

A Comparative Study of Various Returns on Mutual Funds in India

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Abstract

The history of mutual funds dates support to 19th century when it was introduced in Europe, in particular, Great Britain. Robert Fleming set up in 1868 the first investment trust called Foreign and colonial investment trust which promised to manage the finances of the moneyed classes of Scotland by scattering the investment over a number of different stocks. This investment trust and other investment trusts which were afterward set up in Britain and the U.S., resembled today's close – ended mutual funds. The first mutual fund in the U.S., Massachusetts investor's trust, was set up in March 1924. This was the open – ended mutual fund.

Keywords: Mutual Fund, Risk and Return, Comparative Analysis.



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INTRODUCTION

Mutual fund is the pool of the money, based on the trust who invests the savings of a number of investors who shares a common financial goal, like the capital appreciation and dividend earning. The money thus collect is then invested in capital market instruments such as shares, debenture, and foreign market. Investors invest money and get the units as per the unit value which we called as NAV (net assets value). Mutual fund is the most suitable investment for the common man as it offers an opportunity to invest in diversified portfolio management, good research team, professionally managed Indian stock as well as the foreign market, the main aim of the fund manager is to taking the scrip that have under value and future will rising, then fund manager sell out the stock. Fund manager concentration on risk – return trade off, where minimize the risk and maximize the return through diversification of the portfolio. The most common features of the mutual fund unit are low cost. The below I mention the how the transactions will done or working with mutual fund.

A fund is “mutual” as all of its returns, minus its expenses, are shared by the fund’s investors. The Securities and Exchange Board of India (Mutual Funds) Regulations, 1996 defines a mutual fund as a ‘a fund established in the form of a trust to raise money through the sale of units to the public or a section of the public under one or more schemes for investing in securities, including money market instruments’. According to the above definition, a mutual fund in India can raise resources through sale of units to the public. It can be set up in the form of a Trust under the Indian Trust Act. The definition has been further extended by allowing mutual funds to diversify their activities in the following areas:

- Portfolio management services
- Management of offshore funds
- Providing advice to offshore funds
- Management of pension or provident funds
- Management of venture capital funds
- Management of money market funds
- Management of real estate funds

A mutual fund serves as a link between the investor and the securities market by mobilizing savings from the investors and investing them in the securities market to generate returns. Thus, a mutual fund is akin to portfolio management services (PMS). Although, both are conceptually same, they are different from each other. Portfolio management services are offered to high net worth individuals; taking into account their risk profile, their investments are managed separately.

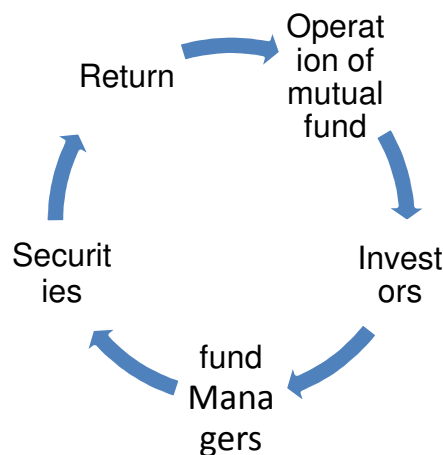
In the case of mutual funds, savings of small investors are pooled under a scheme and the returns are distributed in the same proportion in which the investments are made by the investors/unit-holders. Mutual fund is a collective savings scheme. Mutual funds play an important role in mobilizing the savings of small investors and channelizing the same for productive ventures in the Indian economy.

The first mutual fund in the US, Massachusetts Investors’ Trust, was setup in March 1924. This was the first open-ended mutual fund. The stock market crash in 1929, the Great Depression, and the outbreak of the Second World War slackened the pace of growth of the mutual fund industry.

Innovations in products and services increased the popularity of mutual funds in the 1950s and 1960s.

The first international stock mutual fund was introduced in the US in 1940. In 1976, the first tax-exempt municipal bond funds emerged and in 1979, the first money market mutual funds were created. The latest additions are the International bond fund in 1986 and arm funds in 1990. This industry witnessed substantial growth in the eighties and nineties when there was a significant increase in the number of mutual funds, schemes, assets, and shareholders. In the US, the mutual fund industry registered a tenfold growth in the eighties (1980-89) only, with 25% of the household sector's investment in financial assets made through them. Fund assets increased from less than \$150 billion in 1980 to over \$4 trillion by the end of 1997.

Mutual funds have organization structure as per there Security Exchange Board of India guideline; Security Exchange Board of India specified authority and responsibility of Trustee and Assets Management Companies. The objectives are to controlling, to promoted, to regulate, to protect the investor's right and efficient trading of units. Operation of Mutual fund start with investors saves their money on mutual fund, than Mutual Fund manager handling the funds and strategic investment on scrip.



“Mutual Funds are collective savings and investment vehicles where savings of small (or something big) investors are pooled together to invest for their mutual benefit and returns distributed proportionately.”

Despite being available in the market less than 10% of Indian households have invested in mutual funds. A recent report on Mutual Fund Investments in India published by research and analytics firm, Boston Analytics, suggests investors are holding back from putting their money into mutual funds due to their perceived high risk and a lack of information on how mutual funds work. There are 46 Mutual Funds as of June 2013.

Mutual fund investments are sourced both from institutions (companies) and individuals. Since January 2013, institutional investors have moved to investing directly with the mutual funds since doing so saves on the expense ratio incurred. Since 2009, online platforms for investing in Mutual funds have also evolved.

LITERATURE REVIEW

(S. Poornima, 2013) In this research paper an attempt is made to analyze about the performance of the growth oriented equity diversified schemes by using Sortino ratio. 102 growth oriented equity diversified schemes which were performing during the period April 2006 to March 2011

were selected for the study. This research paper clearly reveals the fact that careful evaluation using appropriate performance measure will lead the investor in selecting the best funds.

(Palanisamy, 2012) studied Investment Pattern in Debt Scheme of Mutual Funds. Data collected through interview schedule and statistical tools used such as percentage analysis, weighted ranking analysis and Chi-square analysis. The study concludes that debt scheme are suitable for genuine investors as there exists a variety of investors needs depending on purpose, expectations and risk taking abilities.

(Jatinder Loomba, 2011) Evaluates the performance and growth of Indian mutual funds vis-à-vis the Indian equity market. The overall analysis finds that Nifty returns outperformed Franklin Templeton Large Cap Equity Scheme returns. Kruskal Wallis H-test was applied to know whether the returns significantly differ or not and the results indicated that the returns of schemes don't differ significantly.

(Sahil Jain, 2012), analysis of Equity Based Mutual Funds in India attempted to analyze the performance of equity based mutual funds. The analysis has been made using the risk-return relationship and Capital Asset Pricing Model (CAPM). The overall analysis finds that HDFC and ICICI have been the best performers, UTI an average performer and LIC the worst performer which gave below- expected returns on the risk-return relationship.

(Kuah Kean Lam, 2008), had studied on the Malaysia's unit trust performance during the up and down market conditions has shown that the Malaysia mutual fund performance from 1996 to 2000 reported that the manager's poor timing ability contributes significantly to the fund's 18 negative overall performance. Such results suggest no economic benefit accrues to the average fund manager involving in market timing activities.

(Dr. Shantanu Mehta, 2012), made a household investor survey with the objective to provide data on the investor preferences on MFs and other financial assets. The findings of the study were more appropriate, at that time, to the policy makers and mutual funds to design the financial products for the future.

(McDonald, 1997), McDonald examined the performance of funds, during the period from 1960 to 1969, in light of their objectives. He found that the objectives did explain a portion of performance as measured by excess returns over the market return. However, he also found large overlaps in performance from objective to objective.

(Dr. Sarita Bahl, 2012), Debasish (2009) studied the performance of selected schemes of mutual funds based on risk and return models and measures. The study covered the period from April 1996 to March 2005. The study revealed that Franklin Templeton and UTI were the best performers and Birla Sun life, HDFC and LIC mutual funds showed poor performance.

(Sharpe, 1966) in order to evaluate the risk-adjusted performance of mutual funds introduced the measure known as reward-to-variability ratio (Currently Sharpe Ratio). With the help of this ratio he evaluated the return of 34 open-end mutual funds in the period 1945-1963. The results showed that to a major extent the capital market was highly efficient due to which majority of the sample had lower performance as compared to the Dow Jones Index. Sharpe (1966) found that from 1954 to 1963 only 11 funds outperformed the Dow-Jones Industrial Average (DJIA) while 23 funds were outperformed by the DJIA. Study concluded that the mutual funds were inferior investments during the period. Results also showed that good managers concentrate on evaluating risk and providing diversification.

(Carlson, 1970), conducted a research to analyze the predictive value of past results in forecasting future performance of mutual funds for the period 1948-1967. The author also examined the efficiency of market and identified the factors related to the fund performance. First of all he constructed indices for three types of mutual funds (Diversified common stock, Balanced, Income) and compared these indices with the market indices. The author also concluded that past performance showed little predictive value and that the performance was positively related to the availability of new cash resources for investment purposes.

RESEARCH METHODOLOGY

This chapter introduces the research outline of the study. The chapter begins with an overview of the Mutual Fund industry in India, and benefits and disadvantages of the Mutual fund Scheme, their growth and different. Besides that, this chapter also includes the problem statement, research objectives and research questions. The key terms and significance of the study will also be highlighted.

Mutual Fund (MF) is a form of collective investment that allow investors with similar investment objectives to pool their savings, which are then invested in a portfolio of securities or other assets managed by investment professionals.

Saving is the surplus of income over expenditure and when such savings are invested to generate more money, it is called investment. With the development of capital market, investment in stocks became a good option for generating higher returns. However, greater risk and lack of knowledge about the movement of stock prices were also associated with them. Therefore, mutual funds emerged as an ultra modern method of investment to lessen the risk at low cost with experts' knowledge.

This study differs from a few past studies in several ways. It uses a much larger and more recent data base with a greater number of objective categories. The data were subjected to more rigorous (strong) statistical tests than were used before. Two time periods were examined to see if fund performance for objective categories changed in comparison to other categories over time. We used the objectives stated in the prospectuses of the funds; whereas, the prior studies used objectives based in part on judgement.

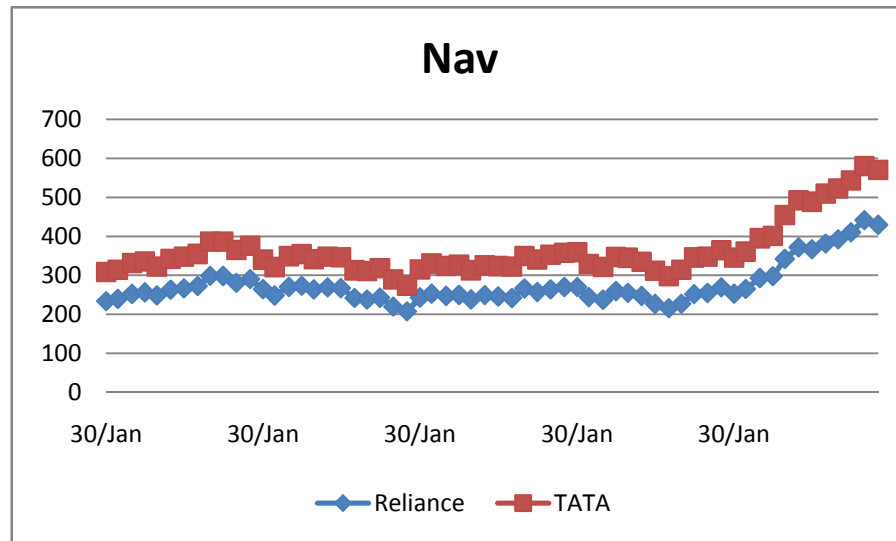
In India, Mutual Fund industry started in 1963 with the formation of Unit Trust of India (UTI). It was the..

- **First phase (1964–1987)** of Indian mutual fund industry during which UTI enjoyed a complete monopoly.
- **Second phase (1987–1993)**, Government of India allowed public sector banks and financial institutions to set up mutual funds.
- **Third phase (1993–2003)** started with the entry of private sector and foreign funds.
- **Fourth phase (since February 2003 till date)**, is the age of consolidation and growth.

As on 31 March 2012, there are 44 mutual fund companies with 1309 schemes and wide variety such as Open-Ended, Close-Ended, Interval, Growth, Income, Balanced, Equity Linked Savings Scheme. Because of the large number of mutual fund companies and schemes, retail investors are facing problems in selecting right funds.

ANALYSIS

Reliance Mutual Fund & Tata Mutual Fund



Dependent variable is TATA mutual fund, 1 independent variables Reliance mutual fund , 60 cases.

Variable	Coefficient	St. Error	t-value	p(2 tail)
Intercept	1.9411908	4.6018784	.4218257	0.675
VAR1	.3163712	0.0165189	19.152099	<.001

R-Square = 0.8635 Adjusted R-Square = 0.8611
 Cohen's f-square = 6.3242, a large effect size.

Analysis of Variance to Test Regression Relation

Source	Sum of Sq	df	Mean Sq	F	p-value
Regression	15769.147	1	15769.147	366.8029	<.001
Error	2493.4658	58	42.99079		
Total	18262.612	59			

A low p-value suggests that the dependent variable TATA mutual fund may be linearly related to independent variable(s).

MEAN X = 273.83 S.D. X = 51.675 CORR XSS = 157549.0
 MEAN Y = 88.573 S.D. Y = 17.594 CORR YSS = 18262.56
 REGRESSION MS= 15769.147 RESIDUAL MS= 42.991
 Pearson's r (Correlation Coefficient)= 0.9292

The linear regression equation is:

$$\text{VAR 2 TATA mutual fund} = 1.941191 + 0.3163712 * \text{VAR1 Reliance mutual fund}$$

Test of hypothesis to determine significance of relationship:

H(null): Slope = 0 or H(null): $\rho \neq 0$ (two-tailed test)

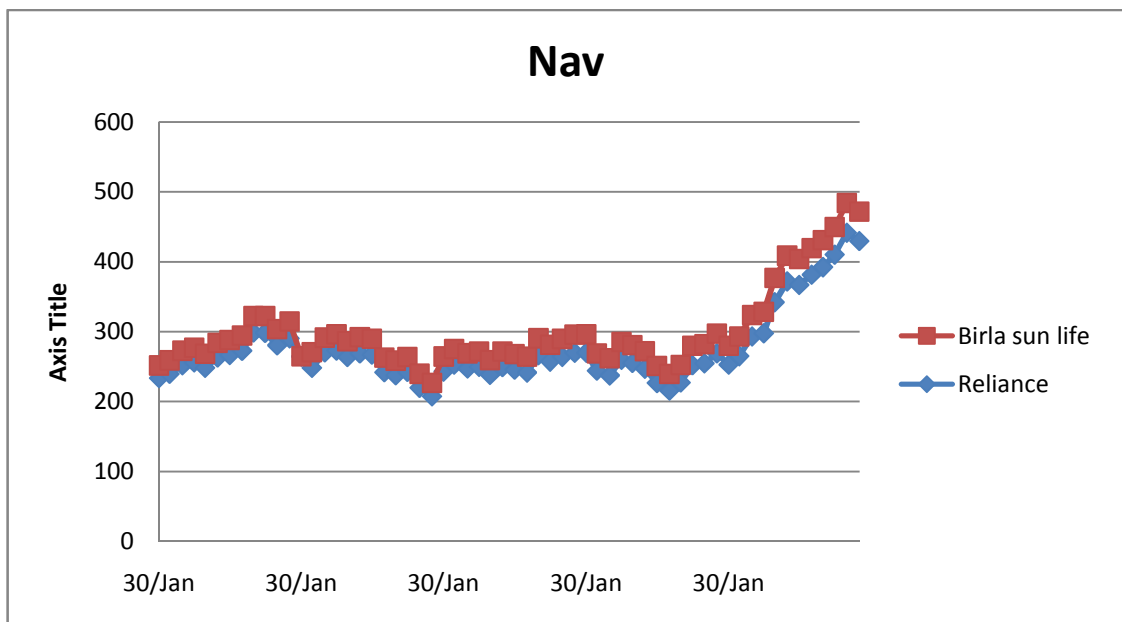
t = 19.15 with 58 degrees of freedom p <= .001

F tabular value is =2.81

Note: A low p-value implies that the slope does not = 0.

Conclusion: H0 is Rejected.

Reliance Mutual Fund & Birla sun life Mutual Fund



Dependent variable is Birla sun life mutual fund, 1 independent variables Reliance mutual fund, 60 cases.

Variable	Coefficient	St. Error	t-value	p(2 tail)
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Intercept	-4.062241	2.8263297	-1.437285	0.156
VAR1	.1061709	.0101454	10.464953	<.001

R-Square = 0.6538 Adjusted R-Square = 0.6478

Cohen's f-square = 1.8882, a large effect size.

Analysis of Variance to Test Regression Relation

Source	Sum of Sqsd	Mean Sq	F	p-value
Regression	1775.9282	1	1775.9282	109.51525 <.001
Error	940.54331	58	16.216264	
Total	2716.4715	59		

A low p-value suggests that the dependent variable Birla sun life mutual fund may be linearly related to independent variable(s) Reliance mutual fund.

MEAN X = 273.83 S.D. X = 51.675 CORR XSS = 157549.0
 MEAN Y = 25.011 S.D. Y = 6.785 CORR YSS = 2716.469
 REGRESSION MS= 1775.928 RESIDUAL MS= 16.216

Pearson's r (Correlation Coefficient)= 0.8086

The linear regression equation is:

$$\text{VAR2 Birla sun life mutual fund} = -4.062242 + 0.1061709 * \text{VAR1 Reliance mutual fund}$$

Test of hypothesis to determine significance of relationship:

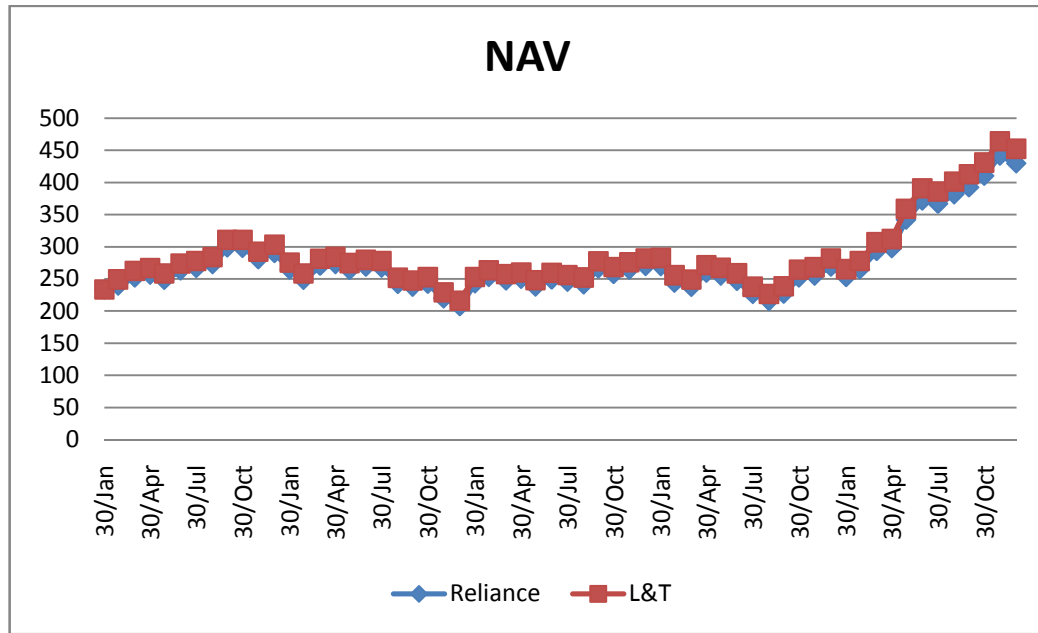
H(null): Slope = 0 or H(null): rho ≠ 0 (two-tailed test)

t = 10.46 with 58 degrees of freedom p ≤ .001

Note: A low p-value implies that the slope does not = 0.

✓ Conclusion: H0 is rejected.

Reliance Mutual Fund and L&T Mutual Fund



Dependent variable is VAR2 L&T mutual fund, 1 independent variables Reliance mutual fund, 60 cases.

Variable	Coefficient	St. Error	t-value	p(2 tail)
Intercept	-5.145255	1.1174709	-4.604375	<.001
VAR1	.0634169	.0040113	15.809686	<.001

R-Square = 0.8117 Adjusted R-Square = 0.8084
 Cohen's f-square = 4.3094, a large effect size.

Analysis of Variance to Test Regression Relation

Source	Sum of Sq	df	Mean Sq	F	p-value
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Regression	633.61299	1	633.61299	249.94616	<.001
Error	147.02988	58	2.5349979		
Total	780.64287	59			

A low p-value suggests that the dependent variable VAR2 may be linearly related to independent variable(s).

MEAN X =	273.83	S.D. X =	51.675	CORR XSS =	157549.0
MEAN Y =	12.22	S.D. Y =	3.637	CORR YSS =	780.643
REGRESSION MS=	633.613	RESIDUAL MS=	2.535		

Pearson's r (Correlation Coefficient) = 0.9009

The linear regression equation is:

$$\text{VAR2 L \& t mutual fund} = -5.145255 + 6.341688\text{E-}02 * \text{VAR1 Reliance mutual fund}$$

Test of hypothesis to determine significance of relationship:

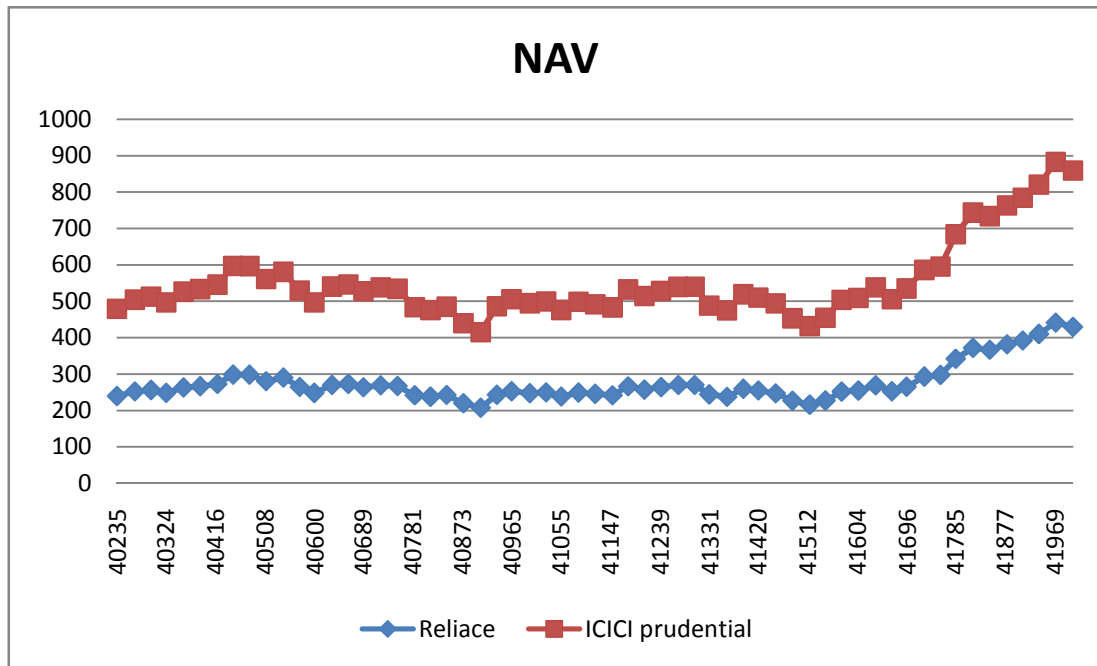
H(null): Slope = 0 or H(null): $\rho \neq 0$ (two-tailed test)

t = 15.81 with 58 degrees of freedom p <= .001

Note: A low p-value implies that the slope does not = 0.

✓ Conclusion: H0 is rejected.

Reliance Mutual fund and ICICI prudential Mutual Fund



Dependent variable is VAR2 ICICI prudential mutual fund, 1 independent variables Reliance mutual fund, 60 cases.

Variable	Coefficient	St. Error	t-value	p(2 tail)
Intercept	-27.90647	30.089136	-.9274601	0.358
VAR1	1.0732182	.1080078	9.9364884	<.001

R-Square = 0.6299 Adjusted R-Square = 0.6236

Cohen's f-square = 1.7023, a large effect size.

Analysis of Variance to Test Regression Relation

Source	Sum of Sqsd	Mean Sq	F	p-value
Regression	181463.99	1	181463.99	98.733802 <.001
Error	106598.87	58	1837.9115	
Total	288062.86	59		

A low p-value suggests that the dependent variable VAR2 may be linearly related to independent variable(s).

MEAN X = 273.83 S.D. X = 51.675 CORR XSS = 157549.0
MEAN Y = 265.973 S.D. Y = 69.874 CORR YSS = 288063.0
REGRESSION MS = 181463.989 RESIDUAL MS= 1837.911

Pearson's r (Correlation Coefficient) = 0.7937

The linear regression equation is:

VAR2ICICI prudential mutual fund= -27.90648+1.073218 * VAR1Reliance mutual fund

Test of hypothesis to determine significance of relationship:

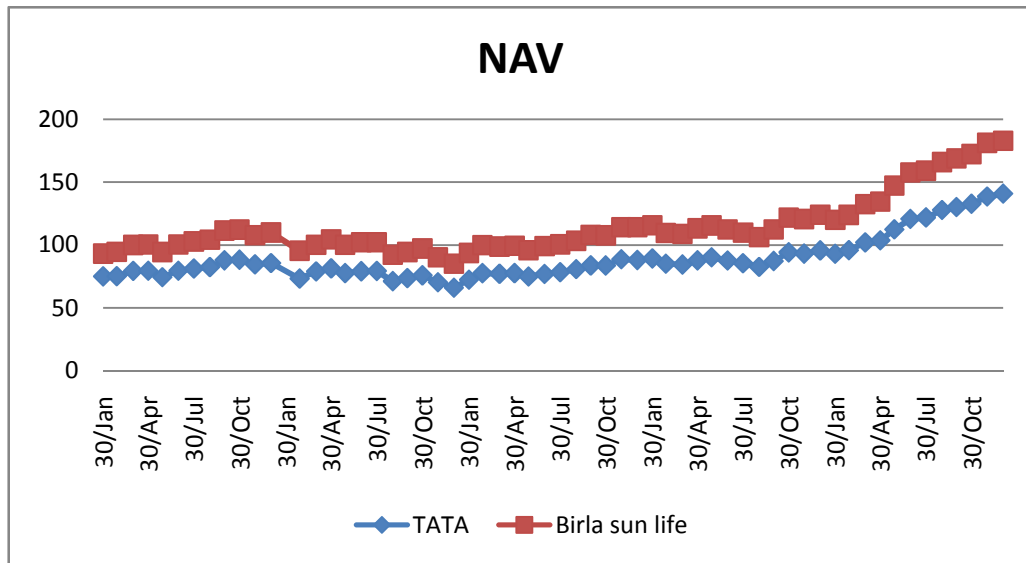
H(null): Slope = 0 or H(null): $\rho \neq 0$ (two-tailed test)

t = 9.94 with 58 degrees of freedom p \leq .001

Note: A low p-value implies that the slope does not = 0.

✓ Conclusion: H0 is rejected.

TATA Mutual Fund and Birla sun life Mutual Fund



Dependent variable is VAR2 Birla sun life mutual fund, 1 independent variables TATA mutual fund, 60 cases.

Variable	Coefficient	St. Error	t-value	p(2 tail)
Intercept	-5.982452	1.9225255	-3.111767	0.003
VAR1	.3499142	.0212964	16.430712	<.001

R-Square = 0.8232 Adjusted R-Square = 0.8201
 Cohen's f-square = 4.6546, a large effect size.

Analysis of Variance to Test Regression Relation

Source	Sum of Sqsd	Mean Sq	F	p-value
Regression	2236.0734	1	2236.0734	269.9683 <.001
Error	480.3981	58	8.2827258	
Total	2716.4715	59		

A low p-value suggests that the dependent variable VAR2 may be linearly related to independent variable(s).

 MEAN X = 88.573 S.D. X = 17.594 CORR XSS = 18262.56
 MEAN Y = 25.011 S.D. Y = 6.785 CORR YSS = 2716.469
 REGRESSION MS= 2236.073 RESIDUAL MS= 8.283

Pearson's r (Correlation Coefficient) = 0.9073

The linear regression equation is:

$$\text{VAR2 Birla sun life mutual fund} = -5.982451 + 0.3499142 * \text{VAR1 TATA mutual fund}$$

Test of hypothesis to determine significance of relationship:

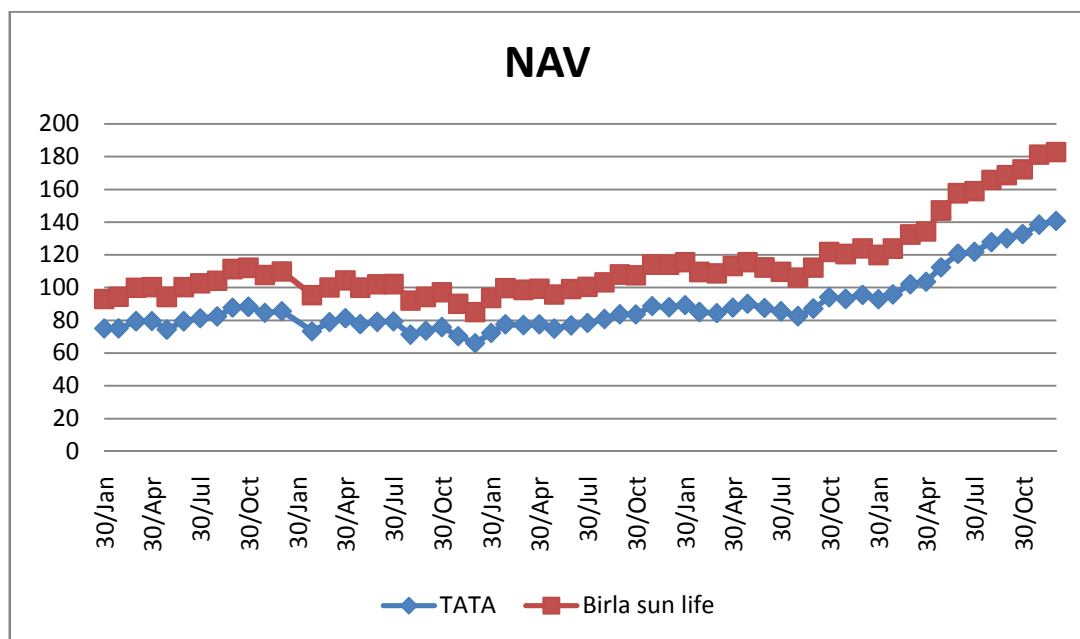
H(null): Slope = 0 or H(null): rho ≠ 0 (two-tailed test)

t = 16.43 with 58 degrees of freedom p ≤ .001

Note: A low p-value implies that the slope does not = 0.

✓ Conclusion: H0 is rejected.

TATA Mutual Fund and L&T Mutual Fund



Dependent variable is VAR2 L & T mutual fund, 1 independent variables TATA mutual fund, 60 cases.

Variable	Coefficient	St. Error	t-value	p(2 tail)
Intercept	-4.774484	.9128613	-5.23024	<.001
VAR1	.1918717	.010112	18.974615	<.001

R-Square = 0.8613 Adjusted R-Square = 0.8589

Cohen's f-square = 6.2075, a large effect size.

Analysis of Variance to Test Regression Relation

Source	Sum of Sqsd	Mean Sq	F	p-value
Regression	672.33334	1	672.33334	360.03602 <.001
Error	108.30954	58	1.8674058	
Total	780.64287	59		

A low p-value suggests that the dependent variable VAR2 may be linearly related to independent variable(s).

MEAN X =	88.573	S.D. X =	17.594	CORR XSS =	18262.56
MEAN Y =	12.22	S.D. Y =	3.637	CORR YSS =	780.643
REGRESSION MS=	672.333	RESIDUAL MS=	1.867		

Pearson's r (Correlation Coefficient)= 0.928

The linear regression equation is:

$$\text{VAR2 L \& T mutual fund} = -4.774484 + 0.1918717 * \text{VAR1 TATA mutual fund}$$

Test of hypothesis to determine significance of relationship:

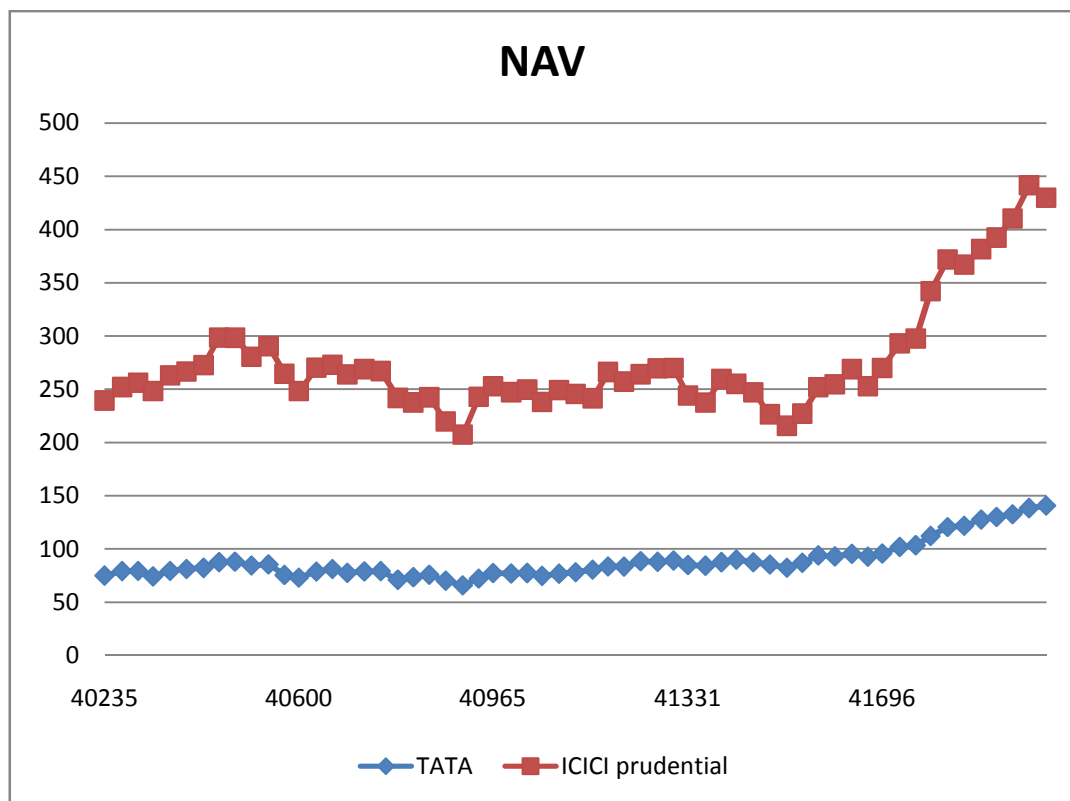
H(null): Slope = 0 or H(null): rho ≠ 0 (two-tailed test)

t = 18.97 with 58 degrees of freedom p ≤ .001

Note: A low p-value implies that the slope does not = 0.

✓ Conclusion: H0 is rejected.

TATA Mutual Fund and ICICI Prudential



Dependent variable is VAR2 ICICI prudential mutual fund, 1 independent variables TATA mutual fund, 60 cases.

Variable	Coefficient	St. Error	t-value	p(2 tail)
Intercept	17.193855	33.284001	.5165802	0.607
VAR1	2.8087413	.3686962	7.6180378	<.001

R-Square = 0.5001 Adjusted R-Square = 0.4915

Cohen's f-square = 1.0006, a large effect size.

Analysis of Variance to Test Regression Relation

Source	Sum of Sqsd	Mean Sq	F	p-value
Regression	144074.25	1	144074.25	58.0345 <.001
Error	143988.6	58	2482.5621	
Total	288062.86	59		

A low p-value suggests that the dependent variable VAR2 may be linearly related to independent variable(s).

MEAN X = 88.573 S.D. X = 17.594 CORR XSS = 18262.56
 MEAN Y = 265.973 S.D. Y = 69.874 CORR YSS = 288063.0
 REGRESSION MS= 144074.251 RESIDUAL MS= 2482.562

Pearson's r (Correlation Coefficient)= 0.7072

The linear regression equation is:

$$\text{VAR2 ICICI prudential mutual fund} = 17.19386 + 2.808741 * \text{VAR1 TATA mutual fund}$$

Test of hypothesis to determine significance of relationship:

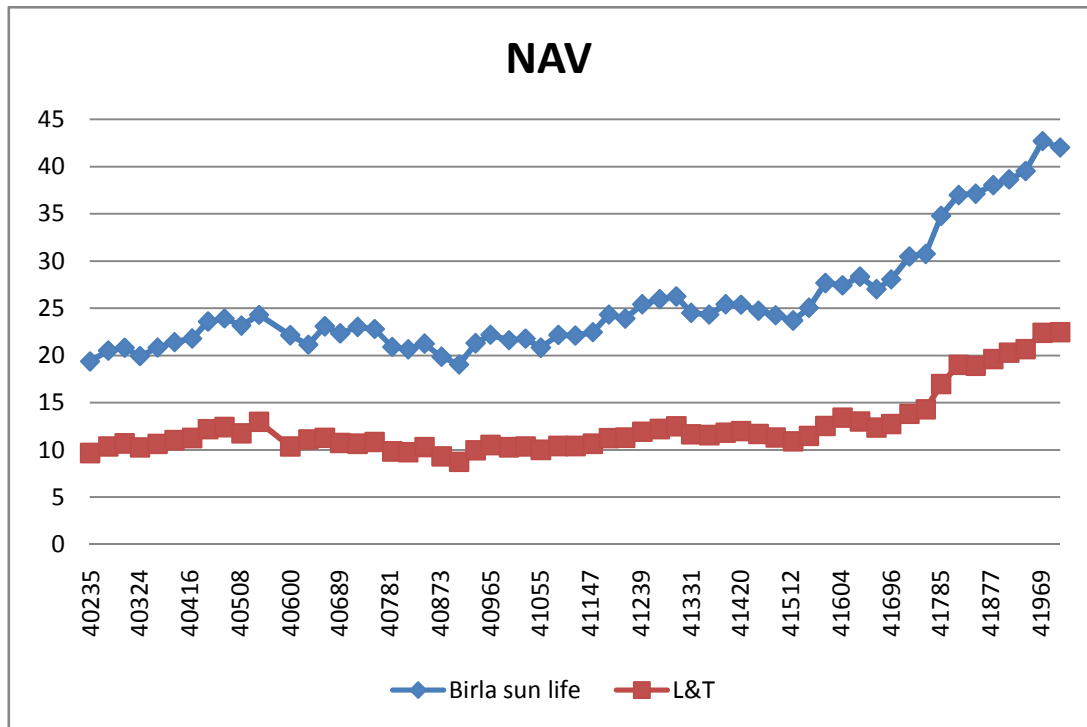
H(null): Slope = 0 or H(null): rho ≠ 0 (two-tailed test)

t = 7.62 with 58 degrees of freedom p ≤ .001

Note: A low p-value implies that the slope does not = 0.

✓ Conclusion: H0 is rejected.

Birla sun life Mutual Fund and L&T Mutual Fund



Dependent variable is VAR2 L & T mutual fund, 1 independent variables Birla sun life mutual fund, 60 cases.

Variable	Coefficient	St. Error	t-value	p(2 tail)
Intercept	.8558086	.9673468	.8846968	0.380
VAR1	.4543835	.0373496	12.16569	<.001

R-Square = 0.7185 Adjusted R-Square = 0.7136

Cohen's f-square = 2.5518, a large effect size.

Analysis of Variance to Test Regression Relation

Source	Sum of Sqsd	Mean Sq	F	p-value
Regression	560.85451	1	560.85451	148.00402 <.001
Error	219.78836	58	3.7894545	
Total	780.64287	59		

A low p-value suggests that the dependent variable VAR2 may be linearly related to independent variable(s).

 MEAN X = 25.011 S.D. X = 6.785 CORR XSS = 2716.469
 MEAN Y = 12.22 S.D. Y = 3.637 CORR YSS = 780.643
 REGRESSION MS= 560.855 RESIDUAL MS= 3.789

Pearson's r (Correlation Coefficient)= 0.8476

The linear regression equation is:

$$\text{VAR2 L \& T mutual fund} = 0.8558086 + 0.4543835 * \text{VAR1 Birla sun life mutual fund}$$

Test of hypothesis to determine significance of relationship:

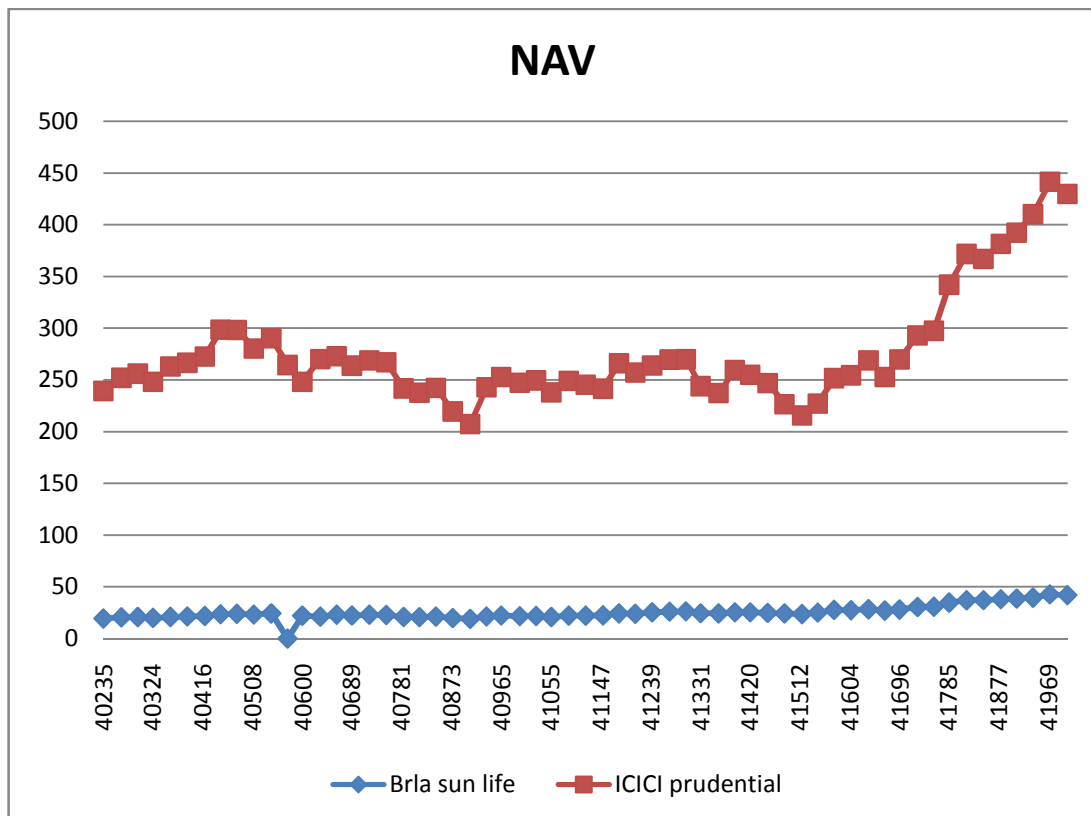
H(null): Slope = 0 or H(null): rho ≠ 0 (two-tailed test)

t = 12.17 with 58 degrees of freedom p ≤ .001

Note: A low p-value implies that the slope does not = 0.

✓ Conclusion: H0 is rejected.

Birla sun life Mutual Fund and ICICI Prudential Mutual Fund



Dependent variable is VAR2 ICICI prudential mutual fund, 1 independent variable Birla sun life mutual fund, 60 cases.

Variable	Coefficient	St. Error	t-value	p(2 tail)
Intercept	103.55755	27.179405	3.8101477	<.001
VAR1	6.4938707	1.049406	6.1881397	<.001

R-Square = 0.3977 Adjusted R-Square = 0.3873

Cohen's f-square = 0.6602, a medium effect size.

Analysis of Variance to Test Regression Relation

Source	Sum of Sq	df	Mean Sq	F	p-value
Regression	114554.57	1	114554.57	38.293073	<.001
Error	173508.28	58	2991.5221		
Total	288062.86	59			

A low p-value suggests that the dependent variable VAR2 may be linearly related to independent variable(s).

MEAN X = 25.011 S.D. X = 6.785 CORR XSS = 2716.469
 MEAN Y = 265.973 S.D. Y = 69.874 CORR YSS = 288063.0
 REGRESSION MS= 114554.573 RESIDUAL MS= 2991.522

Pearson's r (Correlation Coefficient)= 0.6306

The linear regression equation is:

$$\text{VAR2 ICICI prudential mutual fund} = 103.5575 + 6.493871 * \text{VAR1 Birla sun life mutual fund}$$

Test of hypothesis to determine significance of relationship:

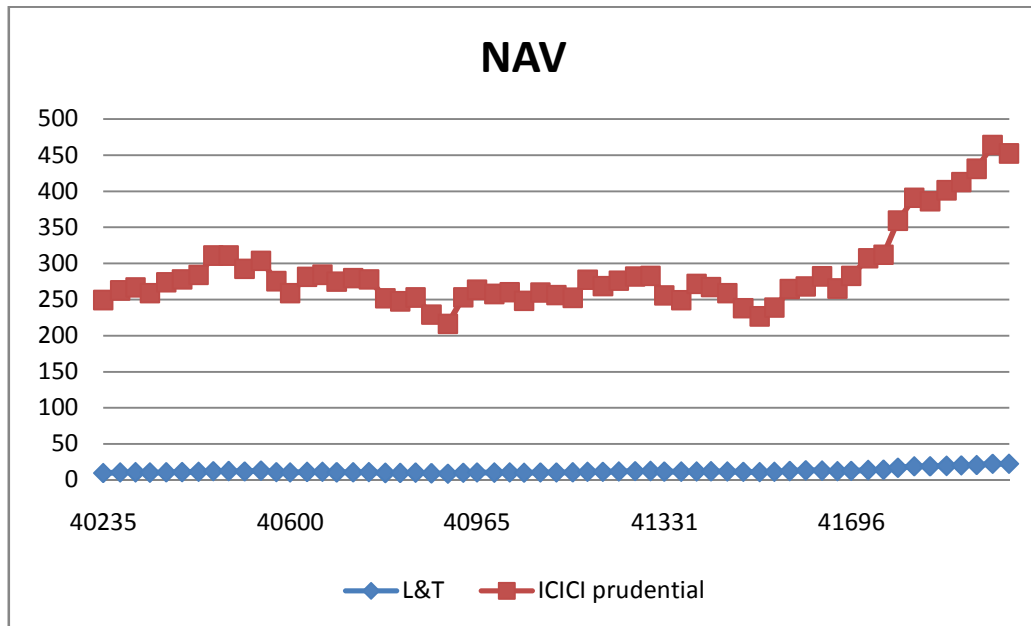
H(null): Slope = 0 or H(null): rho ≠ 0 (two-tailed test)

t = 6.19 with 58 degrees of freedom p <= .001

Note: A low p-value implies that the slope does not = 0.

✓ Conclusion: H0 is rejected.

L&T Mutual Fund ICICI Prudential Mutual Fund



Dependent variable is VAR2 ICICI prudential mutual fund, 1 independent variables L&T mutual fund, 60 cases.

Variable	Coefficient	St. Error	t-value	p(2 tail)
Intercept	66.809763	17.011201	3.9273984	<.001
VAR1	16.297874	1.3351127	12.207114	<.001

R-Square = 0.7198 Adjusted R-Square = 0.715

Cohen's f-square = 2.5692, a large effect size.

Analysis of Variance to Test Regression Relation

Source	Sum of Sqsd	Mean Sq	F	p-value
Regression	207354.91	1	207354.91	149.01364 <.001
Error	80707.944	58	1391.5163	
Total	288062.86	59		

A low p-value suggests that the dependent variable VAR2 may be linearly related to independent variable(s).

MEAN X = 12.22 S.D. X = 3.637 CORR XSS = 780.643
MEAN Y = 265.973 S.D. Y = 69.874 CORR YSS = 288063.0
REGRESSION MS= 207354.911 RESIDUAL MS= 1391.516

Pearson's r (Correlation Coefficient)= 0.8484

The linear regression equation is:

VAR2 ICICI prudential mutual fund = 66.80976 + 16.29787 * VAR1L&T mutual funds

Test of hypothesis to determine significance of relationship:

H(null): Slope = 0 or H(null): $\rho \neq 0$ (two-tailed test)

t = 12.21 with 58 degrees of freedom p \leq .001

Note: A low p-value implies that the slope does not = 0.

✓ Conclusion: H0 is rejected.

REFERENCE

1. Carlson. (1970). Aggregate Performance Of Mutual Funds. *The Journal Of finance and Qualitative Analysis*, 5(1), 1-31.
2. Dr. Sarita Bahl, & M. (2012). A COMPARATIVE ANALYSIS OF MUTUAL FUND SCHEMES IN INDIA. *Internaitonal Journal Of Marketing, Financial Services & Management Research*, 1(7).
3. Dr. Shantanu Mehta, C. S. (2012). Preference of Investors for Indian Mutual Funds and its Performance Evaluation. *International Pacific Business Review*, 3(5).
4. Jatinder Loomba. (2011). Investigating Performance of Equity-Based Mutual Fund Schemes and Comparison with Indian Equity Market. *Asian Journal Of Research in Banking and Finance*, 1(3), 94-111.
5. Kuah Kean Lam. (2008). *Factor Affecting People investing in Mutual Fund*.
6. McDonald, J. (1997). Objectives and Performance of Mutual Funds, 1960-1969. *Journal Of Finance And Quantitative Analysis*, 10(2), 311-333.
7. Palanisamy, A. S. (2012). Investment Pattern in Debt Scheme of Mutual funds-An Analytical Study. *IJMIE*, 2(3), 285-301.

8. S. Poornima, R. K. (2013). Performance Analysis of Growth Oriented Equity Diversified Mutual Fund. *I(8)*, 27-35.
9. Sahil Jain, A. G. (2012). Analysis Of Equity Based Mutual Fund in India. *Journal Of Business & Management*, 2(1), 1-55.
10. Sharpe. (1966). Mutual Fund Performance. *The Journal Of Business*, 39(1), 119-138.