FROM THE EDITOR'S DESK

ETHICS COMMITTEE

Our Institute has entered in to the 9th year of publication of the BVIMSR's Journal of Management Research. During this period we have also conducted several National and two International Conferences. We have had a lot of experience with the kind of research articles / papers coming for presentation in the Conferences or for publication in our Journal. Our experience shows that efforts are required in the direction of improving the quality of research by the faculty members and PhD scholars of the Management Institutions.

We have observed that most of the papers are lacking in research methodology. They lack in clear objectives, appropriate hypotheses, research questions, theoretical frame, research design, sampling plan, definition and measurement of concepts, analysis and interpretation of results.

Many times the papers are dominated by introduction of the theory and review of literature which is a collection of material from already published work and not author's own work. In a research paper the introduction and review of literature should be bare minimum for helping the readers to understand the background of author's work. The objective of a research paper/article is to communicate the work done by the author (researcher).

Authors give formulae like mean, SD, chi-square, t-test, correlations etc. These formulae are quite common and are known to the readers and are easily available in books. Some authors even explain theories like what is research? what are various steps in conducting research?, what are types of research? etc. All these are not necessary in a research paper/article.

Some faculty members send MBA students' theses either in truncated form or at times even in full for publication in the Journal. In most cases these articles lack in theory, methodology, sampling design, analysis of results and presentation. If there is any thesis which is good the faculty member should rewrite in the form of a suitable article / paper before sending for publication in the Journal and also acknowledge the student who has done the original work.

Many authors do not differentiate between Bibliography and References. As a result in some papers the bibliography is too long running in 8 to 10 pages. A research paper should contain only references and not the bibliography.

There have also been instances of plagiarism. We have identified plagiarism to the extent of even 100%. There were two instances in which articles from foreign authors were sent for publication by simply changing the name of the author. Such instances should be of great concern to all of us.

It is therefore suggested all the Management Institutions should constitute an 'Ethical Committee' in their Institution to improve the quality of research papers and to prevent plagiarism. It is suggested that:

1. The committee should consist of faculty members and also practitioners representing different specializations. The members on the committee can be from other Management Institutions also.
2. It should be mandatory for all the faculty members and PhD scholars to present the article to seek the suggestions of this committee before sending the paper for publication.
3. The committee should scrutinize the quality of the paper in the presence of a required quorum of the members.
4. The committee should insist on examining plagiarism with the help of a relevant software.

Such Committees are already existing in all Medical and Food Science Institutions and also in some Management and Social Science Institutions.

CONTENTS

Title and Author   **Page**

An Empirical Investigation into Market Risk and Investment Performance of Mutual Funds in India

Dr. Kavita Arora
Asst Prof., ShyamLal College, University of Delhi.
Email. : kavitaarora2007@rediffmail.com

Abstract

The present study examines the returns of 100 mutual fund schemes per unit of market risk during the period 1st April, 2000 to 31st March, 2008.The sample comprises53 growth schemes, 20 tax planning schemes, 11 balanced schemes and 16 income schemes. Modest attempt has been made in this study to infer whether the risk profiles of sample schemes are in conformity with their investment objectives or not. The study also examines whether high beta funds have actually produced high returns over a period of this study or not. The study period 2000-2008 has been segregated into two sub-periods, sub-period I (2000-2004) and sub-period II (2004-2008) to ascertain whether the performance of mutual fund schemes varied during the two sub-periods as these were bear and bull phases.

Key Words: Market Risk, Beta, Returns, Mutual Funds, Performance, Sub Periods

Introduction

Mutual Fund is a financial intermediary that pools the savings of a large number of investors and invests them in capital and money market instruments such as shares, debentures, treasury bills and other securities. Mutual funds are conceived as institutions for providing small investors with avenues of investment in the capital market. Since, small investors generally do not have adequate time, knowledge, experience and resources for directly assessing the capital market, they have to rely on an intermediary which undertakes informed investment decisions and provides the consequential benefits of professional expertise. Thus, a mutual fund may be a suitable investment for an average investor as it offers an opportunity to invest in professionally managed basket of securities at a relatively low cost. The assessment of mutual fund's performance influences the investors to allocate their money into different mutual funds. Risk measurement and performance evaluation of mutual funds are of vital importance for investors and fund managers alike. The enormous growth in the number of mutual funds and the volume of investment in them worldwide has led to an increasing demand for techniques to evaluate their performance. The performance measurement techniques are primarily within the risk-return framework, based on the Capital Asset Pricing Model (CAPM), assuming that a fund's investment behavior can be explained by a single market index.

An attempt has been made in this study to infer whether the risk profiles of sample schemes are in conformity with their investment objectives or not.The study also examines whether high beta funds have actually produced high returns over a period of this study or not.

LITERATURE REVIEW

Since 1980's there has been a substantial global increase in the importance of mutual funds as investment instruments, with a corresponding escalation in research in the field. One of the most important areas of study is mutual fund performance. The portfolio management evaluation has been studied extensively, and from various different perspectives, in the financial literature. The literature proposes several performance measures and a variety of empirical results, as seen in the work of Sharpe (1966), Jensen (1968), Elton et al. (1987), Carhart (1997), Gupta (2002), Bhandari (2008) , Chopra (2011),Low (2012), Narayanasamy and Rathnamani (2013), Naz et. al.(2015). On the whole, the main outcome of the vast analysis in the finance literature is that the majority of mutual funds have not been able to perform better than the indices against which they have been compared. The performance measurement techniques are primarily within the risk return framework, based on the Capital Asset Pricing Model (CAPM), assuming that a fund's investment behaviour can be explained by a single market index. In addition to the traditional measures of performance-Sharpe (1966),

Treynor (1965) and Jensen (1968) - numerous new performance measures have been proposed.

RESEARCH METHODOLOGY

Sample and Data Sources

The sample contains 100 mutual fund schemes selected on the basis of availability of consecutive data during the period 1st April, 2000 to 31st March, 2008. The sample comprises 53 growth schemes, 20 tax planning schemes, 11 balanced schemes and 16 income schemes. The data comprises weekly NAVs already adjusted for dividend and bonus for the eight-year period from 1st April, 2000 to 31st March, 2008. Figure 1 presents a graphical representation of S&P CNX Nifty Index values during the study period. Index values have been collected from the website of National Stock Exchange.

Figure 1
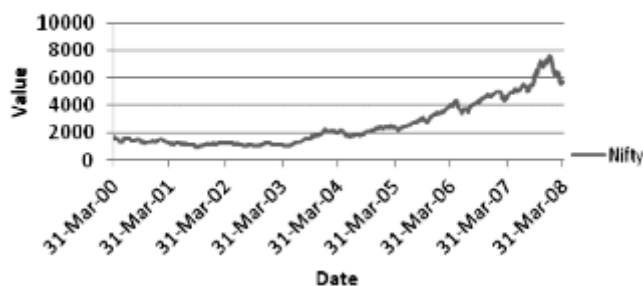
As shown in Figure 1 the study period 2000-2008 can be segregated into two sub-periods with contrasting market conditions. The period from 1st April 2000 to 31st March, 2004 (sub-period I) experienced a prolonged downturn. On the contrary, the period from 1st April, 2004 to 31stMarch, 2008 (sub-period II) reflects recovery in the stock market. To ascertain whether the performance of sample schemes has varied during the two sub-periods, a detailed analysis of performance of sample schemes has been made during the full study period as well as both the sub-periods. The adjusted data have been collected from the databases of indiainfoline.com and Value Research India Private Limited.

In this study, S&P CNX Nifty Index is used as the benchmark for evaluating the performance of equity and tax planning schemes. It is a well-diversified index constituting 50 stocks and accounting for 25 sectors of the economy. Composite Bond Fund Index (Compbex) and the Balanced Fund Index (Balance EX) are taken as the benchmarks for the performance evaluation of income schemes and balanced schemes respectively. Both the indices have been developed jointly by Association of Mutual Funds in India (AMFI), Credit Rating and Information Services of India Limited (CRISIL) and ICICI securities. Both of these indices are derived indices. The index history is calculated from the base date of 31st March, 2002.Since, the values for these indices are available only since 1st April, 2002, the study period for income schemes and balanced schemes is 1st April, 2002 to 31st October, 2008.

The weekly yields on 91-Days Treasury Bills (T-Bills) have been used as a surrogate for risk free rate of return. The T-Bills information has been obtained from the official web site of Reserve Bank of India.

In the present study the returns have been computed using the Rate of Return Measure. This measure computes the average weekly return of the series by using the following formula:

$$Rpt = [NAVt - NAVt\text{-}1] / NAVt\text{-}1$$
Where,

Rpt is the return of the mutual fund scheme on the basis of dividend and bonus adjusted NAV for 't' period.

't' and 't-1'indicate week end and week beginning respectively.

Similarly, the weekly returns for the S & P CNX Nifty Index have been computed.

Systematic Risk (Beta)

Beta is a measure of systematic risk. It provides thequantum of sensitivity in comparison to the market. By definition, beta for the index is 1. Beta provides the measure of excess risk over the index. If a scheme has a beta of 1, it is said that it has assumed the same risk as that of the market. If the beta value is 0.71, it is said that the scheme has experienced 71 per cent of the risk of the market, i.e. it has taken less risk than that of the market. Beta is measured as follows:

$$p = \frac{Cov(Rp * Rm)}{2m}$$

where,

  p = Systematic risk of the scheme,

Cov(Rp * Rm) = Covariance of the return of scheme with the return on the market,

  2m = Variance of the returns of the market.

       A positive and significant beta would imply a positive relationship between return and systematic risk. Since, the beta coefficient of a scheme is weighted mean beta coefficient of individual stock, adding high or low 'beta' security in a portfolio would alter the value of beta coefficient of the scheme. While the aggressive fund manager attempts to add high beta securities in the portfolio to generate high profits when the market is in the bull phase, the conservative fund managers tend to include low beta securities in the portfolio to reduce the risk of loss of capital during the bear phase.

RESULTS

Analysis of Systematic Risk and Returns of Mutual Fund Schemes

Average annualized returns of the sample schemes and estimates of beta coefficients of sample schemes along with their corresponding t-values are given in the Table 1. Detailed observations of the same are given in Annexure 1.

Table 1

Average Annualized Returns and Beta of Schemes

	Average Annualized Returns of Schemes (%)			Average Beta of Schemes		
	2000-04	2004-08	2000-08	2000-04	2004-08	2000-08
Growth	10.51	30.81	19.29	... (13%)	0.75 (6%)	0.73 (2%)
Tax Planning	8.67	28.40	17.84	0.74 (2%)	0.75 -	0.75 -
Balanced	29.43	20.96	23.28	0.51 -	0.67 -	0.62 -
Income	13.43	5.11	8.75	0.69 (44%)	0.76 (25%)	0.75 (30%)

Notes:

1. Figures in parenthesis are the percentage of the schemes having beta more than one.

2. The study period for income schemes and balanced

schemes is 1st April, 2002 to 31st March, 2008, as values for Composite Bond Fund Index and Composite Balanced Fund Index are available only from 1st April, 2002.

Analysis of beta coefficients reveal that 96 per cent of growth schemes in both the sub-periods and 98 per cent of growth schemes in the full study period respectively had positive and statistically significant beta coefficients. All the tax planning and balanced schemes also had positive and statistically significant beta coefficients in both the sub-periods as well as in the full study period. The results also show that beta coefficients of 63 per cent of income schemes in sub-period I and 94 per cent of income schemes in sub-period II as well as in the full study period respectively were positive and statistically significant.

The results given in Table 1show that average beta coefficient of growth schemes was 0.72 in sub-period I, 0.75 in sub-period II and 0.73 in the full study period respectively. Only 13 per cent of growth schemes in sub-period I, 6 per cent of growth schemes in sub-period II and 2 per cent of growth schemes in the full study period respectively had beta greater than one. It means that growth schemes of the sample have invested in low risk securities. Further, average beta coefficient of tax planning schemes was 0.74 in sub-period I. In sub-period II as well as in the full study period the average beta coefficient of tax planning schemes was 0.75. Only one tax planning scheme (SBI Magnum Tax Gain 93 - G) had beta more than one in sub-period I. None of the tax planning schemes in sub-period II and the full study period had beta coefficient greater than one. It means that fund managers of tax planning schemes also have followed conservative approach towards fund management. This is contrary to the basic objective of investment in equity schemes to generate high returns by taking high risk.

The results further reveal that 44 per cent income schemes had beta more than one in sub period 1. In sub period II , 25 per cent and during the full study period, 30 per cent of the income schemes had beta more than 1. It means that fund managers of these schemes have taken high risk in order to earn high return to the investors. This has serious implications for the Indian mutual fund industry and its vast number of investors. Professional fund management requires that corpuses of the mutual

fund schemes are invested as per the investment objectives of the schemes. Different categories of schemes have different investment objectives keeping in view the different risk and return appetite of different classes of investors. If investments are not made as per the investment objectives then the fund managers break the trust imposed on them by the investors. The investors are exposed to far more risk than they are willing to take which may jeopardize their savings.

It is evident from the data that in sub period 1 high beta equity fund namely Birla Sunlife New Millennium has given negative return of -9.27 to the investors. Similarly, SBI Magnum Tax Gain 93had high beta value(1.08) but had yielded negative returns of -8.00 to the investors. On the contrary in the same period Birla Sun Life Basic Industries has shown better performance in terms of rate of return but it had a low beta value of 0.77 only. Similarly, Principal Resurgent India Equity has beta value of 0.47 in sub period 1, 0.81 in sub period II and 0.87 in the full study period respectively. But in both the sub periods as well as the full study period it had given high returns to the investors. It indicates that the scheme returns are insensitive to the market risk. The findings of present study are in conformity with those of Fama and French(1993) and Sondhi and Jain(2006) that high beta portfolios are not necessarily going to produce better returns than low beta portfolio's do. Another study by Corhay et.al.(1987), too found no relationship between betas and returns for US, UK and Belgium equities for the period 1991-83.

CONCLUSIONS

The discussions in the preceding sections have amply shown that relationship between risk and return of sample mutual fund schemes is not necessarily in line with the premise that high risk portfolios generate superior returns.

On examining the performance of mutual fund schemes during the bear period (sub period I) and the boom period (sub period II) separately it was found that that corpuses of the mutual fund schemes are not invested as per the investment objectives of the schemes. It was observed that in case of income schemes the investors are exposed to far more risk than they are willing to take which may jeopardize their savings. In sub period I, 44 per cent in

sub period II , 25 per cent and during the full study period, 30 per cent of the income schemes respectively had beta more than 1. It means that fund managers of these schemes have taken high risk in order to earn high return to the investors. On the contrary, it was found that only 13 per cent of growth schemes in sub-period I, 6 per cent of growth schemes in sub-period II and 2 per cent of growth schemes in the full study period respectively had beta greater than one. Similarly only 2 percent of tax planning schemes in sub period I and none of the schemes in sub period II and the full study period had beta more than 1.This is contrary to the basic objective of investment in equity schemes to generate high returns by taking high risk.

This has serious implications for the Indian mutual fund industry and its vast number of investors. Different categories of schemes have different investment objectives keeping in view the different risk and return appetite of different classes of investors. If investments are not made as per the investment objectives then the fund managers break the trust imposed on them by the investors. The investors are exposed to far more risk than they are willing to take which may jeopardize their savings.

References:

1. Bhandari, Badri Singh (2008), Capital Market Efficiency and the Performance of *Indian Mutual Funds, Unpublished Thesis, University of Delhi.*

2. Carhart, Mark M. (1997), "On Persistence in Mutual Fund Performance", *Journal of Finance, Vol. 52, No.1, 51-82.*

3. Chopra, Manju Punia (2011), "Do Indian Mutual Fund Managers Select the Stock and Time the Market Correctly?", *IUP Journal of Applied Finance, Vol. 17, No.2, 77-86.*

4. Corhay, A., Hawawini, G., & Michel, P.-A. (1987). "Seasonality in the Risk-Return Relationship : Some International Evidence", *Journal of Finance, 42(1), 49-68.*

5. Elton, Edwin J., Gruber, Martin J. and Rentzler, Joel C. (1987), "Professionally Managed , Publicly Traded Commodity Funds" , *Journal of Business, Vol.60, No.2, 177-199.*

6. Fama, Eugene F. and French, Kenneth R. (1993), "Common Risk Factors in the Returns on Stocks and Bonds", *Journal of Financial Economics, Vol. 33, No.1, 3-56.*

7. Goodwin, Thomas (1998), "The Information Ratio", *Financial Analysts Journal, Vol. 54, No. 4 (1998), 34-43.*

8. Grinold, R.C, and R.N. Kahn(2000), Active Portfolio Management: A Quantitative Approach for Providing Superior Returns and Controlling Risk, 2nd ed., McGraw-Hill, New York.

9. Gupta, Amitabh (2002), Mutual Funds in India: A Study of Investment Management, Anmol Publications, New Delhi.

10. Jensen, Michael C. (1968), "The Performance of Mutual Funds in the Period 1945-1964", *Journal of Finance, Vol.23, No. 2, 389-416.*

11. Jensen, Michael C. (1969), "Risk, the Pricing of Capital Assets and the Evaluation of Investment Portfolio", *Journal of Business, Vol. 42, No. 1, 167-247.*

12. Low, Soo-Wah (2012), Market Timing and Selectivity Performance: A Cross-Sectional Analysis of Malaysian Unit Trust Funds, Prague Economic Papers, No. 2, 205-219.

13. Modigliani, F. and Modigliani, L. (1997), "Risk - Adjusted Performance", *Journal of Portfolio Management, Vol. 23, No. 2, 45-54.*

14. Narayanasamy and Rathnamani (2013), Performance Evaluation of Equity Mutual Funds (On Selected Equity Large Cap Funds) International *Journal of Business and Management Invention, Volume 2, Issue 4, 18-24.*

15. Naz, Shakeela , Mustafa , Atta UI, Mukhtar , Arslan and Nawaz , Saqib (2015), "Risk Adjusted Performance Evaluation of Balanced Mutual Fund Schemes in India", *European Journal of Business and Management, Vol. 7,No. 179-187.*

16. Sharpe, William F., Alexander, Gordon J. and Bailey, Jeffery V. (2001), Investments, *Printice Hall of India Private Limited, New Delhi.*

17. Sondhi, H.J. and Jain, P.K. (2006), "Can Growth Stocks be Identified for Investment? A Study of Equity Selectivity Abilities of Fund Managers in India". *Icfai Journal of Applied Finance, Vol. 12, No.2, 14-30.*

S. No.	Name of the Scheme	Annualized Returns (%)			Beta	t-values	Beta	t-values	Beta	t-values
		2000-04	2004-08	2000-08	2000-04		2004-08		2000-08	
A.	Growth Schemes									
1	Alliance Equity - D	0.83	26.85	9.15	0.76	19.67*	0.69	19.67*	0.7	21.93*
2	Birla Advantage - G	0.59	25.8	12.15	0.7	17.49*	0.86	17.49*	0.77	32.05*
3	Birla MNC - G	11.54	26.22	18.4	0.52	15.06*	0.71	15.06*	0.61	24.53*
4	Birla Sun Life Buy India	2.73	38.33	19.23	0.49	9.24*	0.61	9.24*	0.55	14.46*
5	Birla Sun Life New Millennium	-9.27	34.07	10.33	1.27	13.33*	0.68	13.33*	1.01	17.35*
6	Birla Sun Life Basic Industries	39.09	33.52	35.79	0.77	19.36*	1	19.36*	0.87	32.15*
7	CanaraRobeco Expo - G	2.49	22.69	12.72	0.87	16.96*	0.81	16.96*	0.85	27.16*
8	CanaraRobeco Fortune 94	23.21	28.49	25.15	0.84	21.97*	0.76	21.97*	0.8	31.01*
9	DSPML Equity - D	4.48	24.11	13.6	0.7	27.22*	0.57	27.22*	0.64	39.64*
10	DSPML Opportunities	29.2	36.23	32.73	0.9	16.13*	0.82	16.13*	0.86	23.13*
11	DSPML Technology.com	5	39.97	21.49	1.2	15.02*	0.7	15.02*	0.96	18.78*
12	Franklin FMCG - G	4.09	28.72	15.39	0.52	15.21*	0.58	15.21*	0.55	22.58*
13	FT India Bluechip - G	21.24	28.56	26.17	0.89	28.11*	0.86	28.11*	0.88	44.05*
14	FT India Prima - G	29.35	33.61	30.87	0.83	16.01*	0.85	16.01*	0.83	23.65*
15	FT India Prima Plus - G	29.35	36.4	26.18	0.89	25.30*	0.89	25.30*	0.89	40.43*
16	Franklin Infotech	-11.29	23.81	4.83	1.2	12.44*	0.6	12.44*	0.93	15.59*
17	Franklin Pharma	14.05	15.69	14.87	0.43	8.58*	0.51	8.58*	0.47	12.52*

18	HDFC Capital Builder - G	17.77	38.08	27.05	0.58	18.09*	0.85	18.09*	0.7	27.58*
19	HDFC Equity - G	24.38	36.68	29.8	0.82	23.57*	0.89	23.57*	0.85	37.37*
20	HDFC Growth - G	21.14	38.8	20.67	0.72	21.99*	0.86	21.99*	0.78	14.03*
21	HDFC Prudence - G	21.41	29.23	24.95	0.49	22.77*	0.55	22.77*	0.51	30.27*
22	ICICI Prudential Growth - G	9.07	32.89	19.84	0.99	16.16*	0.93	16.16*	0.96	28.50*
23	ING Core Equity	-16.1	39.16	8.12	-0.07	-0.52	0.05	-0.52	-0.01	-0.09
24	JM Basic Fund - G	19.19	8.83	13.75	0.39	8.80*	0.33	8.80*	0.36	14.77*
25	JM Equity - G	3.29	31.5	16.08	1.03	26.78*	0.91	26.78*	0.97	34.97*
26	Kotak 30- G	4.44	33.98	20.84	0.97	26.52*	0.83	26.52*	0.93	35.73*
27	Kotak MNC	13.22	26.75	19.88	0.44	8.44*	0.58	8.44*	0.47	12.00*
28	Kotak Tech	-9.62	20.48	4.55	1.13	14.20*	0.65	14.20*	0.91	17.94*
29	LIC Equity - G	6.79	20.94	13.8	0.91	27.41*	1.01	27.41*	0.75	17.96*
30	LIC MF Growth - G	4.08	20.07	12.08	0.45	5.94*	0.89	5.94*	0.65	14.86*
31	Morgan Stanley Growth	6.74	25.96	15.98	0.24	4.09*	0.81	4.09*	0.5	13.96*
32	Principal Growth	24.75	31.9	28.6	0.76	14.45*	0.82	14.45*	0.79	21.11*
33	Principal Index	7.31	28.31	17.35	0.8	19.15*	0.84	19.15*	0.82	27.22*
34	Principal Resurgent India Equity	39.67	31.5	20.92	0.47	7.97*	0.81	7.97*	0.87	33.48*
35	Prudential ICICI FMCG - G	2.8	45.36	21.86	0.53	11.14*	0.63	11.14*	0.58	17.59*
36	Prudential ICICI Power - G	13.22	35.86	23.53	0.85	12.43*	0.9	12.43*	0.87	23.09*
37	Reliance Growth - G	21.85	48.52	34.09	0.73	16.13*	0.89	16.13*	0.81	26.86*
38	Reliance Vision - G	31.56	37.3	33.81	0.74	16.60*	0.89	16.60*	0.81	29.92*
39	SBI Magnum Equity - G	-7.8	19.44	4.77	0.58	15.65*	0.61	15.65*	0.59	24.14*
40	SBI Magnum Global 94 - G	-1.43	41.13	17.65	1.08	19.05*	0.75	19.05*	0.93	24.12*
41	SBI Magnum Multiplier Plus 93 - G	-8.34	35.17	11.07	0.89	15.79*	0.77	15.79*	0.84	23.25*
42	SBI Magnum Sec Umbrella - FMCG	-0.35	23.6	10.65	0.61	15.38*	0.5	15.38*	0.56	18.98*
43	SBI Magnum Sec Umbrella - Pharma	16.48	17.37	16.49	0.57	12.72*	0.52	12.72*	0.54	16.57*
44	Sundaram BNP Paribas Growth - G	9.7	32.43	22.87	0.91	22.90*	0.94	22.90*	0.94	29.65*
45	Tata Life Science & Tech - G	2.69	22.71	11.36	0.65	12.93*	0.61	12.93*	0.63	20.75*
46	Tata Pure Equity - G	8.13	25.99	16.41	0.46	19.46*	0.75	19.46*	0.59	34.27*
47	Taurus Bonanza Exclusive	24.54	36.09	31.2	0.06	0.77	0.87	0.77	0.43	8.08*
48	Taurus Discovery Stock	-6.58	47.44	17.55	0.63	8.78*	0.88	8.78*	0.75	13.08*
49	Taurus Starshare	1.83	53.62	24.72	0.88	16.46*	1.01	16.46*	0.94	23.63*
50	Templeton India Growth - G	21.99	31.37	26.07	0.73	29.62*	0.86	29.62*	0.78	42.77*
51	UTI Master Growth	16.74	27.58	22.04	0.85	15.91*	0.87	15.91*	0.83	22.69*
52	UTI Master Index - G	7.21	32.93	18.91	1.01	58.63*	0.95	58.63*	0.98	54.74*
53	UTI MNC Fund - G	8.41	21.01	14.09	0.5	15.79*	0.6	15.79*	0.54	22.85*
	Average (A)	**10.51**	**30.81**	**19.29**	**0.72**		**0.75**		**0.73**	
B.	**Tax Planning Schemes**	**2000-04**	**2004-08**	**2000-08**	**2000-04**		**2004-08**		**2000-08**	
54	Birla Equity Plan - D	6.59	26.85	16.01	0.78	16.35*	0.69	25.75*	0.74	26.33*
55	Birla Sun Life Tax Relief 96 - D	8.07	19.65	13.3	0.74	20.84*	0.55	20.96*	0.65	28.85*
56	Birla Taxplan 98	10.92	34.14	21.2	0.85	15.43*	0.9	24.45*	0.87	25.71*
57	CanaraRobeco Equity Taxsaver	-6.16	11.37	2.61	0.6	14.71*	0.42	12.88*	0.52	19.62*
58	Escorts Tax Plan - G	22.15	33.09	26.83	0.73	24.24*	0.9	19.53*	0.8	29.29*
59	FT India Taxshield - G	17.89	32.42	24.42	0.9	31.08*	0.9	36.89*	0.9	46.75*
60	FT India Taxshield 98	5.3	30.17	17.06	0.77	8.93*	0.76	17.75*	0.77	15.58*
61	HDFC Taxsaver - G	9.12	28.18	18.05	0.3	21.19*	0.67	23.00*	0.47	25.83*
62	HDFC Top 200 - G	17.18	34.29	24.95	0.68	22.96*	0.84	40.04*	0.75	39.81*
63	LIC Tax Plan - G	1.51	18.21	9.65	0.38	4.93*	0.9	30.45*	0.62	13.98*

64	Principal Personal Taxsaver	11.33	28.67	19.21	0.84	19.84*	0.7	21.35*	0.77	28.34*
65	Principal Tax Savings	25.99	39.05	32.98	0.83	13.44*	0.78	13.81*	0.8	19.33*
66	Sahara Taxgain - G	-3.86	34.96	13.55	0.99	18.63*	0.91	20.38*	0.95	27.24*
67	SBI Magnum Tax Gain 93 - G	-8	34.74	11.02	1.08	17.45*	0.53	16.45*	0.83	21.68*
68	Sundaram BNP Paribas TaxSaver 97	3.26	19.52	9.56	0.44	20.74*	0.6	23.00*	0.49	29.18*
69	Sundaram BNP Paribas Taxsaver	10.07	30.08	19.43	0.88	37.33*	0.69	19.41*	0.79	32.58*
70	Sundaram BNP Paribas Taxsaver 98	12.99	30.29	20.82	0.92	37.88*	0.86	25.70*	0.89	36.38*
71	Tata Tax Saving	8.1	21.3	14.11	0.73	16.66*	0.82	22.55*	0.77	26.75*
72	Taurus Libra Taxshield	1.97	37.71	18.53	0.66	8.00*	0.88	10.45*	0.77	12.94*
73	UTI Equity Tax Savings	19	27.32	23.09	0.76	12.93*	0.74	15.26*	0.75	19.59*
	Average (B)	**8.67**	**28.4**	**17.84**	**0.74**		**0.75**		**0.75**	
C.	**Balanced Schemes**	2002-04	2004-08	2002-08	2002-04		2004-08		2002-08	
74	Birla Balance - G	34.56	26.67	23.8	0.69	7.34*	0.77	15.38*	0.73	16.89*
75	Birla Sun Life 95 - G	34.61	19.5	28.61	0.67	6.51*	0.75	17.51*	0.74	16.61*
76	DSPML Balanced - D	38.17	20.31	24.65	0.57	6.49*	0.56	15.01*	0.56	14.93*
77	FT India Balanced - G	36.89	24.5	28.02	0.64	6.24*	0.79	16.38*	0.75	16.39*
78	ICICI Prudential Balanced - G	31.17	25.82	27.58	0.51	4.53*	0.64	16.01*	0.75	14.73*
79	JM Balanced - G	15.54	10.72	12.13	0.34	7.20*	0.46	13.44*	0.43	15.27*
80	SBIM Balanced - D	25.25	21.85	21.95	0.52	6.14^	0.6	10.23*	0.58	11.89*
81	SundaramBNP Paribas Balanced - G	30.16	23.59	25.75	0.28	2.70*	0.8	17.56*	0.66	14.05*
82	Tata Balanced - G	28.13	25.33	25.76	0.54	7.61*	0.81	15.87*	0.74	17.50*
83	Tata Young Citizens	27.11	17.33	20.09	0.53	7.84*	0.56	16.04*	0.55	17.38*
84	Templeton India Pension - G	24.18	14.98	17.76	0.29	6.29*	0.43	15.43*	0.39	16.18*
	Average (C)	**29.43**	**20.96**	**23.28**	**0.51**		**0.67**		**0.62**	
D.	**Income Schemes**									
85	Alliance Income - G	10.93	6.39	7.82	1.01	15.60*	0.91	13.68*	0.9	13.39*
86	Birla Income Plus - G	11.08	5.38	7.2	1.15	18.31*	1.06	18.34*	1.05	18.02*
87	Birla Sun Life Cash Manager - G	5.93	6.15	6.08	0	-0.02	0.01	1.75	0	0.3
88	DDS Chola Triple Ace	10.42	1.2	4.12	1.29	18.75*	0.44	7.33*	0.45	7.27*
89	DSPML Bond Retail	10.35	3.54	5.77	0.9	12.58*	0.86	19.80*	0.86	19.72*
90	Escorts Income Bond - G	49.27	15.24	25.67	0.84	1.01	0.99	3.08*	1	3.07*
91	Escorts Income Plan - G	11.38	5.25	7.26	0.1	2.61*	0.41	12.28*	0.41	12.03*
92	ICICI Prudential Income - G	10.4	4.65	6.49	1.23	15.84*	1.07	16.67*	1.07	16.50*
93	JM Income - G	11.07	3.01	5.64	0.95	8.33*	0.64	11.31*	0.63	11.18*
94	Kotak Bond Deposit - G	14.44	4.58	11.64	0.05	0.51	0.78	14.79*	0.78	14.63*
95	Libra Bond - G	5.35	5.19	5.24	1.36	11.08*	0.5	3.07*	0.5	3.04*
96	LIC Bond - G	14.38	4.91	11.93	-0.23	-0.71	0.63	14.49*	0.62	14.26*
97	Reliance Income - G	13.72	5.53	12.1	-0.03	-0.36	0.92	17.15*	0.92	16.95*
98	Sundaram BNP Paribas Bond - G	14.11	3.42	10.92	0.06	0.71	0.75	25.38*	0.74	25.13*
99	Templeton India IBA - G	11.38	3.23	5.89	1.26	15.01*	1.1	16.98*	1.1	16.88*
100	Templeton India Income - G	10.62	4.08	6.18	1.03	16.14*	1.05	15.88*	1.05	15.72*
	Average (D)	**13.43**	**5.11**	**8.75**	**0.69**		**0.76**		**0.75**	

*Statistically significant at 1% level

❑❑❑