North Asian International Research Journal Consortium

North Asian International Research Sournal

Multidisciplinary

Chief Editor Dr. Nisar Hussain Malik

Publisher

Dr. Bilal Ahmad Malik

Associate Editor

Dr.Nagendra Mani Trapathi

Honorary Dr.Ashak Hussain Malik



Welcome to NAIRJC

ISSN NO: 2454 - 2326

North Asian International Research Journal is a multidisciplinary research journal, published monthly in English, Hindi, Urdu all research papers submitted to the journal will be double-blind peer reviewed referred by members of the editorial board. Readers will include investigator in Universities, Research Institutes Government and Industry with research interest in the general subjects

Editorial Board

J.Anil Kumar Head Geography University of Thirvanathpuram	Sanjuket Das Head Economics Samplpur University	Adgaonkar Ganesh Dept. of Commerce, B.S.A.U Aruganbad			
Kiran Mishra	Somanath Reddy	Rajpal Choudhary			
Dept. of Engligh,Ranchi University,	Dept. of Social Work, Gulbarga	Dept. Govt. Engg. College Bikaner			
Jharkhand	University.	Rajasthan			
R.D. Sharma	R.P. Pandday	Moinuddin Khan			
Head Commerce & Management Jammu	Head Education Dr. C.V.Raman	Dept. of Botany SinghaniyaUniversity			
University	University	Rajasthan.			
Manish Mishra Dept. of Engg, United College Ald.UPTU Lucknow	K.M Bhandarkar Praful Patel College of Education, Gondia	Ravi Kumar Pandey Director, H.I.M.T, Allahabad			
Tihar Pandit Dept. of Environmental Science, University of Kashmir.	Simnani Dept. of Political Science, Govt. Degree College Pulwama, University of Kashmir.	Ashok D. Wagh Head PG. Dept. of Accountancy, B.N.N.College, Bhiwandi, Thane, Maharashtra.			
Neelam Yaday	Nisar Hussain	M.C.P. Singh			
Head Exam. Mat.KM .Patel College	Dept. of Medicine A.I. Medical College	Head Information Technology Dr C.V.			
Thakurli (E), Thane, Maharashtra	(U.P) Kanpur University	Rama University			
Ashak Husssain	Khagendra Nath Sethi	Rama Singh			
Head Pol-Science G.B, PG College Ald.	Head Dept. of History Sambalpur	Dept. of Political Science A.K.D College,			
Kanpur University	University.	Ald.University of Allahabad			

Address: - Dr. Ashak Hussain Malik House No. 221 Gangoo, Pulwama, Jammu and Kashmir, India - 192301, Cell: 09086405302, 09906662570, Ph. No: 01933-212815,

Email: nairjc5@gmail.com, info@nairjc.com Website: www.nairjc.com



IRJIF IMPACT FACTOR: 3.52 AN EMPIRICAL EVALUATION OF SELECTED TAX SAVING MUTUAL FUND SCHEMES IN INDIA THROUGH SHARPE RATIO

B. RATNAVALLI*

*Asst. Professor, Dept. of Management Studies, TJPS College, Guntur

DR. S. ANITHA DEVI**

**Prof. & Head, Dept. of Mgt Studies, TJPS College, Guntur

ABSTRACT

Investment is a commitment of funds in real assets or financial assets. Investment involves risk and gain. In the present dynamic global environment, exploring investment avenues are of great relevance. Mutual funds would be one of the major instruments of wealth creation and wealth saving in the years to come, giving positive results. The success of an investment activity depends on the knowledge and ability of investors to invest, the right amount, in the right type of investment, at the right time. The present paper shed light on performance evaluation of tax saving schemes through Sharpe ratio. *Keywords:* Investment, global environment, Tax Saving schemes.

REVIEW OF LITERATURE

Muthappan P K and Damodharan E (2006) evaluated 40 schemes for the period April 1995 to March 2000. The study concludes that, the Indian Mutual Funds were not properly diversified.

Sanjay Kant Khare (2007) opined that investors could purchase stocks or bonds with much lower trading costs through mutual funds and enjoy the advantages of diversification and lower risk.

Debasish (2009) evaluated the performance of selected schemes of mutual funds based on risk and return models and measures the study revealed that Franklin Templeton and UTI were the best performers and Birla Sun Life, HDFC and LIC mutual funds showed poor performance.

Sondhi and Jain (2010) examined the market risk and investment performance of equity mutual funds in India The study revealed that, the category, size and ownership have been significant determinants of the performance of mutual fund schemes.

Satya Sekhar.G.V. (2013) intended to examine the role of mutual fund organization in financial inclusiveness with reference to performance through public and private sector.

RESEARCH OBJECTIVE

To evaluate the performance of selected Tax Saving Schemes in India through Sharpe Ratio

DATA AND METHODOLOGY

The data used for analysis is mainly the secondary data. Data on mutual funds is drawn from the respective websites. The sample is restricted to 19 tax saving funds whose data is available on a daily basis for the sample period. The schemes considered in the study are only those with growth option as this will not warrant any dividend adjustments to the published NAV data.

SAMPLE PERIOD

The sample period spans over 6 years ie., from June 2009 to June 2015.

ANALYSIS

1, 3, 5 year absolute returns and excess returns were calculated as absolute returns do not account for overall market movements for all the 19 schemes. We then have used Sharpe's ratio which take into account not only the market performance but also the riskiness of the scheme. We started the performance evaluation by looking at raw returns which is defined as under:

Rt =NAVt-NAVt-1/NAV t-1

Where, Rt= daily return of a mutual fund in the period t and NAVt = daily net asset value per unit of the mutual fund in the period. Since the absolute return does not account for overall market movements during the period under consideration we also computed the excess returns defined as under:

ER=SR-MR

Where ER = Excess returns, SR = Scheme Returns, MR = Market returns. For computing the excess returns we had used Nifty Total Returns as the proxy for market returns which is an appropriate measure as it accounts for dividends.

Return alone should not be considered as the basis of measurement of the performance of a mutual fund scheme, it should also include the risk taken by the fund manager because different funds will have different levels of risk attached to them. The total risk of the mutual funds under consideration is measured by the standard deviation of the daily returns which was calculated as follows

$$S = \sqrt{\frac{1}{n-1} \sum_{t=1}^{n} (R_t - \overline{R})^2}$$

Where,

S = standard deviation (total risk) of the mutual fund, N = number of daily returns

Rt = Daily returns of the mutual fund, R = Mean return of the mutual fund

COMPUTATION OF SHARPE' RATIO

We then computed the Sharpe's Ratio for each scheme which takes into account not only the market performance but also the riskiness of the scheme. Sharpe's Ratio defined as under:

Sharpe Index (Si)
$$S = \frac{SR - R_f}{\sigma_s}$$

Where

SR=Scheme Returns, Rf= Risk free returns, σ s= Standard deviation of the returns

For computing Sharpe's ration we had taken one year –T Bill yield as the proxy or rate and ignored those schemes with-out one year of existence accordingly we are left with only twenty schemes.

EMPIRICAL RESULTS

- For 1, 3 and 5 year return analysis, we had considered all those schemes that had a track record of at least one year in existence. Consequently, we were left with the schemes whose names and their returns are presented in Table-1.
- On an one year absolute return basis it may be observed that Taurus Tax Shield returned the minimum among all the competing schemes with a return of -20.2709 per cent and JP Morgan India returned a

maximum of 5.9691 per cent which is the maximum return from tax saving schemes over the last one year period (Table-1)

- On an three year absolute return basis it may be observed that Escorts tax saving scheme returned the minimum among all the competing schemes with a return of -35.6234 per cent and HSBC tax saver returned a maximum of 17.6434 per cent which is the maximum return from tax saving schemes over the last three year period (Table-1)
- On an five year absolute return basis it may be observed that SAHARA tax saving scheme returned the minimum among all the competing schemes with a return of -10.5889 per cent and JP MORGAN India returned a maximum of 68.7997 per cent which is the maximum return from tax saving schemes over the last three year period (Table-1)
- As per one year excess returns again Taurus Tax saving scheme turned out to be least performer with a negative excess return of 2.5277 per cent while JP MORGAN INDIA was the best performer with an excess return of 0. per cent.(Table-2)
- As per three year excess returns again JP MORGAN INDIA turned out to be least performer with a negative excess return of 0.0926 per cent while HSBC Taxsaver was the best performer with an excess return of 0.0393 per cent.(Table-2)
- As per the 5 year excess returns DWS Tax saving scheme turned out to be least performer with a negative excess return of 0.0969 per cent while Tax saver BIRLASUNLIFE was the best performer with an excess return of 0.0731 per cent.(Table-2)
- The Sharpe's ratio is minimum for TAURUS at 0.0019 and is maximum for JP MORGAN INDIA at 0.02691 from Sharpe's ratio we can infer that excess returns per unit risk of the scheme are minimum for Taurus and maximum for Magnum tax gain.(Table-3)
- Standard deviation is high for PRINCIPAL TAX SAVER at 0.9209 and is low for RELIGARE at 0.0701.(Table-4)

IRJIF IMPACT FACTOR: 3.52 Table-1: Results of 1, 3, 5 yr returns of the selected schemes

Fund Name	1 year return (%)	3 year return (%)	5 year return (%)
Birla Sun Life	0.022075	2.5165560	65.62914
BOI AXA	-0.66007	4.950495	48.18482
DWS	-3.52469	2.015679	51.60799
Escorts	-14.2016	-35.6234	7.527709
Franklin India	-2.35312	-6.98163	41.79382
HDFC TaxSaver	-4.10646	-24.2572	4.245083
HSBC Tax Saver	1.269953	17.64345	57.35828
IDFC	-18.8755	-26.1859	9.974243
JM Tax Gain Fund	-7.85295	-5.47975	60.90566
JPMorgan India	5.969187	10.94231	68.79971
L&T Tax Saver Fund	0.210084	-11.8347	50.35014
LIC NOMURA	2.710798	5.573855	68.7054
Principal Personal Tax Saver	-0.20204	1.86091	63.65376
Reliance Tax Saver	-5.55401	-14.8643	46.30669
Religare	-14.8336	-4.19682	45.73082
Sahara Tax Gain	-13.3242	-23.8452	-10.5889
SBI MAGNUM	-11.4208	-19.6966	13.07819
Sundaram Tax Saver	-11.5628	-4.11167	32.77573
Taurus Tax Shield	-20.2709	-20.8515	23.41558

K

Table -2: Results of Excess Returns

Fund Name	1 year excess	3 year excess	5 year excess
	return(%)	return(%)	return(%)
Birla Sun Life	-0.56832	-0.23234	0.073161
	0.40000	0.01000	0.110.00
BOLAXA	-0.48802	-0.21992	-0.11928
DWS	-0.77137	-0.30059	-0.096907582
Escorts	-1.62227	-1.44988	-0.63059
Franklin India	-0.52931	-0.52638	-0.16629
HDFC TaxSaver	-0.78672	-1.14811	-0.68156
HSBC Tax Saver	-0.36527	0.039362	0.018078
IDFC	-2.10517	-1.13523	-0.53657
JM Tax Gain Fund	-1.14374	-0.49441	0.101936
JPMorgan India	0.131725	-0.09267	0.099789
L&T Tax Saver Fund	-0.49674	-0.6818	-0.07618
LIC NOMURA	-0.19441	-0.20932	0.072242
Principal Personal Tax Saver	-0.51796	-0.32366	0.043951
Reliance Tax Saver	-0.81894	-0.77904	-0.12307
Religare	-1.48196	-0.44805	-0.11977
Sahara Tax Gain	-1.62724	-1.07875	-0.88478
SBI MAGNUM	-0.56832	-0.23234	0.072161
Sundaram Tax Saver	-1.51766	-0.96689	-0.54003
Taurus Tax Shield	-2.52777	-0.99018	-0.34589



K

Table-3 represents the results of the Sharpe's ratio for the sample schemes.

MUTUAL FUND NAME	Sharpe Ratio
Birla Sun Life	0.023907
BOI AXA	0.011711
DWS	0.013847
Escorts Tax	-0.01524
Franklin India	0.008075
HDFC TaxSaver	-0.01894
HSBC Tax Saver	0.018117
IDFC	-0.01088
JM Tax Gain Fund	0.020997
JPMorgan India	0.026196
L&T Tax Saver Fund	0.013666
LIC NOMURA	0.023365
Principal Personal Tax Saver	0.021725
Reliance Tax Saver	0.008261
Religare	0.010845
SaharaTax Gain	-0.02664
SBI MAGNUM	-0.01258
Sundaram Tax Saver	-0.00096
Taurus Tax Shield	-0.00192

K

Mutual fund name	Standard deviation
Birla Sun Life	0.075346
BOI AXA	0.073875
DWS	0.073615
Escorts	0.077869
Franklin India	0.076215
HDFC TaxSaver	0.072894
HSBC TaxSaver	0.08734
IDFC	0.7887
JM Taxgain	0.6974
JP MorganIndia	0.086838
L&T TaxsaverFund	0.07281
LIC NOMURA	0.76944
PrincipalPersonalTax Saver	0.920995
Reliance Taxsaver	0.07124
Religare	0.0701
SaharaTax Gain	0.090844
SBI MAGNUM	0.07573
Sundaram Taxsaver	0.074672
Taurus Tax Shield	0.086051

Table -4 Represents the standard deviation

CONCLUSION

The tremendous success the fund 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 be afforded to remain 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 future.

REFERENCES

- Christopherson, J (1995) Equity Style Classifications, Journal of Portfolio Management, 21, 32-43.
- Fischer, E.D., & Jordan, J.R. (1997) Security Analysis and Portfolio Management; Prentice Hall of India: New-Delhi, 6th Edition.
- Seorge P. Artikis, (2003) Performance Evaluation : A Case Study of the Greek Balanced Mutual Funds, Managerial Finance, Vol.29, No.9, pp.1-8.
- ♦ Juan Carlos Matally'n Sa'ez (200) Style Analysis and Performance Evaluation of Spanish Mutual Funds, Journal of Asset Management, Vol. 1, 2,151-171.
- Narayan Rao, S., & Ravindrfan, M (2003) Performance Evaluation of Indian Mutual Funds Working paper http://papers. Ssrn.com/sol3/papers.cfm?abstract_id=433100.
- Sadhak.H. (2003) Mutual Funds in India, Marketing Strategies and Investment Practices, Second Edition, Response Books, A division of Sage Publications India Pvt. Ltd.
- Sharpe, William F. (1992) Asset Allocation: Management Style and Performance Measurement, Journal of Portfolio Management, Vol.18, No.2, pp.7-19.
- Sharad Panwar, & Madhumathi, R. (2006) Characteristics and Performance Evaluation of selected Mutual Funds in India, Working Paper SSRN -Id876402.
- Viswanath S.R (2007) Corporate Finance Theory and Practice, Sage Publications New Delhi

Publish Research Article

Dear Sir/Mam,

We invite unpublished Research Paper,Summary of Research Project,Theses,Books and Book Review for publication.

Address:- Dr. Ashak Hussain Malik House No-221, Gangoo Pulwama - 192301 Jammu & Kashmir, India Cell: 09086405302, 09906662570, Ph No: 01933212815 Email: <u>nairjc5@gmail.com, info@nairjc.com</u> Website: <u>www.nairjc.com</u>



