S M A R T

JOURNAL OF BUSINESS MANAGEMENT STUDIES

(An International Serial of Scientific Management and Advanced Research Trust)

Vol.6 **No. 1** **January - June 2010**

ISSN 0973 - 1598

Chief Editor
M. SELVAM, M.Com., Ph.D.,
Bharathidasan University,
India

SMART Journal is indexed and abstracted by Ulrich's Periodicals Directory, Intute Catalogue (University of Manchester) and CABELL'S Directory

SCIENTIFIC MANAGEMENT AND ADVANCED RESEARCH TRUST
(SMART)
TIRUCHIRAPPALLI (INDIA)
http://www.smartjournalbms.org

RISK-RETURNS ANALYSIS OF PRIVATE AND PUBLIC MUTUAL FUNDS

N.Lenin Kumar
Assistant Professor, Dept. of Management Science, Swarna Bharathi Institute of Management Science, Pakabanda, Khammam, Andhra Pradesh, India
V.Rama Devi
Professor, School of Management, KL University, Vaddeswaram, Guntur (Dt.), Andhra Pradesh, India

Abstract

A Mutual Funds is the ideal investment vehicle for today's complex and modern financial scenario. Mutual Funds, which have been operating for more than five years, were selected for the present research. The sample for the study consists of 261 Mutual Funds classified into private and public funds which are further categorized on the basis of investment styles. The performance of selected funds was evaluated by using Average Rate of Returns of Fund, Standard Deviation and Risk/Returns.

Key words: *Investment Style, Private Funds, Public Funds.*

Introduction

With the growth of the economy and the capital market in India, the size of investors has also increased rapidly. In fact, small investors in India have regularly invested in public issues to finance big and small green-field projects of known promoters. They have been benefited from such investments in the past. As the stock market crumbled later on and new issues flopped, small investors again began looking for a good opportunity. In this situation, Mutual Funds proved that they are able to deliver the goods.

A Mutual Funds is the ideal investment vehicle for today's complex and modern financial scenario. Markets for equity shares, bonds and other fixed income instruments, real estate, derivatives and other assets have become mature and information - driven. Price changes in these assets are driven by global events occurring in faraway places. Small investors face a lot of problems in the share market due to lack of professional advice and lack of information. Mutual Funds have come as a much needed help to these investors.

Statement of the Problem

Mutual Funds Industry today is one of the most preferred investment avenues in India. However, with a plethora of schemes to choose from, the retail investor faces problems in selecting funds. Though investment strategy and management style are qualitatively important, the funds record is an important quantitative indicator. Though past performance alone cannot be indicative of future performance, it is, frankly, the only quantitative way to judge how good a fund is at present. The problem is to know the past performance of funds that can help the investors in exercising their choice.

Literature Review

Literature review highlights the trends in theoretical progress as well as in methodology and techniques used in these studies.

Jain (1982), evaluated performance of Unit Trust of India (UTI) during 1964-65 to 1979-80, including the profitability aspects of Unit Scheme 1964, Unit Scheme 1971 and Unit Scheme 1976. He concluded that its real rate of returns has been low indicating overall poor performance of UTI schemes. Barua and

Verma (1991) provided empirical evidence of equity Mutual Funds performance in India. They studied the investment performance of India's first 7-year close-end equity Mutual Funds, Mastershare. They concluded that the Funds performed satisfactorily for large investors in terms of rate of returns. Vaid (1994) looked at the performance in terms of the ability of the Mutual Funds to attract more investors and higher fund mobilization. It shows the popularity of the Mutual Funds as it is perceived to pay superior returns to the investors.

Gupta and Sehgal (1997) evaluated Mutual Funds performance over a four year period, 1992-96. The sample consisted of 80 Mutual Funds Schemes. They concluded that Mutual Funds Industry performed well during the period of study. The performance was evaluated in terms of benchmark comparison, performance from one period to the next and their risk-returns characteristics. Mishra (2001) evaluated performance over a period, April 1992 to December 1996. The sample size was 24 public sector sponsored Mutual Funds. The study indicated dismal performance of PSU Mutual Funds in India in general, during the period 1992-96.

Narayan and Ravindran (2003) studied the performance of Indian Mutual Funds in a bear market using relative performance index, risk-returns analysis, Treynor's Ratio, and measures of Sharpe, Jensen and Fama. Amit Singh Sisodiya (2005) concluded that the entry of private players has galvanized the industry as it has led to increased competition, greater emphasis on product innovation, emergence of new distribution models, and better investor services, which has, in turn, meant increased market penetration..

Objectives of the Study

1. To evaluate performance of different private and public Mutual Funds Schemes on the basis of risk - returns parameters.
2. To study if there is a significant difference between the returns of different Mutual Funds Schemes within an investment style.
3. To find out if there is a significant difference between the returns of private and public sector Mutual Funds.

Hypotheses of the Study

1. There is no significant difference between the returns of different Mutual Funds schemes within an investment style.
2. There is no significant difference between the returns of private and public sector Mutual Funds.

Methodology

Funds Selected For the Study

Mutual Funds, which have been operating for more than five years and performing during the period of study (i.e. 2003 – 2007), were selected for the present research. There were 261 such funds which were classified into nine private debt institutional funds, 53 private debt long term funds, four private debt speciality funds, 39 private debt short term funds, 47 private equity diversified funds, 16 private equity index funds, 12 private equity tax savings funds, nine private money income plan funds, 23 private money market funds, two public debt institutional funds, seven public debt long term funds, three public debt speciality funds, eight public debt short term funds, nine public equity diversified funds, five public equity index funds, six public equity tax savings funds, three public money income plan funds and six public money market funds.

Data collection

The Research Study was based on secondary data. To gain an overview of the current performance trends of the Indian Mutual Funds Industry, secondary data formed an important source. Data were collected from the fact sheets, newspapers, journals, books,

periodicals, websites, etc. The data were collected from various websites of AMCs, AMFI, value research online, money control.com, etc.

Period of Study

The period of study covers five years (2003 – 2007) and the reasons for studying the performance of Mutual Funds for a period of five years are:

- Ø A large number of mutual funds have been investigated during 2003 - 2007.
- Ø The Mutual Funds Industry in India registered notable growth during the period 2003 – 2007.
- Ø The Indian stock market has done exceptionally well during the period 2003 – 2007.

Performance Measures/ Tools Used in the Study

The performance of selected funds was evaluated by using average rate of returns of fund, standard deviation and risk/returns. Returns alone should not be considered as the basis of measurement of the performance of a Mutual Funds Scheme. It should also include the risk taken by the Fund Manager because different funds will have different levels of risk attached to them. Risk associated with a fund, in general, can be defined as variability or fluctuations in the returns generated by it. Higher the fluctuations in the returns of a fund during a given period, higher will be the risk associated with it. Standard Deviation is a statistical measure of the range of a fund's performance and it is reported as an annual number. When a fund has a high Standard Deviation, its range of performance is very wide, indicating that there is a greater potential for volatility.

Limitations of the Study

1. The study was confined to Mutual Funds Schemes that have operated for more than past five years and still performing during the period of the study. Hence the study was not extensive.
2. The performance of Mutual Funds was evaluated by using few performance measures like Average Rate of Returns and Standard Deviation
3. The evaluation of Mutual Funds performance was done for a period of 5 years only i.e. from 2003 – 2007.
4. Since the Study was conducted over a five year period, the period during which the Indian stock market was generally bullish, the findings of the Study should be taken with caution.

Analysis and Discussion

Returns and Risk Parameters of Private Sector Funds

It is observed from **Table - 1** that the returns of Private Sector Funds ranged from 3.47% to 56.70%. Private Equity Tax Savings Fund was the topper in returns, followed by Private Equity Diversified with 55.97%, Private Equity Index with 43.34% and returns was the lowest for Private Debt Institutional.

The risk for Private Sector Funds ranged from 0.25 to 8.95. The risk was the highest for Private Equity Diversified and lowest for Private Money Market. The risk per unit returns ranged from 0.04 to 1.02. The risk per unit returns ratio was the highest for Private Debt Institutional and lowest for Private Money Market.

Returns and Risk Parameters of Public Sector Funds

Table - 2 reveals that the returns of Public Sector Funds ranged from 4.35% to 54.20%. Public Equity Tax Savings Fund earned the highest returns, followed by Public Equity Diversified with 53.30% and Public Debt Long Term Fund recorded the lowest returns.

The risk fluctuated from 0.10 to 13.39 for Public Sector Funds. The risk was the highest for Public Equity Diversified, followed by Public Equity Tax Savings with 12.71 and the lowest risk was recorded for Public Debt Institutional. The risk per unit returns fluctuated from 0.02 to 0.25 for Public Sector Funds. The risk per unit returns was the highest for Public Equity Diversified and lowest for Public Debt Institutional.

Testing of Hypothesis No - 1

There is no significant difference between returns of various Mutual Funds schemes under the Private **S**ector Category.

Table- 3 portrays that in the case of Private Equity Diversified Funds, Private Equity Index Funds, Private Equity Index Savings Funds and Private Money Market Funds, the F Value was significant which implies that the returns of various Mutual Funds Schemes differed from one another in that specific category.

For the remaining Private Sector Investment Styles, the F value was insignificant. This means that the alternative hypothesis that there is significant difference between the returns of Mutual Funds Schemes under Private Sector Investment Styles is rejected. It implies that returns of Mutual Funds Schemes do not significantly differ from one another within the respective Private Sector Investment Styles.

Testing of Hypothesis No-2

There is no significant difference between returns of various mutual funds schemes under the Public Sector Category.

From **Table 4** it can be observed that F value was significant at 5% level for Public equity Index Funds and Public Money Market Funds. Therefore the alternative hypothesis that there is significant difference between the returns of chosen Mutual Funds Schemes under the Public Sector Investment Style is accepted. It implies that returns of Mutual Funds Schemes significantly differed from one another within the respective Public Sector Investment Styles.

For the remaining Public Investment Styles, the calculated value was less than the table value. Therefore the null hypothesis that there is no significant difference between the returns of Mutual Fund Schemes under the Public Investment Styles is accepted. It implies that returns of Mutual Funds Schemes do not significantly differ from one other within the respective Public Investment Style.

Testing of Hypothesis

There is no significant difference between returns of private and public sector Mutual Funds.

From **Table - 5** it can be understood that the F value was insignificant. Therefore the null hypothesis that there is no significant difference between the performance of private and public Mutual Funds is accepted. It implies that the returns of Private Mutual Funds did not significantly differ from returns of Public Mutual Funds.

Suggestions : With a strong regulatory framework, clear guidelines and the talent to back it up, the Indian Mutual Funds Industry is in a position to cater to the new breed of investors who are keen to diversify their risks. But the Mutual Funds Industry also faces some major challenges. Certain measures have to be taken in order to sustain the growth of the industry and further strengthen it.

1. The Indian Mutual Funds Industry has to tap the semi-urban and rural markets in order to attract more investors. To enable this, it needs to widen its range of products with affordable and yet competitive schemes against low-risk assured returns of government sponsored saving schemes such as post office saving deposits.

2. There is a need for greater awareness, investor education and financial literacy. Every investor has aspirations. Until he knows how to make the right choice, those aspirations cannot be met. Investor education should be imparted.

3. Promoting the growth of Mutual Funds Industry in India by reinforcing investor confidence through strengthened corporate governance, regulation, and supervision and instituting an appropriate incentive structure is very much required.

4. For an investor with inadequate knowledge and an urge for investment, the results indicate how one can diversify investment in Mutual Funds across different categories, different sectors, etc. The investors may consider the past performance while making investment decisions.

Conclusion

The tremendous success the Mutual Funds Industry has enjoyed is due to the fact that it has done more than any other financial services industry to offer investors solid products tailored to meet real financial needs, and marketed those products responsibly. But it cannot be ignored that rapid changes and market pressures are challenging. It cannot afford to remain "pigeonholed" by outdated thinking or antiquated business practices. If the long-term health of the industry and investor protection is maintained, the record of success can be maintained in the future also.

Scope for Further Research

There is scope for improvement in the research for evaluating Mutual Funds performance. Various other performance measures like Sharpe Ratio, Treynor Ratio and Jensen Ratio and Fama Measure could be used for evaluating Mutual Funds performance. Testing of fund performances in the longer run can be done by extending the period of time. In order to generalize the results of the Study, a wide comprehensive study encompassing a large and wide spectrum of Mutual Funds over a relatively longer period of time, may be initiated.

References

1. Amit Singh Sisodiya. (2005). *Mutual Funsd Industry in India – An Introduction*, ICFAI Publications.
2. Barua. S.K. and Verma. J.R. (1991). *Mastershare, A Bonanza for Large Investors. Vikalpa,* (January – March), 29-34.
3. Gupta. O.P. and Sehgal. S. (1997). *Investment Performance of Mutual Funds – The Indian Experience*. 'Indian Capital Market – Trends and Dimensions', Tata McGraw Hill Publishing Company Ltd. (on behalf of Institute of Capital Market, Navi Mumbai), 1-41.
4. Jain. P.K. (1982). *Financial Institution in India – A Study of Unit Trust of India*, Triveni Publication, New Delhi, 1982.
5. Mishra. B. (2001). *A Study of Mutual Funds in India,* Unpublished Research Paper under the aegis of Faculty of Management Studies, University of Delhi.
6. Narayan Rao. S. and Ravindran.M. *Performance Evaluation of Indian Mutual Funds.* Working paper , http://papers.ssrn.com/sol3/papers.cfm?abstract_id=433100
7. Vaid. S. (1994). *Mutual Funds Operation in India,* Rishi Publication, Varanasi, India, 101-119.

Table 1 : Returns and Risk Parameters of Private Sector Funds

S. No	Type of Fund	Returns (%)	Risk	Coefficient of Variation
1	Private Debt Institutional	3.47	3.55	1.02
2	Private Debt Long Term	4.68	1.50	0.32
3	Private Debt Speciality	11.35	2.57	0.23
4	Private Debt Short Term	5.38	0.91	0.17
5	Private Equity Diversified	55.97	8.95	0.16
6	Private Equity Index	43.34	5.04	0.12
7	Private Equity Tax Savings	56.70	6.70	0.12
8	Private Money Income Plan	9.65	2.61	0.27
9	Private Money Market	5.66	0.25	0.04

Table 2 : Returns and Risk Parameters of Public Sector Funds

S. No	Type of Fund	Returns (%)	Risk	Coefficient of Variation
1	Public Debt Institutional	5.72	0.10	0.02
2	Public Debt Long Term	4.35	0.88	0.20
3	Public Debt Speciality	14.19	2.13	0.15
4	Public Debt Short Term	5.31	0.69	0.13
5	Public Equity Diversified	53.30	13.39	0.25
6	Public Equity Index	36.18	3.38	0.09
7	Public Equity Tax Savings	54.20	12.71	0.24
8	Public Money Income Plan	10.17	1.13	0.11
9	Public Money Market	5.93	0.24	0.04

Table 3 : ANOVA between Returns of various Mutual Fund Schemes of Private Category

S. No	Name	F Value	Result
1	Private Debt Institutional	1.24	Not Significant
2	Private Debt Long Term	1.21	Not Significant
3	Private Debt Short Term	1.4	Not Significant
4	Private Debt Speciality	1.11	Not Significant
5	Private Equity Diversified	3.53	Significant at 1% Level
6	Private Equity Index	5.16	Significant at 1% Level
7	Private Equity Tax Savings	7.27	Significant at 1% Level
8	Private Money Income Plan	1.7	Not Significant
9	Private Money Market	5.99	Significant at 1% Level

Table 4 : ANOVA between Returns of various Mutual Funds Schemes of Public Category

S. No	Name	F Value	Result
1	Public Debt Institutional	80.96	Not Significant
2	Public Debt Long Term	3.09	Not Significant
3	Public Debt Short Term	2.35	Not Significant
4	Public Debt Speciality	7.12	Not Significant
5	Public Equity Diversified	1.02	Not Significant
6	Public Equity Index	8.24	Significant at 5% Level
7	Public Equity Tax Savings	1.43	Not Significant
8	Public Money Income Plan	4.04	Not Significant
9	Public Money Market	4.94	Significant at 5% Level

Table 5 : ANOVA between Returns of Private and Public Sector Mutual Funds

S. No	Name	F Value	Result
1	Private Public	6.39	Not significant