INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT

IJRCM

A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories

Indexed & Listed at:

Ulrich's Periodicals Directory ©, ProQuest, U.S.A., EBSCO Publishing, U.S.A., Cabell's Directories of Publishing Opportunities, U.S.A.,
Open J-Gage, India [link of the same is duly available at Inflibnet of University Grants Commission (U.G.C.)],
The American Economic Association's electronic bibliography, EconLit, U.S.A.,
Index Copernicus Publishers Panel, Poland with IC Value of 5.09 & number of libraries all around the world.

Circulated all over the world & Google has verified that scholars of more than 3770 Cities in 175 countries/territories are visiting our journal on regular basis.

Ground Floor, Building No. 1041-C-1, Devi Bhawan Bazar, JAGADHRI – 135 003, Yamunanagar, Haryana, INDIA

http://ijrcm.org.in/

CONTENTS

CALL FOR MANUSCRIPTS

We invite unpublished novel, original, empirical and high quality research work pertaining to recent developments & practices in the areas of Computer Science & Applications; Commerce; Business; Finance; Marketing; Human Resource Management; General Management; Banking; Economics; Tourism Administration & Management; Education; Law; Library & Information Science; Defence & Strategic Studies; Electronic Science; Corporate Governance; Industrial Relations; and emerging paradigms in allied subjects like Accounting; Accounting Information Systems; Accounting Theory & Practice; Auditing; Behavioral Accounting; Behavioral Economics; Corporate Finance; Cost Accounting; Econometrics; Economic Development; Economic History; Financial Institutions & Markets; Financial Services; Fiscal Policy; Government & Non Profit Accounting; Industrial Organization; International Economics & Trade; International Finance; Macro Economics; Micro Economics; Rural Economics; Co-operation; Demography: Development Planning; Development Studies; Applied Economics; Development Economics; Business Economics; Monetary Policy; Public Policy Economics; Real Estate; Regional Economics; Political Science; Continuing Education; Labour Welfare; Philosophy; Psychology; Sociology; Tax Accounting; Advertising & Promotion Management; Management Information Systems (MIS); Business Law; Public Responsibility & Ethics; Communication; Direct Marketing; E-Commerce; Global Business; Health Care Administration; Labour Relations & Human Resource Management; Marketing Research; Marketing Theory & Applications; Non-Profit Organizations; Office Administration/Management; Operations Research/Statistics; Organizational Behavior & Theory; Organizational Development; Production/Operations; International Relations; Human Rights & Duties; Public Administration; Population Studies; Purchasing/Materials Management; Retailing; Sales/Selling; Services; Small Business Entrepreneurship; Strategic Management Policy; Technology/Innovation; Tourism & Hospitality; Transportation Distribution; Algorithms; Artificial Intelligence; Compilers & Translation; Computer Aided Design (CAD); Computer Aided Manufacturing; Computer Graphics; Computer Organization & Architecture; Database Structures & Systems; Discrete Structures; Internet; Management Information Systems; Modeling & Simulation; Neural Systems/Neural Networks; Numerical Analysis/Scientific Computing; Object Oriented Programming; Operating Systems; Programming Languages; Robotics; Symbolic & Formal Logic; Web Design and emerging paradigms in allied subjects.

Anybody can submit the **soft copy** of unpublished novel; original; empirical and high quality **research work/manuscript** ***anytime*** in ***M.S. Word format*** after preparing the same as per our **GUIDELINES FOR SUBMISSION**; at our email address i.e. infoijrcm@gmail.com or online by clicking the link **online submission** as given on our website (***FOR ONLINE SUBMISSION, CLICK HERE***).

GUIDELINES FOR SUBMISSION OF MANUSCRIPT

1. **COVERING LETTER FOR SUBMISSION:**

DATED: _____

THE EDITOR
IJRCM

Subject: **SUBMISSION OF MANUSCRIPT IN THE AREA OF.**

(e.g. Finance/Marketing/HRM/General Management/Economics/Psychology/Law/Computer/IT/Engineering/Mathematics/other, please specify)

DEAR SIR/MADAM

Please find my submission of manuscript entitled '_____' for possible publication in your journals.

I hereby affirm that the contents of this manuscript are original. Furthermore, it has neither been published elsewhere in any language fully or partly, nor is it under review for publication elsewhere.

I affirm that all the author (s) have seen and agreed to the submitted version of the manuscript and their inclusion of name (s) as co-author (s).

Also, if my/our manuscript is accepted, I/We agree to comply with the formalities as given on the website of the journal & you are free to publish our contribution in any of your journals.

NAME OF CORRESPONDING AUTHOR:
Designation:
Affiliation with full address, contact numbers & Pin Code:
Residential address with Pin Code:
Mobile Number (s):
Landline Number (s):
E-mail Address:
Alternate E-mail Address:

NOTES:

a) The whole manuscript is required to be in ***ONE MS WORD FILE*** only (pdf. version is liable to be rejected without any consideration), which will start from the covering letter, inside the manuscript.
b) The sender is required to mentionthe following in the **SUBJECT COLUMN** of the mail:
New Manuscript for Review in the area of (Finance/Marketing/HRM/General Management/Economics/Psychology/Law/Computer/IT/ Engineering/Mathematics/other, please specify)
c) There is no need to give any text in the body of mail, except the cases where the author wishes to give any specific message w.r.t. to the manuscript.
d) The total size of the file containing the manuscript is required to be below **500 KB**.
e) Abstract alone will not be considered for review, and the author is required to submit the complete manuscript in the first instance.
f) The journal gives acknowledgement w.r.t. the receipt of every email and in case of non-receipt of acknowledgment from the journal, w.r.t. the submission of manuscript, within two days of submission, the corresponding author is required to demand for the same by sending separate mail to the journal.

2. **MANUSCRIPT TITLE:** The title of the paper should be in a 12 point Calibri Font. It should be bold typed, centered and fully capitalised.

3. **AUTHOR NAME (S) & AFFILIATIONS:** The author (s) **full name**, **designation**, **affiliation** (s), **address**, **mobile/landline numbers**, and **email/alternate email address** should be in italic & 11-point Calibri Font. It must be centered underneath the title.

4. **ABSTRACT:** Abstract should be in fully italicized text, not exceeding 250 words. The abstract must be informative and explain the background, aims, methods, results & conclusion in a single para. Abbreviations must be mentioned in full.

5. **KEYWORDS:** Abstract must be followed by a list of keywords, subject to the maximum of five. These should be arranged in alphabetic order separated by commas and full stops at the end.

6. **MANUSCRIPT:** Manuscript must be in ***BRITISH ENGLISH*** prepared on a standard A4 size ***PORTRAIT SETTING PAPER***. It must be prepared on a single space and single column with 1" margin set for top, bottom, left and right. It should be typed in 8 point Calibri Font with page numbers at the bottom and centre of every page. It should be free from grammatical, spelling and punctuation errors and must be thoroughly edited.

7. **HEADINGS:** All the headings should be in a 10 point Calibri Font. These must be bold-faced, aligned left and fully capitalised. Leave a blank line before each heading.

8. **SUB-HEADINGS:** All the sub-headings should be in a 8 point Calibri Font. These must be bold-faced, aligned left and fully capitalised.

9. **MAIN TEXT:** The main text should follow the following sequence:

INTRODUCTION

REVIEW OF LITERATURE

NEED/IMPORTANCE OF THE STUDY

STATEMENT OF THE PROBLEM

OBJECTIVES

HYPOTHESES

RESEARCH METHODOLOGY

RESULTS & DISCUSSION

FINDINGS

RECOMMENDATIONS/SUGGESTIONS

CONCLUSIONS

SCOPE FOR FURTHER RESEARCH

ACKNOWLEDGMENTS

REFERENCES

APPENDIX/ANNEXURE

It should be in a 8 point Calibri Font, single spaced and justified. The manuscript should preferably not exceed ***5000 WORDS***.

10. **FIGURES &TABLES:** These should be simple, crystal clear, centered, separately numbered & self explained, and **titles must be above the table/figure**. **Sources of data should be mentioned below the table/figure**. It should be ensured that the tables/figures are referred to from the main text.

11. **EQUATIONS:**These should be consecutively numbered in parentheses, horizontally centered with equation number placed at the right.

12. **REFERENCES:** The list of all references should be alphabetically arranged. The author (s) should mention only the actually utilised references in the preparation of manuscript and they are supposed to follow **Harvard Style of Referencing**. The author (s) are supposed to follow the references as per the following:

- All works cited in the text (including sources for tables and figures) should be listed alphabetically.
- Use (**ed.**) for one editor, and (**ed.s)** for multiple editors.
- When listing two or more works by one author, use --- (20xx), such as after Kohl (1997), use --- (2001), etc, in chronologically ascending order.
- Indicate (opening and closing) page numbers for articles in journals and for chapters in books.
- The title of books and journals should be in italics. Double quotation marks are used for titles of journal articles, book chapters, dissertations, reports, working papers, unpublished material, etc.
- For titles in a language other than English, provide an English translation in parentheses.
- The location of endnotes within the text should be indicated by superscript numbers.

PLEASE USE THE FOLLOWING FOR STYLE AND PUNCTUATION IN REFERENCES:

BOOKS

- Bowersox, Donald J., Closs, David J., (1996), "Logistical Management." Tata McGraw, Hill, New Delhi.
- Hunker, H.L. and A.J. Wright (1963), "Factors of Industrial Location in Ohio" Ohio State University, Nigeria.

CONTRIBUTIONS TO BOOKS

- Sharma T., Kwatra, G. (2008) Effectiveness of Social Advertising: A Study of Selected Campaigns, Corporate Social Responsibility, Edited by David Crowther & Nicholas Capaldi, Ashgate Research Companion to Corporate Social Responsibility, Chapter 15, pp 287-303.

JOURNAL AND OTHER ARTICLES

- Schemenner, R.W., Huber, J.C. and Cook, R.L. (1987), "Geographic Differences and the Location of New Manufacturing Facilities," Journal of Urban Economics, Vol. 21, No. 1, pp. 83-104.

CONFERENCE PAPERS

- Garg, Sambhav (2011): "Business Ethics" Paper presented at the Annual International Conference for the All India Management Association, New Delhi, India, 19–22 June.

UNPUBLISHED DISSERTATIONS AND THESES

- Kumar S. (2011): "Customer Value: A Comparative Study of Rural and Urban Customers," Thesis, Kurukshetra University, Kurukshetra.

ONLINE RESOURCES

- Always indicate the date that the source was accessed, as online resources are frequently updated or removed.

WEBSITES

- Garg, Bhavet (2011): Towards a New Natural Gas Policy, Political Weekly, Viewed on January 01, 2012 http://epw.in/user/viewabstract.jsp

MUTUAL FUND PERFORMANCE: AN EMPIRICAL INVESTIGATION OF SELECTED EQUITY DIVERSIFIED SCHEMES IN INDIA

AKSHATHA SUVARNA
RESEARCH SCHOLAR
DEPARTMENT OF COMMERCE
MANGALORE UNIVERSITY
KANOJE

DR. ISHWARA P.
ASSOCIATE PROFESSOR
DEPARTMENT OF COMMERCE
MANGALORE UNIVERSITY
KANOJE

ABSTRACT

With progressive liberalization of economic policies there has been a rapid growth of capital market, money market and financial services industry. Consistent with this evolution of the financial sector, the mutual fund industry in India has also come to occupy an important place. It has emerged as a strong financial intermediary and is playing a vital role in bringing stability to the financial system and efficiency to resource allocation. In the present paper an attempt has been made to evaluate the performance of the selected equity diversified schemes in India. The performance of selected fund is evaluated using average rate of return of fund, standard deviation, Beta, diversification, Sharpe ratio, Treynor ratio and Jensen ratio and Fama's decomposition measure. Benchmark comparison is also made as it indicates to what extent the fund managers were able to produce better performance of managed portfolio compared to the market or index portfolio. The reference period for the study is 5 years from April 2009 to March 2014. Findings of the study revealed that the majority of the schemes outperformed the market benchmark and they appeared to possess superior stock selection skill. The average daily return of all the schemes was found to be greater than the market return. However the difference was not found significant on application of t test. Majority of the fund schemes were reasonably diversified.

KEYWORDS

Growth Schemes, Mutual funds, Risk adjusted Return, Sharpe ratio, Treynor ratio.

INTRODUCTION

Resource mobilization is very significant for the economic growth of a developing country like India. The Indian mutual fund industry is playing a vital role in this process of mobilization of economic resources. Over the years, the Indian mutual fund industry has evolved from a single player market in 1963, with the formation of Unit Trust of India (UTI), to a highly competitive market comprising domestic and foreign players, supported by favorable regulatory reforms.

Today the Indian mutual fund industry is one of the fastest growing sectors in the Indian capital and financial markets. The mutual fund industry in India has seen dramatic improvements in quantity as well as quality of product and service offerings in recent years. The Indian mutual fund industry has grown several folds in terms of size and operations during the past five decades of its existence. There has been substantial growth in terms of assets under management, variety of investment schemes. From a single player the number of players has increased to 42 and the number of schemes has spiraled to more than 900 with managed assets of about Rs.9Lakh crores. The growth of mutual funds has also posed difficulties to investors in making a selection of suitable schemes. A proper performance evaluation of these schemes will remover confusion and help the small investors in selecting suitable mutual fund scheme for investment. Further with growing competition in the market, the fund managers also need to satisfy themselves that management fees and research expenses are justified keeping in view the returns generated. Moreover, there is need to investigate how efficiently the hard earned money of the investors and scarce resources of the economy are being utilized by mutual funds. In this context an attempt has been made in the present paper to evaluate the performance of selected equity diversified schemes in India.

The paper is divided into six sections including the present one. Section 2 presents the brief review of literature pertaining to evaluation of mutual fund performance. Section 3 discusses the objectives of the study; the data used in the study and their sources and specifies the testable hypothesis. Section 4 presents the performance measures used and empirical results of the study. Section 5 presents the concluding remarks.

II REVIEW OF LITERATURE

Various studies have been carried out in India and abroad to evaluate the performance of mutual fund schemes form time to time. In this study an attempt has been made to briefly review the work already undertaken and methodology employed. Brief review of select studies has been presented in the following pages.

Jensen (1967) investigated the predictive ability of 115 mutual fund managers in the period 1945-1964 using risk adjusted performance measure. The study concluded that on an average 115 mutual funds considered in the study were not able to predict security prices well enough to outperform a buy-the-market-and-hold policy and that there was very little evidence that any individual fund was able to do significantly better than that which we expected from mere random chance. **Musa Essayyad and H.K.Wu (1988)** investigated the performance of international mutual funds incorporated in the U.S from the investor's point of view. The study found that the U.S. International mutual funds as a group outperformed the U.S. market in terms of both returns and risk. **M Jayadev (1998)** tried to give an empirical evidence in the Indian context on the performance of Mutual fund managers. The study revealed that the returns and risk were not always in conformity with the stated investment objective. Some of the funds were able to earn higher returns due to selectivity, but failed to maintain proper balance between selectivity and diversification. Study indicated that due to lack of diversification the funds performance had declined. Further analysis with the help of Fama's measures indicated that the selectivity ability of fund managers was not satisfactory. **H.J.Sondhi, P.K. Jain (2006)** evaluated the market risk and investment performance of equity mutual funds in India. Their study showed that relationship between risk and return of the sample equity mutual funds was not necessarily in line with the premise that high risks portfolios generate superior returns. They found that sample equity mutual funds had invested in low risk securities, contrary to the basic objective of equity to generate high returns by assuming high risks. **Beehary Nitish, Rojid Sawkut (2009)** analysed the performance of Mauritian Mutual funds. The results show that the rankings obtained by applying both the Sharpe and Treynor rules are almost the same, implying that the funds appear to be well-diversified. The positive Jensen's alpha indicated that fund managers though their stock picking skills, privileged information or intuition have 'beaten the market'. Individual analysis revealed that funds are heavily dependent on the performance of the local stock market, that is they move in line with the market index and those mutual funds investing heavily in the local stock market are reported to 'beat the market'. **Aman Srivastava and Rakesh Gupta (2010)** evaluated the performance of growth oriented equity schemes of Indian mutual funds schemes during bear market.

Measures such as relative performance index (RPI), Treynor's ratio, Sharpe ratio, Sharpe's measure, Jensen's measure and Fama's measure were used in evaluation. The findings of the study suggested that majority of the mutual funds outperformed the market benchmarks. However the study also indicated that Indian fund managers were not properly diversifying their portfolios which resulted in huge losses to investors in falling markets. **Vangapandu Rama Devi and Nooney Lenin Kumar (2010)** in their study found that the returns of mutual fund schemes significantly differ from one another in the respective category for equity diversified, equity index, equity tax savings investment styles. **Shrinivas R. Patil and Prof. Prakash Rao K. S.(2011)** On the basis of the comparison of mutual fund returns with their benchmark indexes study indicated superior performance of mutual funds. It was also observed in the study that investment in mutual funds is quite sensible than direct capital market investment, not only because of return but also for risk diversification, professional management and other benefits. **Rakesh Kumar (2012)** analysed the mutual fund performance, level of diversification, manager's capability to pick the undervalued stocks and to time the market. The study revealed that 60% sampled fund schemes performed better than market. Moreover, better performing funds were exposed to higher risk but were less afflicted to market risks. A majority of the funds were reasonably diversified and reduced the unique risk. Consequently, unique risks and the returns were negatively associated. The study also exposes that about 58% of fund schemes were capable of beating the market by stock selection skills. **Deepti Sahoo and Naresh Kumar Sharma** in their study evaluated the investment performance of selected mutual funds in terms of risk-return analysis. Their study showed that performance in terms of returns was better in the case of Tax planning funds and diversified equity funds, as compared to balanced and debt funds. However, the former also had much higher risks by any measure compared to the latter. **Theodore Prince and Frank Bacon based** on the analysis of small cap growth schemes of mutual funds found an evidence in support of market efficiency since for the most part, the actively managed funds examined in their study produced returns that were largely expected.

OBJECTIVES OF THE STUDY

The objective of the study is to evaluate the performance of open ended equity diversified Indian mutual fund schemes in the framework of risk and return during the recent five year period 1st April 2009 to 31st March 2014.

The specific objectives of the study are:

1. To evaluate the performance of selected mutual funds schemes on the basis of risk-return parameters.
2. To examine fund's sensitivity to the market fluctuations in terms of beta.
3. To study the major factors (diversification, selectivity) influencing the investment performance of the schemes.
4. To analyse the performance based the risk adjusted performance measures.

DATA AND METHODOLOGY OF THE STUDY

The current study focuses on the performance of the fund managers of 24 equity diversified mutual fund schemes of various fund houses (with growth option). The period of the study is for 5 years from 1st April 2009 to 31st March 2014. Daily net asset values (NAVs) obtained from the official website of the association of mutual funds in India (www.amfiindia.com) has been used for the purpose of the study. NSE Nifty is used a benchmark portfolio and the yield on 91 day Treasury bills is considered a proxy for risk free yield. Data on NSE Nifty and 91 day Treasury bills is collected from NSE website and RBI website respectively.

Hypothesis The study tests the following hypothesis with regard to performance evaluation:

H_0: There is no difference between the return of the equity diversified growth schemes of mutual funds and market return.

The selected 24 equity diversified mutual funds from 12 mutual funds are presented in Table I.

TABLE 1: NAMES OF THE ASSET MANAGEMENT COMPANIES, ASSETS UNDER MANAGEMENT AS ON 31ST MARCH 2014 AND SAMPLED EQUITY DIVERSIFIED FUND SCHEMES

Mutual Funds	Assets under management (March 2014) (Rs.Cr)	Mutual Fund Schemes
HDFC Mutual Fund	112,963	HDFC Equity Fund - Growth Option HDFC Capital Builder Fund - Growth Option
ICICI Prudential Mutual Fund	106,822	ICICI Prudential Dynamic - Regular Plan -Growth ICICI Prudential Top 200 Fund - Regular Plan -Growth
Reliance Mutual Fund	103,542	Reliance Equity Opportunities Fund-Growth Plan Reliance Growth Fund-Growth Plan-Growth Option
Birla Sun Life Mutual Fund	89,051	Birla Sun Life Equity Fund-Plan B(Growth) Birla Sun Life Pure Value Fund - Growth Option
UTI Mutual Fund	74,233	UTI - Equity Fund-Growth Option UTI Contra Fund-Growth-Growth Option
SBI Mutual Fund	65,499	SBI Magnum Equity Fund- REGULAR PLAN – Growth SBI Magnum Multicap Fund - REGULAR PLAN -Growth Option
Franklin Templeton Mutual Fund	45,404	Franklin India Flexi Cap Fund-Growth Plan Franklin India Opportunities Fund - Growth
IDFC Mutual Fund	41,349	IDFC Equity Fund-Regular Plan-Growth IDFC Premier Equity Fund-Regular Plan-Growth
Kotak Mahindra Mutual Fund	33,079	Kotak Classic Equity Scheme---Growth Kotak Opportunities---Growth
DSP BlackRock Mutual Fund	31,631	DSP BlackRock Equity Fund - Regular Plan – Growth DSP BlackRock Opportunities Fund-Regular Plan - Growth
Tata Mutual Fund	21,954	Tata Equity Opportunities Fund Plan AGrowth Tata Equity P/E Fund Plan A-(Growth Option)
Deutsche Mutual Fund	18,795	Deutsche Alpha Equity Fund – Growth Deutsche Investment Opportunity Fund - Growth Option

Source: www.amfiindia.com

EMPIRICAL ANALYSIS

RETURN AND RISK OF SELECTED EQUITY SCHEMES

Fund returns are assumed to be continuously compounded and are calculated as follows:

RETURN

The daily log returns are computed on the basis of the different schemes and returns on the market index are calculated on the basis of NSE Nifty on the respective date for the 5 years.

The log returns from a mutual fund scheme (R_{pt}) at time t, is as follows

$R_{pt} = \text{Ln}\ (NAV_t / NAV_{t-1})$

Where NAV_t and NAV_{t-1} are net assets values for time period t and t-1 respectively.

The mean return of the mutual fund scheme (R_p) over a period of time is calculated using the following equation.

$R_p=\sum R_{pt}/n$

Where R_{pt} is the return from a mutual fund scheme at time t and n is the total number of time period studied.

The log return on the market (represented by a stock index) at time t, is as follows:

$R_{it} = Ln(I_t / I_{t-1})$

Where I_t and I_{t-1} are value of a benchmark stock market index at period t and t-1 respectively. In the present study NSE Nifty has been taken as the benchmark stock index representing the broad market.

The mean return of the market portfolio (R_i) over a period of time is computed using the following equation.

$R_i = \sum R_{it}/ n$

Where, R_{it} is the return from a stock market index (NSE Nifty) at time t and n is the total number of time periods studied.

The average daily return along with the ranking based on this return is presented in Table II. All the schemes have recorded positive average return during the study period. The ranking pattern based on return statistics shows that Reliance Growth Fund, ICICI Prudential Top 200 Fund and IDFC Premier Equity Fund have got the top 1st, 2nd and 3rd ranks respectively. Conversely UTI Contra Fund, Deutsche Alpha Equity Fund and Deutsche Investment Opportunity Fund obtained the lowest ranks on the basis of return earned. The average daily return of all the schemes (0.075%) is greater than the market return (0.063%). However the difference is not found significant on application of t test at 0.05 level of significance, as the p-value is greater than 0.05 in the case of all the mutual fund schemes analysed in the study. Therefore the null hypothesis that there is no significant difference between the return on the equity diversified growth schemes of mutual funds and market return is accepted. As presented in Table 3, 18 schemes have outperformed the market, whereas 6 schemes have under performed the market index.

RISK

Standard Deviation (σ)

Standard deviation is a way to quantify risk. It is a statistic to measure the variation in individual returns from the average expected return over a certain period of time. The higher the standard deviation, the greater the risk.

The standard deviation is computed from logarithmic daily returns using the following formula

$\sigma_p= [1/n \sum(R_{pt} -R_p)^2]^{1/2}$

Where σ_p is the total risk of the scheme portfolio.

The total risk of the market line portfolio is:

$\sigma_m= [1/n \sigma\sum(R_{mt} -R_m)^2]^{1/2}$

Where σ_m is the total risk of the market portfolio.

Systematic risk (β) of the portfolio:

Beta relates the return on a mutual fund to a market index. Beta signifies the sensitivity of the return on the mutual fund scheme in comparison to the movement in the stock market index. Higher value of beta indicates a high sensitivity of fund returns against market returns, the lower value indicates a low sensitivity.

Beta of the Portfolio is calculated as follows:

$\beta = Cov(R_{p,}R_m) / \sigma_m^2$

$Cov(R_{p,}R_m)$ = Covariance of the portfolio and market returns

σ_m^2 =Variance of the market return.

The total risk ((σ) and beta values for all the 24 schemes has been calculated and presented in the Table II. The risk (σ) associated with mutual funds (1.122745) is found to be lower than that of market risk (1.302436). Positive value of beta in the case of all the mutual fund schemes indicates that the fund return closely follows the market return. All the schemes have recorded a beta less than 1 indicating holding of relatively less risky portfolio than the market portfolio. However majority of the schemes are highly volatile as their betas have high value, except for nine fund schemes that have recorded a beta of less than 0.80.

DIVERSIFICATION: CO-EFFICIENT OF DETERMINATION (R^2)

The basic idea behind the equity diversified mutual funds is to lessen the unique risk specific to the portfolio through diversification. Higher diversification lessens the risk. Portfolio diversification is typically measured by correlating the returns on the portfolio with the returns on the market index, this is accomplished as part of the process of fitting a characteristic line whereby the portfolio's returns are regressed against the market's returns. The square of the correlation coefficient produced as a part of the analysis called the coefficient of determination or R^2 is used to denote the degree of diversification. A low R^2 value indicates that the fund has further scope for the diversification.

Table II also shows the values of co-efficient of determination for each of the 24 equity diversified schemes, when measured with the market index (NSE Nifty). The highest R^2 value was found in IDFC Equity Fund-Regular Plan (0.994) followed by ICICI Prudential Top 200 Fund - Regular Plan (0.950) and Franklin India Opportunities Fund (0.949). 22 schemes out of 24 i.e about 92% of the sampled funds have recorded R^2 value of more than 0.8 which indicates that these schemes have reasonably exploited the diversification strategy in forming their portfolio.

TABLE II: RETURN, RISK AND DIVERSIFICATION IN EQUITY DIVERSIFIED MUTUAL FUND SCHEMES

	Average Daily Return	Rank	t-stat	p-value	Standard Deviation	Beta	Diversification R^2
Birla Sun Life Equity Fund-Plan B(Growth)	0.074877	12	0.332	0.74	1.192233	0.877634	0.919214
Birla Sun Life Pure Value Fund - Growth Option	0.089004	4	0	1	1.035522	0.671209	0.712704
Deutsche Alpha Equity Fund - Growth	0.056880	23	-0.207	0.836	1.141068	0.850603	0.942633
Deutsche Investment Opportunity Fund - Growth Option	0.058189	22	-0.165	0.869	1.148901	0.838519	0.903593
DSP BlackRock Equity Fund - Regular Plan - Growth	0.072161	17	0.276	0.783	1.089943	0.776975	0.862024
DSP BlackRock Opportunities Fund-Regular Plan - Growth	0.073461	14	0.323	0.747	1.071217	0.787133	0.915914
Franklin India Flexi Cap Fund-Growth Plan	0.082522	19	-0.013	0.989	1.190701	0.860687	0.888582
Franklin India Opportunities Fund - Growth	0.063133	7	0.558	0.577	1.231848	0.920476	0.949104
HDFC Capital Builder Fund - Growth Option	0.088327	6	0.862	0.389	1.007015	0.726580	0.883095
HDFC Equity Fund - Growth Option	0.089478	13	0.751	0.453	1.210562	0.873764	0.883744
ICICI Prudential Dynamic - Regular Plan -Growth	0.085046	20	0.832	0.405	0.904606	0.645069	0.862592
ICICI Prudential Top 200 Fund - Regular Plan -Growth	0.073997	2	0.317	0.752	1.153275	0.863179	0.950273
IDFC Equity Fund-Regular Plan-Growth	0.062372	11	-0.033	0.974	1.283693	0.988996	0.994210
IDFC Premier Equity Fund-Regular Plan-Growth	0.103958	3	1.382	0.167	1.025363	0.643812	0.668769
Kotak Classic Equity Scheme---Growth	0.072636	5	0.289	0.773	1.097801	0.802406	0.906262
Kotak Opportunities---Growth	0.072665	16	0.271	0.786	1.172571	0.864582	0.922247
Reliance Equity Opportunities Fund-Growth Plan-Growth Option	0.104936	15	1.303	0.193	1.114142	0.783347	0.838572
Reliance Growth Fund-Growth Plan-Growth Option	0.071601	1	0.244	0.807	1.151411	0.811456	0.842523
SBI Magnum Equity Fund- REGULAR PLAN - Growth	0.078961	18	0.473	0.636	1.133052	0.835202	0.934451
SBI Magnum Multicap Fund - REGULAR PLAN -Growth Option	0.061996	21	-0.049	0.961	1.143053	0.839673	0.928028
Tata Equity Opportunities Fund Plan AGrowth	0.078287	9	0.456	0.648	1.130516	0.812575	0.876368
Tata Equity P/E Fund Plan A-(Growth Option)	0.078126	10	0.462	0.644	1.103823	0.767573	0.820262
UTI - Equity Fund-Growth Option	0.080517	8	0.578	0.563	1.026906	0.764460	0.940070
UTI Contra Fund-Growth-Growth Option	0.048064	24	-0.46	0.646	1.186654	0.859163	0.889234
Average of all schemes	0.075883				1.122745		
Market	0.063601				1.302436		

Source: Computed from NAVs

RISK ADJUSTED PERFORMANCE OF SELECTED MUTUAL FUND SCHEMES

Following four measures have been used in the present study

- Sharpe ratio
- Treynor Ratio
- Jensen Differential return measure
- Fama's components of investment performance

APPLICATION OF SHARPE AND TREYNOR RATIO TO EVALAUATE THE PERFORMANCE OF SELECTED SCHEMES:

SHARPE'S REWARD TO VARIABILITY RATIO

It was developed by Sharpe (1966). Here, additional portfolio return over risk free return is related with the total risk of the portfolio measured in terms of standard deviation. It can be expressed as

$$\text{RVARp} = \frac{\text{Rp} - \text{Rf}}{\sigma\text{p}}$$

Where $RVAR_p$ is reward to variability ratio or Sharpe's ratio, R_p is the average return on the portfolio (managed fund), Rf is the average risk free return; and σ_p is the standard deviation of the fund returns.

By dividing the average return of the portfolio in excess of the risk-free return by the standard deviation of the portfolio, the Sharpe ratio measures the risk premium earned per unit of risk exposure. In other words, this ratio measures the change in the portfolio's return with respect to a one unit change in the portfolio's risk. The higher this "reward –to-variability-ratio" the more attractive is the evaluated portfolio because the investor receives more compensation for the same increase in risk.

The benchmark comparison is additional return of market over risk free return related with market portfolio's total risk.

$$\text{RVARm} = \frac{\text{Rm} - \text{Rf}}{\sigma\text{m}}$$

If $RVAR_p$ is greater than the benchmark comparison, the portfolio lies above the ex-post CML, indicating the fund's superior performance over the market. Alternatively if $RVAR_p$ is less than $RVAR_m$, the fund's performance is not good as the market.

TREYNOR'S REWARD TO VOLATILITY RATIO

This is introduced by Treynor (1965). Here, additional returns of the portfolio over the risk free return is expressed in relation to portfolio's systematic risk. Treynor's ratio is calculated as follows:

$$\text{RVOLp} = \frac{\text{Rp} - \text{Rf}}{\beta\text{p}}$$

Where RVOLp is reward to volatility of the portfolio, Rp is the average return on the portfolio, Rf is the average risk free return and β_p is the beta of the portfolio (fund) i.e. sensitivity of fund return to market return.

The benchmark for comparison with this measure of performance is additional returns of market over risk free return (Rm-Rf). Where, Rm is average return on market portfolio (benchmark). As the beta of the market portfolio shall always be one. Hence, denominator is always one. If the RVOLp is greater than the benchmark (Rm-Rf) comparison, the portfolio (fund) has outperformed the market; otherwise it has not.

The sharpe ratio and treynor ratio both for the mutual fund schemes and for the benchmark portfolio (i.e NSE Nifty) are computed and presented in Table III.

According to Sharpe index the highest rank goes to the ICICI Prudential Dynamic - Regular Plan –Growth, Franklin India Flexi Cap Fund-Growth Plan, Birla Sun Life Equity Fund-Plan B(Growth). On the other hand the lowest rank is obtained by ICICI Prudential Top 200 Fund - Regular Plan –Growth, followed by the HDFC Capital Builder Fund - Growth Option and Birla Sun Life Pure Value Fund - Growth Option.

Interestingly all the schemes have out performed the market index and have succeeded to earn a return higher than risk free rate of return as indicated by the positive values of Sharpe's index.

Treynor measure also indicates an almost similar type of situation as indicated by Sharpe's index since all the funds have obtained positive values of this measure. However the benchmark comparison reveals that 18 schemes have outperformed the market index whereas the rest 6 schemes have under performed. The top performing funds in order are: ICICI Prudential Top 200 Fund - Regular Plan –Growth, Reliance Growth Fund-Growth Plan-Growth Option and HDFC Capital Builder Fund - Growth Option. Thus 18 schemes had outperformed both in terms of total risk and systematic risk.

TABLE III: RISK-ADJUSTED PERFORMANCE MEASURES OF EQUITY DIVERSIFIED FUND SCHEMES

	Sharpe Ratio	Rank	Treynor ratio	Rank
Birla Sun Life Equity Fund-Plan B(Growth)	0.046639	3	0.055604	16
Birla Sun Life Pure Value Fund - Growth Option	0.067339	22	0.103888	5
Deutsche Alpha Equity Fund - Growth	0.032958	9	0.044212	23
Deutsche Investment Opportunity Fund - Growth Option	0.033872	11	0.04641	21
DSP BlackRock Equity Fund - Regular Plan - Growth	0.048523	18	0.068069	14
DSP BlackRock Opportunities Fund-Regular Plan - Growth	0.050586	16	0.050586	12
Franklin India Flexi Cap Fund-Growth Plan	0.053119	2	0.073486	20
Franklin India Opportunities Fund - Growth	0.035605	7	0.047649	9
HDFC Capital Builder Fund - Growth Option	0.068573	23	0.09504	3
HDFC Equity Fund - Growth Option	0.057994	6	0.080348	15
ICICI Prudential Dynamic - Regular Plan -Growth	0.072708	1	0.101962	22
ICICI Prudential Top 200 Fund - Regular Plan -Growth	0.047451	24	0.063398	1
IDFC Equity Fund-Regular Plan-Growth	0.033574	19	0.043578	8
IDFC Premier Equity Fund-Regular Plan-Growth	0.082590	4	0.131537	7
Kotak Classic Equity Scheme---Growth	0.048609	21	0.066504	4
Kotak Opportunities---Growth	0.045534	15	0.061754	13
Reliance Equity Opportunities Fund-Growth Plan-Growth Option	0.076887	5	0.109355	17
Reliance Growth Fund-Growth Plan-Growth Option	0.045447	17	0.064486	2
SBI Magnum Equity Fund- REGULAR PLAN - Growth	0.052679	14	0.071465	18
SBI Magnum Multicap Fund - REGULAR PLAN -Growth Option	0.037376	10	0.050880	19
Tata Equity Opportunities Fund Plan AGrowth	0.052201	12	0.072625	10
Tata Equity P/E Fund Plan A-(Growth Option)	0.053317	13	0.076674	11
UTI - Equity Fund-Growth Option	0.059639	20	0.0801137	6
UTI Contra Fund-Growth-Growth Option	0.024262	8	0.033510	24
Average of all schemes	0.051145		0.070547	
Market	0.034035		0.044328	

Source: Computed from NAV

TABLE IV: PERFORMANCE OF EQUITY DIVERSIFIED MUTUAL FUND SCHEMES

	Average Daily return	Sharpe ratio	Treynor ratio
Over-Performed	**18**	**24**	**18**
Under-Performed	**6**	**-**	**6**

The above analysis leaves a question as to why some of the funds had outperformed or why some of the funds had not performed as well. It is a question on ability of the fund manager. The abilities that the fund managers are expected to have are security selection, diversification and market timing. In the present paper only the first two aspects i.e. security selection and diversification are analysed. Jensen Differential return measure and Fama's components of investment performance are used in the analysis of security selection ability of the fund manager.

APPLICATION OF JENSEN MEASURE TO EVALUATE THE PERFORMANCE OF SELECTED SCHEMES

Jensen has given a different dimension to the portfolio performance. He confined his attention to the problem of evaluating a portfolio manager's predictive ability of successfully predicting security prices which yield higher returns. The Jensen's alpha measure is the intercept from the Sharpe-Litner CAPM regression of portfolio excess returns on the market portfolio excess returns over the sample period. According to Jensen (1968), equilibrium return on a portfolio would be a benchmark. Equiliibrium return is the return of the portfolio which is correctly priced by the market with respect to systematic risk (volatility) of the portfolio. This is the return a portfolio should earn with the given systematic risk.

$EAR_p = R_f + (R_m - R_f)\beta_p$

EARp is equillibrium return of the fund, Difference between equilibrium return and return of the portfolio indicates superior performance of the fund. This is called as Alpha (α).

$\alpha_p = R_p - EAR_p$

Thus Jensen alpha is calculated by using the following equation

$\alpha_p = R_p - (R_f + (R_m - R_f)\beta_p)$

Where α_p is the differential return earned by the scheme out of the ability of fund manager in selection of the securities. Thus jensen's measure represents the average return on a portfolio over and above that predicted by the capital asset pricing model (CAPM)

A positive value of Alpha for a portfolio would indicate that the portfolio had an average return greater than the benchmark return (equilibrium portfolio return) indicating the superior performance. The additional return earned by the fund manager over equilibrium return can be attributed to his ability to select the securities.

Table V presents the measures of stock selection skill of the fund manager, namely Jensen's and Fama's measures. According to Jensen measure Negative alpha values have been recorded only in case of 2 schemes i.e. Deutsche Alpha Equity Fund – Growth and UTI Contra Fund-Growth-Growth Option. Rest of the funds i.e. 22 out of 24 schemes have positive alpha , which indicates that about 92% of fund managers were able to beat the market by using their skill in the selection of the portfolio. This is an indication of the superior stock selection ability of equity fund managers. Best performing funds in terms of Jensen's alpha during the study period are : IDFC Premier Equity Fund-Regular Plan-Growth which is followed by the Reliance Equity Opportunities Fund-Growth Plan-Growth Option and Birla Sun Life Pure Value Fund - Growth Option.

APPLICATION OF FAMA'S COMPONENTS TO EVALUATE THE PERFORMANCE OF SELECTED SCHEMES

The empirical results relating to risk-adjusted performance measures discussed earlier reflected the overall performance of sample schemes. However, it will be useful to breakdown the performance into different components of performance. Thus, the performance of the mutual fund schemes has also been examined on the basis of Fama's components of Investment performance measure. According to Fama excess return above risk-free rate can be expressed as the selectivity (or Jensen's alpha) plus the return due to systematic risk as follows:

$R_p - R_f$	=	$R_p - (R_f + (R_m - R_f)\beta_p)$	+	$\beta (Rm - Rf)$
Excess return		Selectivity		Systematic risk

If a portfolio is completely diversified there is no specific risk and the total portfolio risk will equal the systematic risk. Portfolio managers will give up diversification seeking additional return. Selectivity can be broken down into net selectivity and the return required to justify the diversification given up.

Diversification: It is the measure of return required to justify the loss of diversification for the specific risk taken by the portfolio manager. It is calculated as follows:

$D = (Rm - Rf)\ (\sigma p/\sigma m - Beta)$

Net Selectivity: Net selectivity is the remaining selectivity after deducting the amount of return required to justify not being fully diversified.

Net Selectivity = α_p - D

Obviously, if net selectivity is negative the portfolio manager has not justified the loss of diversification.

Thus in terms of Fama's framework portfolio return constitutes the following four components:

a) Risk-free return Rf

b) Compensation for systematic risk β (Rm – Rf)

c) Compensation for inadequate diversification
(Rm – Rf) (σp/σm –Beta)

d) Net superior returns due to selectivity
(Rp- Rf) – (σp/σm) (Rm – Rf)

In the above, second and third measures indicate the impact of market risk (systematic risk) and diversification. By altering systematic and unique risk a portfolio can be reshuffled to get desired level of return. A portfolio manager can earn superior returns by identifying the undervalued securities through constant research and professional acumen. This ability of selectivity can be known with the help of the fourth component. Value for each component of investment performance is computed and presented in Table V.

TABLE V: JENSEN AND FAMA MEASURE

			Fama's Measure		
	Jensen Alpha	**Rank**	**Compensation for systematic risk**	**Compensation for inadequate diversification**	**Net superior returns**
Birla Sun Life Equity Fund-Plan B(Growth)	0.016700	15	0.038903	0.001674	0.015027
Birla Sun Life Pure Value Fund - Growth Option	0.039977	3	0.029753	0.005490	0.034487
Deutsche Alpha Equity Fund - Growth	-0.000099	23	0.037705	0.001130	-0.001229
Deutsche Investment Opportunity Fund - Growth Option	0.001746	21	0.037170	0.001933	-0.000187
DSP BlackRock Equity Fund - Regular Plan - Growth	0.018446	13	0.034442	0.002654	0.015792
DSP BlackRock Opportunities Fund-Regular Plan - Growth	0.019296	12	0.034892	0.001566	0.017729
Franklin India Flexi Cap Fund-Growth Plan	0.025052	8	0.038152	0.002373	0.022724
Franklin India Opportunities Fund - Growth	0.003009	20	0.040803	0.001123	0.001934
HDFC Capital Builder Fund - Growth Option	0.036846	5	0.032208	0.002066	0.034780
HDFC Equity Fund - Growth Option	0.031473	6	0.038732	0.002469	0.029004
ICICI Prudential Dynamic - Regular Plan -Growth	0.037178	4	0.028594	0.002193	0.034985
ICICI Prudential Top 200 Fund - Regular Plan -Growth	0.016461	16	0.038263	0.000988	0.015473
IDFC Equity Fund-Regular Plan-Growth	0.001541	22	0.043840	-0.000150	-0.000591
IDFC Premier Equity Fund-Regular Plan-Growth	0.056146	1	0.028539	0.006359	0.049787
Kotak Classic Equity Scheme---Growth	0.017794	14	0.035569	0.001794	0.016000
Kotak Opportunities---Growth	0.015066	18	0.038325	0.001583	0.013484
Reliance Equity Opportunities Fund-Growth Plan-Growth Option	0.050939	2	0.034724	0.003195	0.047743
Reliance Growth Fund-Growth Plan-Growth Option	0.016357	17	0.035970	0.003218	0.013140
SBI Magnum Equity Fund- REGULAR PLAN - Growth	0.021966	11	0.037023	0.001540	0.021125
SBI Magnum Multicap Fund - REGULAR PLAN -Growth Option	0.004799	19	0.037221	0.001682	0.003820
Tata Equity Opportunities Fund Plan AGrowth	0.022994	10	0.036020	0.002457	0.020537
Tata Equity P/E Fund Plan A-(Growth Option)	0.024828	9	0.034025	0.003543	0.021285
UTI - Equity Fund-Growth Option	0.0273567	7	0.033887	0.001063	0.026294
UTI Contra Fund-Growth-Growth Option	-0.009295	24	0.038085	0.002302	-0.011596
Average of all schemes	0.020691				

Source: Computed from NAVs

Performance on risk: performance on risk assesses return being generated by fund managers due to their decision to take risk. They assume risk in the hope of generating extra returns on their portfolios. The Fama model results show that β impact compensation is positive for all the schemes. Thus risk bearing activity of fund managers has resulted in positive return for all the sampled mutual fund schemes.

Performance on Diversification: Performance of fund managers based on compensation for inadequate diversification too was found to be satisfactory. Except for one scheme - IDFC Equity Fund-Regular Plan-Growth that earned a negative return in this respect, the fund managers of the remaining 23 schemes have earned a positive compensation for inadequate diversification.

Performance on Net Selectivity: After accounting for diversification, the residual performance on selectivity is attributed to net selectivity and it will be equal to (or less than) that on selectivity. A positive net selectivity will indicate superior performance. However, in case net selectivity is negative it would mean that the portfolio manager has not justified the loss of diversification. Table 4 shows that fund managers of 22 schemes (92%) appeared to possess superior stock selection ability as the selectivity (Jensen ratio) was found to be positive. However in terms of net selectivity there were only 20 schemes that showed positive values. Negative values were reported in the case of 4 equity schemes which suggests that these schemes could not justify the loss of diversification. It also indicates that the research ability of these 4 schemes is not satisfactory. Thus 20 schemes which had reported positive net selectivity seem to be more reliable as far as the professional skill of the managers is concerned during the study period. The two top performers with regard to selectively were IDFC Premier Equity Fund-Regular Plan-Growth and Reliance Equity Opportunities Fund-Growth Plan-Growth Option.

CONCLUSION

The present paper is an attempt to measure the performance of equity diversified mutual fund schemes floated by 12 different mutual funds in India. With an analysis of return and risk of different schemes, the performance has also been analysed based on 4 different risk adjusted performance measures. The study is based on the daily NAV data for 24 mutual fund schemes of 12 different mutual funds in India for the recent five year period i.e. from April 2009 to March 2014. The findings of the empirical investigation carried out in this study are quite encouraging.

In terms of average daily return 18 schemes have outperformed the market. The average daily return of all the schemes (0.075%) was greater than the market return (0.063%). However the difference is not found significant on application of t test at 0.05 level of significance. The findings of the study also revealed that majority of the fund schemes were reasonably diversified. It can be stated that all the 24 schemes had superior performance compared to the benchmark portfolio, 18 schemes had superior performance in terms of treynor ratio. Fund managers of 22 schemes (92%) appeared to possess superior stock selection ability as the selectivity (Jensen ratio) was found to be positive. However in terms of net selectivity (Fama's measure) there were only 20 schemes that showed positive values.

REFERENCES

1. Aman Srivastava and Rakesh Gupta (2010), "Performance appraisal of equity schemes of Indian Mutual funds", JIMS –September 2010, pp.4-13.
2. Beehary Nitish, Rojid Sawkut, "Analysing mutual funds performance: The case of Emerging Mauritian Economy", The Icfai University Journal of Financial Economics, Vol.VII, No.2, 2009, pp.47-57.

3. Deepti Sahoo and Naresh Kumar Sharma, "Performance evaluation of Indian Mutual Fund Industry: A Case Study".
4. Himanshu Puri and Sakshi saxena(2012), "Construction and evaluation of optimal portfolio using Sharpe's single index model", Journal of Accounting and Finance, Vol.26, No.1, October 2011- March 2012, pp.109-121.
5. Himanshu Puri(2010), "Performance evaluation of Balanced Mutual Fund Schemes in Indian Scenario", Paradigm, Vol.XIV, No.2, July-December, 2010, pp. 20-28.
6. Jayadev M (1998), "Performance evaluation of portfolio managers: An empirical evidence on Indian mutual funds", The IUP Journal of Applied Finance 5, No.2, pp.41-67.
7. Jensen (1967), "The Performance of Mutual Funds in the period 1945-1964", Journal of Finance, Vol.23, No.2, pp.389-416, 1967.
8. MalikN.S (2008),"Portfolio Management: Country Funds" SCMS Journal of Indian management,January-March,pp.19-35.
9. Musa Essayyad and H.K.Wu (1988) "The performance of U.S. International Mutual Funds",Quarterly Journal of Business and Economics, Vol.27, No.4, pp.32-46.
10. Rakesh Kumar (2012), "Market timing, selectivity and mutual fund performance: An empirical investigation of selective equity diversified schemes in India" The IUP Journal of Financial Economics, Vol.X, No.1, pp.62-84.
11. Shrinivas R Patil, Prof Prakash Rao K.S (2011) "An Empirical Study on performance of mutual fund in India" ,Journal of contemporary research in management, April-June 2011, pp.91-103.
12. Sondhi H.J and Jain P.K (2006), "Market Risk and investment performance of equity mutual funds in India: Some Empirical Evidences", Finance India, Vol.XXIV, No.2, June 2010, pp.43-462.
13. Soumya Guha Deb (2008),'Performance of Indian Equity Mutual Funds vis-à-vis their Style Benchmarks', The Icfai Journal of Applied Finance, Vol.14, No.1,pp 49-81.
14. Sushil Kumar Mehta (2010), "State Bank of India Vs. Unit Trust O India: A comparison of Performance of Mutual fund schemes.", Indian Journal of Finance, February 2010, pp.24-31.
15. Vangapandu Rama Devi and Nooney Lenin Kumar (2010), "Performance evaluation of Equity mutual funds", JIMS, April-June, pp.22-35.

WEBSITES

16. www.amfiindia.com
17. www.moneycontrol.com
18. www.mutualfundsindia.com
19. www.rbi.org.in

REQUEST FOR FEEDBACK

Dear Readers

At the very outset, International Journal of Research in Commerce, Economics & Management (IJRCM) acknowledges & appreciates your efforts in showing interest in our present issue under your kind perusal.

I would like to request you tosupply your critical comments and suggestions about the material published in this issue as well as on the journal as a whole, on our E-mail**infoijrcm@gmail.com** for further improvements in the interest of research.

If youhave any queries please feel free to contact us on our E-mail infoijrcm@gmail.com.

I am sure that your feedback and deliberations would make future issues better – a result of our joint effort.

Looking forward an appropriate consideration.

With sincere regards

Thanking you profoundly

Academically yours

Sd/-
Co-ordinator

DISCLAIMER

The information and opinions presented in the Journal reflect the views of the authors and not of the Journal or its Editorial Board or the Publishers/Editors. Publication does not constitute endorsement by the journal. Neither the Journal nor its publishers/Editors/Editorial Board nor anyone else involved in creating, producing or delivering the journal or the materials contained therein, assumes any liability or responsibility for the accuracy, completeness, or usefulness of any information provided in the journal, nor shall they be liable for any direct, indirect, incidental, special, consequential or punitive damages arising out of the use of information/material contained in the journal. The journal, nor its publishers/Editors/ Editorial Board, nor any other party involved in the preparation of material contained in the journal represents or warrants that the information contained herein is in every respect accurate or complete, and they are not responsible for any errors or omissions or for the results obtained from the use of such material. Readers are encouraged to confirm the information contained herein with other sources. The responsibility of the contents and the opinions expressed in this journal is exclusively of the author (s) concerned.

ABOUT THE JOURNAL

In this age of Commerce, Economics, Computer, I.T. & Management and cut throat competition, a group of intellectuals felt the need to have some platform, where young and budding managers and academicians could express their views and discuss the problems among their peers. This journal was conceived with this noble intention in view. This journal has been introduced to give an opportunity for expressing refined and innovative ideas in this field. It is our humble endeavour to provide a springboard to the upcoming specialists and give a chance to know about the latest in the sphere of research and knowledge. We have taken a small step and we hope that with the active co-operation of like-minded scholars, we shall be able to serve the society with our humble efforts.

Our Other Journals