proportion to their investment in the scheme. The investments are divided into units and the value of the units will be reflected in Net Asset Value or NAV of the unit. NAV is the market value of the assets of the scheme minus its liabilities. The per unit NAV is the net asset value of the scheme divided by the number of units outstanding on the valuation date. Mutual fund companies provide daily net asset value of their schemes to their investors. NAV is important, as it will determine the price at which you buy or redeem the units of a scheme. Depending on the load structure of the scheme, you have to pay entry or exit load.

Review of Literature

Reddy B.S Srinivasalu (Aug.2011) "Mutual Fund houses turn to debt schemes as interest rates rise" In this article author conveys that redemption pressures are mounting on equity mutual fund (MF) schemes in the wake of rising volatility in the equity market, though they have not reached alarming proportions yet. Besides, many fund houses are witnessing shift of money from equity schemes to debt schemes in line with the rising interest rate scenario.

Dhall Aman & Tiwari Dheeraj,(Nov 25, 2007)" Investing in debt mutual fund schemes offer many advantages" Author suggest that With the economy surging ahead at a consistent pace and the stock markets reveling in the India growth story, it appears that anything you put your hands on is turning into gold. However, analysts advise that as an investor it is pertinent to have a mix of investment instruments in your portfolio so as to avoid any risk. What investor missed despite being a risk-averse investor were other alternatives such as debt funds, which could have worked for him both ways — securing returns whilst at the same time getting the tax advantage.

Agrawal Deepak and Patidar Deepak "A comparative study of debt based mutual fund of RELIANCE and HDFC" This article provides an overview of mutual fund activity in emerging markets. It describes about their size and their asset allocation. All fund managers are not successful in the formation of the portfolio and so the study also focuses on the empirically testing on the basis of fund manager performance and analyzing data at the fund-manager and fund-investor levels. The study reveled that the performance is affected by the saving and investment habits of the people and at the second side the confidence and loyalty of the fund Manager and rewards- affects the performance of the MF industry in India.

Bodla and Sunita(2007) "Emerging Trends of Mutual Funds in India: A Study Across Category and Type of schemes" In this research paper author examined the growth of Indian mutual fund industry in terms of increase in number of schemes and funds mobilized. The analysis has been carried across nature, type and sector of the schemes. The result shows that the total schemes have grown to above 1200 and the total purchases during 2006 crossed Rs. 3.5 lakh crores. The private sector funds and joint ventures have outperformed the public sector funds.

Tetsuya Kamiyama(2007) "India's Mutual Fund Industry" In this study author provided an overview of the assets managed within India's mutual fund market, both now and in the past, and of the legal framework for mutual funds, and then discussed the current situation and recent trends in financial products, distribution channels and asset management companies.

Rakesh Mohan" Recent Trends in the Indian Debt Market and Current Initiatives" In this study author suggest that the first such significant change is the prohibition of RBI's subscription to Government securities in the primary market effective April 1, 2006, as mandated by the Fiscal Responsibility and Budget Management (FRBM) Act. Second, as a consequence of the recommendations of the Twelfth Finance Commission, the role of the Central Government as a financial intermediary for State Governments is effectively ending, although there will be some transitional arrangements. Thus State Governments' borrowing will be more and more market determined. Third, the economy is estimated to be growing at 8.1 per cent this year with modest inflation and if similar conditions prevail, we can expect growth and inflation next year to also be on a similar path. This development has reemphasized the fact that bond financing has to supplement traditional bank financing to take care of the growing credit needs of the economy and that resource allocation has to be more efficient.

Objective of the Study

The specific objective of the study is to evaluate the performances of Debt Mutual Funds of Reliance and Birla Sunlife on the basis of risk adjusted measures like Sharpe Model, Treynor's Model and Jensen Model. The idea behind performance evaluation is to find the returns provided by the individual schemes and the risk levels at which they are delivered in comparison with the market and the risk free rates. It is also our aim to identify the under-performers and out-performers.

Research Methodology

Return alone should not be considered the basis of measurement of performance of a mutual fund schemes, it should also include level of risk undertaken and diversification of funds. The excess of portfolio return, over the risk less return is an indication of the overall portfolio performance. The study considered interest rate on treasury bills as risk-less return in view of the average yield being 5.50 percent during the study period. The study covers following different Debt Scheme of Mutual Fund of Birla Sunlife and Reliance.

BIRLA SUNLIFE	BIRLA INCOME PLUS B BIRLA GILT RP G BIRLA GILT PF PLUS G BIRLA GILT LIQUID G BIRLA CASH PLUS INST PREMIUM G BIRLA SWEEP PLAN G
RELIANCE	RELIANCE INC GR RELIANCE LIQUID TP BONUS RELIANCE LIQ TP G RELIANCE LIQ SUPER CASH G RELIANCE LIQ CASH G

NAV has been obtained from the different sources such as:

1. SEBI annual reports
2. Economic Survey
3. Alpha Database and Companies Annual Reports

Portfolio's return (Rn) is calculated by using the following formula:

$$R_P = \frac{(NAV_t - NAV_{t-1})}{NAV_{t-1}}$$

R_p = Portfolio return

NAV_t= Net asset value in time period t

NAV_{t-1} = Net asset value in the period t-l

Sharpe's Model

In this model, performance of a fund is evaluated on the basis of Sharpe ratio, which is the ratio of returns generated by the fund over the risk free rate of return and the total risk associated with it. According to Sharpe, it is the total risk of the fund that investors are more concerned about. So, the model evaluates funds on the basis of reward per unit of total risk. Symbolically, it can be written as:

$S_p = (R_P - R_F)/\sigma_p$

S_P = Sharpe's index

R_P= Portfolio average return

R_F =Risk free rate of return

σ_P= Standard deviation of the return

Analysis

Return of Selected Debt Scheme of Mutual Fund

Schemes	1 year (Jan 2010-Dec 2010)		3 years (Jan 2007-Dec 2010)		5 years (Jan 2005-Dec 2010)		Since Inception	
	Return	Rank	Return	Rank	Return	Rank	Return	Rank
BIRLA CASH PLUS INST PREMIUM G	4.96	7	4.65	41	5.05	40	4.96	42
BIRLA GILT LIQUID G	4.37	22	6.15	21	8.53	19	9.31	19
BIRLA GILT PF PLUS G	-3.74	50	8.02	4	11.51	5	12.25	4
BIRLA GILT RP G	-2.96	45	8.59	3	13.22	2	14.3	2
BIRLA INCOME PLUS B	-1.27	42	6.58	13	9.46	14	12.13	5
BIRLA SWEEP PLAN G	4.94	8	4.66	40	5.11	39	5.1	39

RELIANCE INC GR	1.79	33	7.6	6	9.85	10	10.84	10
RELIANCE LIQ CASH G	4.26	25	4.69	39	4.86	43	4.86	45
RELIANCE LIQ SUPER CASH G	4.36	23	4.85	38	4.22	48	5.07	40
RELIANCE LIQ TP G	4.4	21	5.73	30	6.83	27	7.07	27
RELIANCE LIQUID TP BONUS	4.53	19	5.51	34	6.65	28	6.99	28

The table shows the returns generated by various selected Debt Schemes for different time period. For the period 1 year (Jan 2010-Dec 2010) the returns varies from as low as -3.74 of BIRLA GILT PF PLUS G to 4.96 of BIRLA CASH PLUS INST PREMIUM G. Though it is clear from the table that all the schemes have shown more positive returns but compare to Risk-Free-return 5.50%, the returns of the year 2004 is below the benchmark. The result of period (Jan 2010-Dec 2010) shows that debt scheme of Reliance Mutual Fund performs better than Birla Sunlife.

For the period of last three years from Jan 2007-Dec 2010, the return varies from 4.65 of BIRLA CASH PLUS INST PREMIUM G to 8.59 of BIRLA GILT RP G. Thus all the schemes have maintained their position in the rankings. From last three years private sector performed better than the average return on Debt Schemes and according to the benchmark Risk-Free-Return 5.50%.

For the period of last five years from Jan 2005- Dec 2010 the returns varies from 5.05 of BIRLA CASH PLUS INST PREMIUM G to 13.22 of BIRLA GILT RP G. In this period return of debt scheme of Birla is better than Reliance.

Overall from the above Table it is concluded that returns on Debt Schemes are close to Benchmark return (Crisil Composite Debt Fund Index: 4.34%) and Risk Free Return: 5.50% (average adjusted for last five year).

Ranking of Selected Schemes on the basis of Geometric Mean and Standard Deviation

Schemes	Geometric mean of the monthly returns	Rank	Standard Deviation	Rank
RELIANCE LIQUID TP BONUS	0.3987	20	0.0111	4
RELIANCE LIQ TP G	0.4545	19	0.0215	7
RELIANCE LIQ SUPER CASH G	0.3451	27	0.0442	22
RELIANCE LIQ CASH G	0.2145	38	0.0088	3
RELIANCE INC GR	0.5484	14	0.0987	43
BIRLA SWEEP PLAN G	0.0918	48	0.1108	45
BIRLA INCOME PLUS B	0.1523	42	0.0229	8
BIRLA GILT RP G	0.3964	21	0.1456	48
BIRLA GILT PF PLUS G	0.3441	28	0.0657	33
BIRLA GILT LIQUID G	0.2626	32	0.0456	23
BIRLA CASH PLUS INST PREMIUM G	0.1078	46	0.0655	32

In the above table all the selected schemes have been ranked according to the geometric mean of the monthly returns and also the standard deviation shown by these schemes. The average return varies from 0.0918 of Birla Sweep Plan G to 0.548 for **RELIANCE INC GR** Debt Fund Scheme. This table shows that the average monthly return on private sector is consistent and near to Benchmark- Crisil Composite Debt Fund Index.

Ranking of Selected Schemes on the Basis of Sharpe Index

Schemes	Sharpe's Index	Rank
BIRLA CASH PLUS INST PREMIUM G	0.7320	10

BIRLA GILT LIQUID G	0.1435	38
BIRLA GILT PF PLUS G	0.2552	32
BIRLA GILT RP G	0.1758	35
BIRLA INCOME PLUS B	0.1730	36
BIRLA SWEEP PLAN G	0.0711	43
RELIANCE INC GR	0.5896	17
RELIANCE LIQ CASH G	0.7122	12
RELIANCE LIQ SUPER CASH G	0.3416	25
RELIANCE LIQ TP G	0.9480	4
RELIANCE LIQUID TP BONUS	0.0037	46
Crisil Composite Bond Fund Index	0.4813	

The above table indicates the Sharpe's Index calculated for various schemes and that of the market. The Sharpe's Index is a performance evaluation measure. The index varies from 0.037 from Reliance Liquid TP Bonus to 0.9480 RELIANCE LIQ TP G. The Sharpe's Index shows that the return of the selected Debt Fund Schemes is less than even from Risk-free-return rate and the Benchmark Index.

Conclusion

Debt schemes in Reliance Private Sector yield much higher average return than the other Sector. It means that performance of Reliance Private Sector mutual funds is better than the other mutual funds. Performance of Debt Scheme of Reliance is better than the performance of Debt Scheme of Birla Sunlife on the basis of data studied in the present paper. Large variability found in return of Private Sector Debt Schemes of Mutual Funds. Returns on some Debt Schemes are even lower than risk free return. The overall performance of Reliance Debt Scheme of Mutual Fund is better than the Debt Scheme of Birla Sunlife.

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