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Mutual Funds in India: A Study on Select Equity-Oriented Hybrid Funds

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Abstract

The conventional method of pooling savings by banks for financing industries is changing with time. Investors are resorting to equity-oriented instruments during the last few years. Maximisation of Return on Investment (ROI) with risk minimisation is an important objective of investors. For a retail investor, it may not always be possible to have adequate skill, knowledge, time, and inclination to keep track of events in capital markets. In such cases, mutual funds are there to cater to the needs of different types of investors. Mutual funds offer variety of flavours balancing the two important factors of risk and return. A need was felt to test the above and consequently this paper analyses the performance of few funds from the perspective of risk and return.

Keyword: Mutual Fund, Equity-oriented Hybrid Funds, Arithmetic Mean, Standard Deviation, Sharpe Ratio, Alpha, Beta, R-Squared.

Introduction

By nature, there are three types of mutual funds: equity funds, debt funds, and hybrid funds. Structurally, mutual funds can again be categorised as open-ended and close-ended funds. Open-ended funds are those funds which can issue and redeem units any time during the life of the scheme. Investors can join the scheme by directly applying to the mutual fund at applicable net asset value related prices in case of open-ended schemes while that is not possible in case of close-ended schemes. In two aspects, namely, flexibility and liquidity, open-ended funds score over close-ended funds.

Hybrid funds have a combination of asset classes such as debt and equity in their portfolio are called hybrid funds. They may serve the needs of investors who look for a combination of income-oriented and growth-oriented investments.

Equity-oriented hybrid funds invest at least 65% in equity, and the rest in debt securities to offer a cushion from the risk of an all-equity portfolio. They are sought by investors who seek growth with some protection from volatility. It is a balance between equity and debt.

Literature Survey

Performance evaluation of mutual fund is an area of research in the western countries for more than six decades. In India, performance analysis of mutual fund is of recent origin. Friend and Vickers (1965) tried to assess the performance of mutual funds against the randomly constituted portfolios. Randomly constituted portfolios performed better than the mutual funds on a whole as revealed from the findings of the study. Sharpe's study (1966) revealed that in total 19 funds outperformed the benchmark in terms of total risk on an analysis of 34 funds selected by him. Treynor's (1965) study with respect to 57 mutual funds revealed that none of the fund managers exhibited market timing skills. Reilly (1982) analysed performance of open-end mutual funds for 15 years from 1966 to 1980 and the findings revealed that return of all funds was quite close to that of the market. Jaideep and Majumder (1994) worked with five growth-

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oriented schemes during February 1991 to August 1993 employing Capital Asset Pricing Model (CAPM) to find out the performance of the funds. Their findings pointed out that during market boom the funds performed well but most of the funds failed to generate better returns than the market in general for the considered study period. Dahlquist, Engstorm and Soderhind (2000) dealt with 210 mutual funds operating in Sweden between 1992 and 1997. The study pointed out that good performance occurred only amongst small equity funds and low fee funds. Gupta and Gupta's (2004) study dealt with 57 growth schemes for the period from April 1999 to March 2003. Different evaluation measures like Sharpe, Treynor, Jensen ratios and regression analysis were used for the study. In conclusion, it was pointed out that some sample mutual funds performed better than the market while others underperformed. Panwar and Modhumathi (2007) conducted a study of 269 open-end Indian mutual funds for the period from 2002 to 2005. The study concluded that there was a statistical difference between public sector sponsored and private sector mutual funds when residual variances were employed as a tool for mutual fund portfolio diversification technique. Tripathy (2008) dealt with 31 tax planning schemes (ELSS) in India over the period from December 1995 to January 2004 using Jensen-Mazuay model and Hendrickson and Merton Model. The study pointed out that due to timing the market in wrong direction, fund managers failed to generate returns in excess of market returns.

Objective

The main objective of this study is to analyse the performance of the chosen funds from the perspective of return and risk.

Data and Methodology

The study is an empirical one based on secondary data. In this study, four equity –oriented hybrid / balanced funds (Birla Sun Life-95, HDFC Prudence, Tata Balanced Plan A, and UTI Balanced) have been chosen which are in existence for more than 15 years and having an Average Assets Under Management (AAUM) of minimum INR 500 crores as on 31/10/14. The effects of 'Entry Load' and 'Exit Load' have not been taken into consideration. The period of study is a seven year time frame starting from October 2007 to October 2014. The study considers the month- end Net Asset Values (NAVs), under 'Growth' option of the chosen funds and the month-end closing values of the benchmark. The monthly returns of the four funds and the benchmark (BSE 100) over the period of study have been computed with the help of MS Excel. The average annualised risk-free rate (Rf) is taken as 8% for the purpose of the study. It is the rate offered by Public Provident Fund (PPF) scheme for a long period of time from October 2007 to October 2014 and most part of the time frame chosen for the purpose of the study falls during that period. For the purpose of analysis, appropriate statistical and financial tools like arithmetic mean, standard deviation, Sharpe ratio, Alpha, Beta and R-squared have been applied.

In this backdrop, the author has tried to evaluate answer to the following questions:

(1) Have the funds generated superior risk-adjusted return in terms of total risk?

(2) Are the funds aggressive in relation to the benchmark?

(3) Are the funds properly diversified?

(4) Do fund managers have adequate stock selection skill?

Performance Analysis

The brief particular of the funds are given in Table 1.

It is observed that all the funds are in existence for more than 15 years, have a sizeable corpus, and have witnessed

Table 1: Fund Particulars

Sl. No.	*Fund*	*Launched on*	*AAUM as on 30.09.2014 In Rs. Crore.*	*Total Stocks as on 31.10.2014*
01	Birla Sun Life 95	February 1995	956.7	69
02	HDFC Prudence	January 1994	7025.1	71
03	UTI Balanced	March 1995	1193.3	49
04	Tata Balance Plan A	October 1995	1141.4	61

Source: www.valuresearchonline.com

several ups and down. Large AAUM is an indicator of investors' confidence in these funds. No uniformity is found in case of total number of stocks in the portfolio of the funds. While UTI Balanced Fund has 49 (forty nine) stocks in its portfolio, HDFC Prudence has 71 (seventy one), Birla Sun Life 95 Fund has 69 (sixty nine), and Tata Balanced Fund has 61 (sixty one) stocks in their portfolio.

Composition of portfolio of these funds is presented in Table 2.

Table 2: Composition of Portfolio

Serial No	*Fund*	*Equity (%)*	*Debt (%)*	*Cash (%)*
1	Birla Sun Life 95	71.65	27.92	0.43
2	HDFC Prudence	74.52	25.16	0.32
3	UTI Balance	73.8	25.02	1.18
4	Tata Balance Plan A	74.05	27.91	-1.96

Source: www.valueresearchonline.com

Equity component is more than 70% in all the funds under consideration and debt is more than 25%. Debt Component in hybrid fund is necessary to give some sort of stability and cushion to the portfolio. So far as cash holding is concerned, all the funds have negligible cash holdings.

Annualised returns generated by the funds and the benchmark are depicted in Table 3.

Table 3: Average Returns (%) (Annualised)

Sl. No.	*Fund & Benchmark*	*3 Year*	*5 Year*	*7 Year*
01	Birla Sun Life 95	18.52	15.18	13.38
02	HDFC Prudence	20.53	17.83	15.13
03	UTI Balance	16.22	12.89	9.06
04	Tata Balance Plan A	20.91	16.49	12.48
05	BSE 100	16.6	12.56	8.40

Source: Calculated by the author

In the 5 year and 7 year time horizon all funds have outperformed the benchmark. In the time span of three years excluding UTI Balanced Fund all the funds have outperformed the benchmark. HDFC Prudence Fund is the best performer in 5-year and 7-year period, while in 3-year period Tata Balance Plan 'A' Fund is the best performing fund. UTI Balance Fund is the worst performing fund in all the periods.

The total risk associated with the funds and their compared benchmarks are expressed in terms of annualised standard deviation as presented in Table 4.

Table 4: Annualised Standard Deviation

Sl. No.	*Fund*	*SDp*		
		3 Yr.	*5 Yr.*	*7 Yr.*
01	Birla Sun Life 95	12.91	12.24	20.28
02	HDFC Prudence	18.04	15.76	22.50
03	UTI Balance	12.83	12.77	18.86
04	Tata Balance Plan A	12.78	12.38	18.86
05	BSE 100	17.06	17.40	27.02

Source: Calculated by the author

Standard Deviation measures the total risk and lower figure of standard deviation signifies lower risk for the fund or the benchmark. In the three year period, only one fund, namely, HDFC Prudence Fund carries more risk than its benchmark. In the 5 year and 7 year time frame it can be seen that it is safer to hold any one of the funds as the standard deviation of the funds is lower than that of the benchmark. Tata Balance Plan 'A' Fund is the best performing fund in 3 year period, and Birla Sun Life 95 Fund is the best performing fund in 5 year period. In the 7 year period, UTI Balance Fund and Tata Balance Plan 'A' Fund are the best performing funds.

Sharpe ratio measures excess return per unit of total risk (standard deviation). Higher Sharpe ratio signifies better risk-adjusted performance of the fund. Table 5 depicts the Sharpe ratio of the funds and the benchmark.

Table 5: Sharpe Ratio

FUND [(Rp-Rf) / SDp]	*3 Year*	*5 Year*	*7 Year*
Birla Sun Life 95	0.76	0.53	0.23
HDFC Prudence Fund	0.66	0.58	0.29
TATA Balance Fund Plan-A	0.95	0.63	0.19
UTI Balanced Fund	0.59	0.33	0.02
Sharpe Ratio (benchmark)[(Rb-Rf)/ SDb]	0.46	0.22	-0.01
AVERAGE	0.74	0.52	0.18
MINIMUM	0.59	0.33	0.02

Source: Calculation done by author

It is revealed that all the funds have performed better than the benchmark during the time frame of 3 year, 5year and 7year which signifies the fact that the funds have generated superior risk-adjusted return in terms of total

risk. Higher Sharpe ratio indicates better risk adjusted performance.

UTI Balanced Fund has the worst Sharpe ratio for the entire study period under consideration while TATA Balance Fund Plan-A is the best performer in 3 year and 5 year period. HDFC Prudence Fund is the best performing fund in the 7 year period.

Table 6 incorporates data about Jensen Alpha.

Table 6: Jensen Alpha

Serial No	FUND	3 Year	5 Year	7 Year
1	Birla Sun Life 95	4.09	3.90	4.89
2	HDFC Prudence Fund	4.33	6.04	6.67
3	TATA Balance Fund-Plan A	6.68	5.20	3.99
4	UTI Balance Fund	1.78	1.44	0.57
	>0	4	4	4

Source: Calculation done by author

Jenson Alpha indicates whether a firm is able to outperform the benchmark index or not. A positive alpha indicates that the fund outperforms the benchmark index while a negative alpha means that the fund underperforms the benchmark index.

All the funds under consideration have positive alpha during the entire study period, clearly indicating that fund managers have shown better stock picking abilities and skills.

Beta is a measure of volatility which determines the volatility or risk of a fund in comparison to that of bench mark index. Table 7 shows the Beta values of the funds.

Table 7: Beta Values

Sl. No.	FUND	3Y	5Y	7Y
1	Birla Sun Life 95	0.73	0.67	0.72
2	HDFC Prudence Fund	0.95	0.80	0.79
3	TATA Balanced Fund –Plan A	0.70	0.67	0.70
4	UTI Balanced Fund	0.73	0.71	0.69
	>1	0	0	0
	<1	4	4	4

Source: Calculation done by author

Beta values in all the periods under study are less than 1 for all the four funds.

In fact, during the entire time frame, Beta values range from 0.67 to 0.95 which signifies that the funds are defensive in nature with respect to the benchmark.

The next measure of risk is R-square. The value of R-square ranges between 0 and 1. '0' indicates that there exists the least correlation between the fund and the benchmark where as '1' means the fund is fully correlated to the index. R-square value close to '1' signifies that the beta of the fund can be true. Table 8 shows R-square values.

Table 8: RSQ of the Funds

Sl. No.	FUND	3Y	5Y	7Y
1	Birla Sun Life 95 Fund	0.92	0.90	0.93
2	HDFC Prudence Fund	0.81	0.78	0.89
3	TATA Balance Fund A	0.87	0.88	0.93
4	UTI Balanced Fund	0.93	0.94	0.96
	>0.75	4	4	4
	>0.8	4	3	4

Source: Calculation done by author

In the 3 year time frame the value of RSQ varied from 0.81 to 0.93.

Similarly, during the 5 year time frame the RSQ value varied from 0.78 to 0.94. During the seven year time frame the value has varied from 0.89 to 0.96. Nevertheless, in all the periods

RSQ value is >0.75 which indicates that the fund managers are successful in keeping the unique risk at minimum.

Limitations of the Study

There are certain limitations of the study which are enumerated below:

(a) The study deals with only four schemes while the mutual fund industry of India has a large basket of funds/schemes managed by fund managers of different AMCs.

(b) The period of study involves three year, five year, and seven year time frame ending on October, 2014 while the funds have been in existence for much more than the chosen time frame.

(c) The study is based on a few traditional measures to analyse the performance of the chosen mutual funds.

Relevance of the Study

The findings of the study are expected to be relevant in many respects. The findings of the study should encourage

researchers and institutions to undertake similar kind of analysis for the benefit of small retail investors of mutual fund.

Conclusion

Movement of capital market, health of the company or industry has its impact on the performance of the various mutual funds present in the market. Mutual funds also invest in various securities and thus face market risk. Risk cannot be eliminated but can be reduced to a great extent with diversification and professional management. Continuous efforts of the fund managers coupled with encouraging market conditions can provide the right impetus for better aspiration of the retail investors with respect to security and returns. All the funds chosen for the purpose of study have been performing well. The summary results are presented hereunder:

(1) All the funds have exhibited superior risk-adjusted performance in relation to the benchmark.

(2) All the funds are defensive or conservative in nature with respect to the benchmark.

(3) Funds are adequately diversified.

(4) Fund managers have good stock picking skills.

Finally creation of favourable and positive environment is absolutely essential to encourage investors to invest spontaneously in mutual funds. Here the role of regulator is very crucial. SEBI, the capital market regulator has been taking various measures to win back the confidence of retail investors. Financial awareness through financial education is very much essential. AMCs, distributors, researchers and others should join hands with the regulators to make financial exercise meaningful. The period through which mutual fund industry in India is passing is challenging. Innovation, focused regulation and patience are required to overcome the challenges.

References

Books and Articles

Dahlquist, M., Engstorm, S., & Soderhind, P. (2000). Performance and characteristics of Swedish Mutual funds. *Journal of Financial and Quantitative Analysis*, 35(3), 409-423.

Friend, I., & Vickers, D. (1965). Portfolio selection and investment performance. *The Journal of Finance,* 20(3), 391-415.

Gupta, O. P., & Gupta, A. (2004). Performance evaluation of selected Indian mutual fund scheme: Empirical study. *The ICFAI Journal of Applied Finance*, 10(3), 81-98.

Sarkar, J., & Majumdar, S. (1994). Performance Evaluation of Mutual Funds in India. *NMIS Management Review*, 6(2), 64-78.

Panwar, S., & Madhumathi, R. Characteristics and Performance Evaluation of Selected Mutual Funds in India. Retrieved from http://papers.ssrn.com/so13/papers.cfm on 11.03.2008

Reilly, F. K. (1982). *Investments.* Dryden Press, 643-648.

Sarkar J., & Majumdar, S. (1994). Performance evaluation of mutual funds in India. *NMIS Management Review,* 6(2), 64-78.

Sharpe, W. F. (1966). Mutual fund performance. *Journal of Business*, 39(1), 119-138.

Treynorr, J. L. (1965). How to rate management of investment funds. *Harvard Business Review*, 43(1), 63-75.

Tripathy, N. P. (2008). Market timing abilities and mutual fund performance-an empirical investigation into equity linked saving schemes, Vilakshan. *XIMB Journal of Management*, 127-138.

Web References

www.amfiindia.com

www.valueresearchonlin.com

www.mutualfundsindia.com

www.sebi.gov.in

www.ssrn.com

Respective websites of fund houses chosen for the purpose of study

Magazines

Mutual Fund Insight

Outlook Money

Money life

Dailies

The Economic Times

Business Standard