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# "A study on the Risk and Return Analysis of Mutual Funds (Equity Midcap) "

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#### ABSTRACT

Researcher started the study with statement of the problem as Investors in india and their awareness of investment process and opportunity philosophy of mutual fund. With reference to Equity mutual fund, Debt mutual fund and balanced mutual fund.

This study deals with identifying the better performing equity midcap funds among the selected group of funds by considering various parameters to help the advisors suggest the investors in choice of their investment.

This study driven with Need for the study of doing this work is to know about mutual funds and its functions. This helps to know in detail about mutual fund industry right from its inception stage, growth and future prospects and It also helps in understanding different schemes of mutual funds.

Researcher has set an Objective for the study as to study the various schemes to invest from investor point of view, to compare the risk involved and the yield in each scheme and to study the price movement and variation involved in the scheme with respect to NIFTY index.

The secondary data was obtained from various mutual fund schemes and investors magazine and websites. Yearly fact sheets of mutual fund companies are important source of secondary data. The data obtained is analyzed using mathematical models and present value method analysis.

Keywords – equity midcap funds, Debt mutual fund, NIFTY index, balanced mutual fund; schemes of mutual funds.

IJCR.

#### 1. INTRODUCTION

#### Investment

Investment is the sacrifice of certain present value for the uncertain future reward. Such decision making has not only to be continuous but rational too. Broadly speaking, an investment decision is a trade-off between the risk and return.

Investment decisions are found to be the outcome of three different but related classes of factors

- 1. The first may be describe as factual or informal premises.
- The second class of factors is exceptional premises. 2.
- 3. The third class of factors is valuation premises.

Investing has been an activity confined to the rich and business class in the past. But, today we find that investment has become common and popular with people from all walks of life. Increasing popularity of investment can be attributed to the following factors:

- Increasing in working population, larger family incomes and consequent higher savings. 1.
- Provisions of tax incentives with respect to investment in specified channels. 2.
- Increase in tendency of people to hedge against inflation. 3.
- Availability of large and attractive investment alternatives. 4.
- Increase in investment related publicity. 5.
- Availability of investment to provide income and capital gains, etc. 6.
- Investment process: 7.

The investment process describes how an investor should go about making decision about marketable securities in which to invest, how extensively the investment should beand when the investment should be made.

The five steps procedure for making these decisions from the basis of the investment process:

- Set investment policy
- Perform security analysis.
- Construct a portfolio.
- Revise the portfolio.
- Evaluate the performance of portfolio.

All investment is risky and uncertain. An efficient investor is one with the knowledge of the market who can reduce the risk and maximize the returns. He can avoid pitfalls and protect his interests. The management of risk and return requires expertise. Investment is both an art ant and science. Investment in financial market is not a gamble or speculation that some investors indulge in, which is risky.

Investor should be those who invest with the objective of receiving some income, share in the prosperity of the company and gain capital appreciation in a longer time span.

Investing in the stock market is always interesting, challenging and rewarding. Interesting because the stock market is dynamic; the only certainty is uncertainty. Rewarding because it is risky and is likely to yield high returns. Stock markets are dynamic, volatile and unpredictable.

Introduction to Indian Mutual Fund Industry:

The mutual fund industry in India started in 1963 with the formation of Unit Trust of India, at the initiative of the Government of India and Reserve Bank of India. The history of mutual funds in India can be broadly divided into four distinct phases:

First Phase – 1964-87

An Act of Parliament established Unit Trust of India (UTI) on 1963. It was set up by the Reserve Bank of India and functioned under the Regulatory and administrative control of the Reserve Bank of India. In 1978 UTI was delinked from the RBI and the Industrial Development Bank of India (IDBI) took over the regulatory and administrative control in place of RBI. The first scheme launched by UTI was Unit Scheme 1964. At the end of 1988 UTI had Rs.6, 700 crores of assets under management.

Second Phase – 1987-1993 (Entry of Public Sector Funds)

1987 marked the entry of non- UTI, public sector mutual funds set up by public sector banks and Life Insurance Corporation of India (LIC) and General Insurance Corporation of India (GIC). SBI Mutual Fund was the first non-UTI Mutual Fund established in June 1987 followed by Canbank Mutual Fund (Dec 87), Punjab National Bank Mutual Fund (Aug 89), Indian Bank Mutual Fund (Nov 89), Bank of India (Jun 90), Bank of Baroda Mutual Fund (Oct 92). LIC established its mutual fund in June 1989 while GIC had set up its mutual fund in December 1990. At the end of 1993, the mutual fund industry had assets under management of Rs.47, 004 crores.

Third Phase – 1993-2003 (Entry of Private Sector Funds)

With the entry of private sector funds in 1993, a new era started in the Indian mutual fund industry, giving the Indian investors a wider choice of fund families. Also, 1993 was the year in which the first Mutual Fund Regulations came into being, under which all mutual funds, except UTI were to be registered and governed. The erstwhile Kothari Pioneer (now merged with Franklin Templeton) was the first private sector mutual fund registered in July 1993.

The 1993 SEBI (Mutual Fund) Regulations were substituted by a more comprehensive and revised Mutual Fund Regulations in 1996. The industry now functions under the SEBI (Mutual Fund) Regulations 1996.

The number of mutual fund houses went on increasing, with many foreign mutual funds setting up funds in India and also the industry has witnessed several mergers and acquisitions. At the end of January 2003, there were 33 mutual funds with total assets of Rs. 1, 21,805 crores. The Unit Trust of India with Rs.44, 541 crores of assets under management was way ahead of other mutual funds.

Fourth Phase – since February 2003

In February 2003, following the repeal of the Unit Trust of India Act 1963 UTI was bifurcated into two separate entities. One is the Specified Undertaking of the Unit Trust of India with assets under management of Rs.29, 835 crores as at the end of January 2003, representing broadly, the assets of US 64 scheme, assured return and certain other schemes. The Specified Undertaking of Unit Trust of India, functioning under an administrator and under the rules framed by Government of India and does not come under the purview of the Mutual Fund Regulations.

The second is the UTI Mutual Fund Ltd, sponsored by SBI, PNB, BOB and LIC. It is registered with SEBI and functions under the Mutual Fund Regulations. With the bifurcation of the erstwhile UTI which had in March 2000 more than Rs.76, 000 crores of assets under management and with the setting up of a UTI Mutual Fund, conforming to the SEBI Mutual Fund Regulations, and with recent mergers taking place among different private sector funds, the mutual fund industry has entered its current phase of consolidation and growth. As at the end of September 2004, there were 29 funds, which manage assets of Rs.153108 crores under 421 schemes.

#### 2. RESEARCH METHODOLOGY

Design of the study

Title of the Study:

"A study on the Risk and Return Analysis of Mutual Funds (Equity Midcap)"

Statement of the problem: Investors in india are not aware of investment process and opportunity philosophy of mutual fund. They are:

- 1. Equity mutual fund
- 2. Debt mutual fund
- 3. Balanced mutual fund

The project deals with identifying the better performing equity midcap funds among the selected group of funds by considering various parameters to help the advisors suggest the investors in choice of their investment."

Need for the study:

- 1. The main purpose of doing this project is to know about mutual funds and its functions. This helps to know in detail about mutual fund industry right from its inception stage, growth and future prospects.
- 2. It also helps in understanding different schemes of mutual funds.
- 3. The project is done to ascertain the asset allocation, entry load, exit load associated with mutual funds. Ultimately this would help in understanding the benefits of mutual funds to investors.

Objectives of the study:

- 1. To study the various schemes to invest from investor point of view.
- To compare the risk involved and the yield in each scheme.
- 3. To study the price movement and variation involved in the scheme with respect to NIFTY index.

Scope of the study:

1. The area of the study was only restricted to equity diversified mid cap funds of

#### BIRLA MID CAP FUND SCHEME SUNDARAMBNP PANIBAS MIDCAP FUBD SCHEME UTI THEMATIC MIDCAP FUND SCHEME

2. The data collected from each fund is for maximum of 5 years. The market selected was CNX Nifty Midcap

#### Methodology Adopted:

The secondary data was obtained from various mutual fund schemes and investors magazine and websites. Yearly fact sheets of mutual fund companies are important source of secondary data. The data obtained is analyzed using mathematical models and present value method analysis.

#### Sources of data

The data sources can be classified into two categories

- 1. Primary data
- 2. Secondary data

Secondary data

Secondary data is collected through

- 3. The internet sources.
- 4. Material provided by the company.
- 5. Annual report of the company.
- 6. Brochures, fact sheets etc
- 7. Fund houses.

The secondary data was obtained from various mutual fund schemes and investor's magazines and websites. Monthly fact sheets of mutual fund companies are important source of secondary data. The data obtained is analyzed using mathematical models and present value method analysis.

The secondary data obtained from various sources such as

- 1. Finance magazines
- 2. Fact sheets of mutual fund companies
- 3. Business line
- 4. Indiainfoline.com
- 5. Mutualfundindia.com
- 6. Valueresearchonline.com

#### 3. LITERATURE REVIEW:

It is bound to adopt the rich books, journals, periodicals, reports etc. to measure with quantity of collections. Lots of books national and international level magazines, websites are referred for the study.

- 1. Dr.K.Sathya Paul Sharma in his research article titled analysis of the on risk and return relationship of mutual funds in India published in the international journal of advancement in research and technology.volume2 issue8 and august 2013.using capm one can calculate the expected rate of return for a portfolio, given its risk the object of the study is to bringing out a comparison between the performance of mutual funds of public and private sector in India .so in this paper the first task is to calculate risk associated with the mutual funds. This is denoted by the beta .it is concluded with the point that though the stock market is subjected to high risk ,by using mutual funds the loss can be minimized to an extent.
- 2. Ajay Jaiswal (2001) evaluated the implication of equity premium. He opened that investors look for a certain level of return for assuming the risk of equities volatile return. this level can

- 3. be measured through the equity risk premium equity risk premium is the sum of the dividend yield and earnings growth less current bond annual yield .he observed that the risk premium rose very sharply towards the end of the last decade.
- 4. Crisil report on risk management stated that the loss potential from market risk will increase in the absence of strong risk management tool .the report commented that in the increasingly deregulated and competitive environment the risk management strategies of banks would hold the key to differentiation their credit worthiness.
- 5. Preethi singh (1986) disclosed the basic rules for selecting the company to invest in. she opined the understanding and measuring return and risk is fundamental to the investment process. According to her most investors are risk averse. To have a higher return the investor has to face greater risks. She concluded that risk is fundamental to the process of investment
- 6. .the investor should carefully understand the various pit falls of investment and analyze the fundamental statements with special reference to solvency profitability, EPS and efficiency of the company.
- 7. Dr.Rao Narayan (2007) evaluated the performance of Indian Mutual Fund Schemes in a bear market using relative performance index, risk-return analysis, Treynor's ratio, Sharpe's ratio, Jensen's measure. The study finds that medium term debt funds were the best performing funds during the bear period of September 98-April 2002 and 58 of 269 open ended mutual funds provided better return than the overall market returns.
- 8. Gupta Ramesh (1989) evaluated fund performance in India comparing the returns earned by schemes of similar risk and similar constraints. An explicit risk return relationship was developed to make comparison across fund with different risk levels. They used capital market line to study the risk, return relationship of the fund from the perspective of large investors and security market line for small investors.
- 9. Barua and Varma (1991) evaluated the performance of master share (1987-1991) using CAPM approach from the view point of large investors, small investors and from fund management. The study had used ET index as a proxy for market behavior. The risk adjusted performance is measured by using Sharpe, Jensen and Treynor's measures. They used capital market line to study the risk, return relationship of the fund from the perspective of large investors and security market line for small investors. The study concludes that the fund performed better than the market for small investors and fund management but the fund did not do well when compared to CML.
- 10. K.P. Sivakumar, Dr.S. Rajamohan (2010)1 examined the performance of mutual fund players based on private and public sector participants. The study revealed that there is a significant contribution by all the participants for the growth of the mutual fund industry in India. The performance of mutual funds was analyzed from 1998-99 to 2008-09 by taking into consideration of resource mobilization, the study also found that the private participants play a greater role in resource mobilization compared to those of public sector. This study indicated that there is a significant difference between the quantum funds mobilized by public sector with or without UTI. Hence it proved that the UTI has a greater role in performance of mobilization of funds.
- 11. M. Jayadev (1996)2 carried out a research on Mutual fund performance with respect to growth oriented funds for the period of 21 months from June 1992 to March 1994 in terms of diversification, market timing and selectivity, it is found to be highly diversified fund with high diversification, reduced total risk of the portfolio. The study showed that the growth oriented fund does not outperform the benchmark index.
- 12. Edward Chang, H. Doug Witte (2010)3 examined the performance of socially responsible funds in the U.S. mutual fund industry for the fifteen years. This paper empirically compared U.S. mutual fund industry. The operating characteristics were examined by expense ratio, annual turnover rates and tax cost ratio. The performance measures include conventional risk, return and risk- adjusted return measures such as Multi factor model and CAPM model.

13. Paula A.Tkac (2001)4 evaluated the performance of open-ended International mutual funds for the period 1990-99. The study results showed that international open-ended mutual funds are quite heterogeneous in terms of their average return, volatility and performance measures. The result also revealed that managers of domestic fund do not outperform the U.S. market, but managers of well-diversified international funds do not outperform their market. Managers of regional and country funds, however, do not show the same ability to outperform. The study pointed out that emerging market funds do not exhibits significantly higher average or abnormal returns than developed market funds. Moreover, their volatilities are generally higher than those of funds investing in developed markets. Thus the result of the study showed that the performance depends on the underlying economic factors that are

#### Limitation of the study:

- 1. Any financial analysis will have a shelf life. This study also has limitations. They are:
- 2. The study is mainly covered the mutual funds and not other financial institutions.
- 3. The data collected is for limited period.
- 4. This study has been conducted and analyzed based on a set of available information which is governed by the time factor. As the time progress the data, based on which the analysis conducted is likely to vary and will have different implications.
- 5. The conclusion arrived on the subject is not exhaustive.

#### Stock exchange:

A stock exchange is an entity which provides "trading" facilities for stock brokers and traders, to trade stocks and other securities. Stock Exchanges are an organized marketplace, either corporation or mutual organization, where members of the organization gather to trade company stocks or other securities. Stock exchanges also provide facilities for the issue and redemption of securities as well as other financial instruments and capital events including the payment of income and dividends.

Theoretical background

#### Risk:

Risk and uncertainty are an internal part of an investment decision. Technically 'risk' can be defined as a situation where the possible consequences of the decision that is to be taken as known' uncertainty' is generally defined to apply to situation where the probabilities cannot be estimated. However, risk and uncertainty are used interchangeably. Risk is composed of the demands that bring in variations in return of income. The main forces contributing to risk are price and interest.

Risk is also influenced by external and internal considerations. External risks are uncontrollable and broadly affects investments. These external risks are called systematic risk. Risk due to internal environment of a firm or that affect a particular industry is referred to as unsystematic risk.

Risk mainly consists of two components:

- Systematic Risk
- Unsystematic Risk

Systematic risk is non-diversifiable and is associated with the securities market as well as the economic, sociological, political and legal considerations of the prices of all securities in the economy and the effect of these factors is to put pressure on all securities in such a way that the prices of stock will move in the same direction. For example, during a boom period, prices of all securities will rise indicate that the economy is moving towards prosperity.

Unsystematic risk is unique to a firm or industry and it does not affect an average investor. Unsystematic risk is caused by factors like labor strike, irregular disorganized management policies and customer preferences. These

factors are independent of the price mechanism operating in the securities market and the problems of both systematic risk and unsystematic risk are inherent in industries dealing with basic raw materials as well as in consumer goods industries.

Systematic risk:

Market risk, interest rate risks and purchasing power risk are grouped under systematic risk.

Market Risk: Market risk is referred to that proportion of total variability of return that is caused by the alternating forces of the bull and bear phases. Both tangible and intangible events can affect the market. During the bull and bear phases more than 80 percent of the securities' prices rise or fall along with the stock market indices.

Interest Rate Risk: Interest Rate Risk is the variation in the return caused by fluctuations in the market interest rate. There are four types of movements in prices of stocks in the market- (1) Long term, (2) Cyclical (Bull and Bear markets), (3) Intermediate or within the cycle and (4) Short term. The prices of all securities rise or fall depending on the change in interest rates.

Purchasing Power Risk: variations in return are caused also by the loss of purchasing power of the currency. Purchasing power risk is the probable loss in the purchasing power of the returns to be received. Inflation is the reason behind the loss of purchasing power.

#### Unsystematic Risk:

The importance of unsystematic risk arises out of uncertainty surrounding a particular firm or industry due to facts like labor strike, consumer preferences and management policies.

Business Risk: Business risk is that portion of unsystematic risk caused by the operating environment of the business. Variations in the expected operating income reflect business risks. Variations that occur in the operating environment are reflected in the operating incomes expected dividends. Business risks is concerned with the difference between revenue and EBIT.

Financial Risk: This refers to the variability in income vis-à-vis equity capital because of the debt capital. Financial risk is associated with the capital structure of the company. This structure consists of equity funds and borrowed funds. The presence of debt and preference capital results in a commitment of paying interest or a prefixed rate of dividend.

Tools used for analysis

Average return:

It is a change between present price and the previous price.

Return=[(Today's price-Yesterday's price)/ Yesterday's price]\*100

Standard deviation:

Standard deviation measures the spread or variability present in the sample. If all the numbers are very close to each other than the standard deviation is zero and if the numbers are well dispersed, the standard deviation will tend to be larger.

S.D: [(R-Ra)2/n-1]1/2

Beta:

The concept of beta for measuring the riskiness of a stock is, if an investor selects stock with low betas (i.e., (beta<1), then the investor will suffer less in a falling market. Of course, at the same time investor will also stand to gain less than the market average in rising market. In case an investor is prepared to take greater risk then he can choose stock with higher betas (beta>1) in order to gain more than the market average in a rising market. At the same time the investor should be prepared to lose more than the market average, in case the market crashes. However, it is desirable to choose stocks with betas varying between 0.5 and 1.5.

 $\beta = (R-Ra)(Rm-Rma)/(Rm-Rma)2$ 

Where Rm: market return

Rma: market average return

Treynor's Ratio:

Treynor's Ratio is a measure of returns earned in excess of over the risk free rate to the additional risk taken. To understand the treynor index, an investor should know the concept of characteristic line. The relationship between a given market return and the fund's return is given by the characteristic line. The fund's performance is measured in relation to the market permormance. Treynor's measures the performance of the fund with the help of the characteristic line.the higher the ratio the better the performance.

Treynor's Ratio= Ra-Rf/β

Correlation:

Correlation is a statistical measure of how two securities move in relation to each other and are used in advanced portfolio management. Perfectly positively correlation implies that as one security moves, either up and down, the other security will move in lockstep, in the same direction. Perfectly negatively correlation means that if one security moves in either direction the security that is perfectly negatively correlated will move in the opposite direction. If the correlation is zero, the movements in the securities are said to have no correlation.

$$\mathbf{r} = \begin{pmatrix} (\sum_{i}) - (\sum_{i}) & *\sqrt{\sum_{i}} - (\sum_{i}) \end{pmatrix}$$

$$\sqrt{(\sum_{i} - (\sum_{i}))} & *\sqrt{\sum_{i}} - (\sum_{i})$$

N= number of pairs of scores

 $\sum xy = \text{sum of the product of paired scores}$ 

 $\sum x = \text{sum of } x \text{ scores}$ 

$\overline{}$		•		
> y=	sum	Οİ	V	scores

- $\sum$ =sum of squared x scores
- $\sum_{i}$ =sum of squared y scores

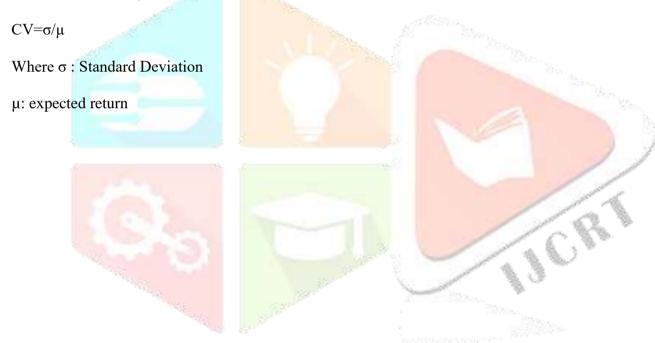
#### T-test:

T-test is one of the number of hypothesis tests to compare three or more variables. Here three funds are used that is Birla Mutual Fund, Sundaram Mutual Fund And UTI Mutual Fund which shows the performance of the funds with respect of market indices.

#### Coefficient of variation:

CV is a statistical measure of the dispersion of data points in a data series around the mean.

It represents the ratio of the Standard Deviation to the mean and it is useful statistic for comparing the degree of variation from one data series to another, even if the means are drastically different from each other. Lower the ratio of SD to mean, the better our risk-return tradeoff.



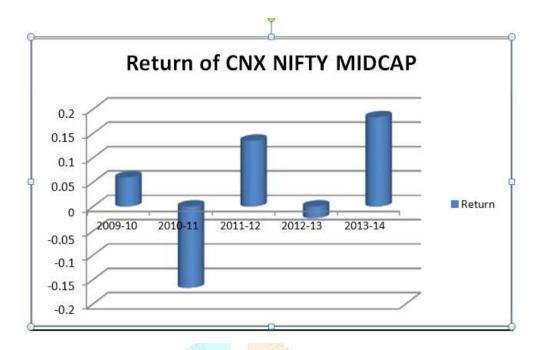
#### 4. ANALYSIS AND INTERPRETATION

TABLE 1: CALCULATION OF RISK AND RETURN OF CNX NIFTY MIDCAP

Month	n 2009-10	2010-11	2011-12	2012-13	2013-14
Apr	0.274152	0.18028	0.18028	0.165256	0.189087
May	-0.22718	-0.11515	-0.11515	0.03476	0.701624
Jun	0.207489	-0.03209	-0.03209	-0.33772	0.494612
Jul	0.162755	0.045083	0.045083	-0.31346	-0.08544
Aug	0.116966	-0.45324	-0.45324	-0.21471	0.067792
Sept	0.299354	-0.45324	-0.45324	0.285651	0.119796
Oct	0.13009	0.147981	0.147981	0.411008	0.180122
Nov	-0.30981	-0.55517	-0.55517	0.17876	0.243062
Dec	0.035241	-0.42949	-0.42949	0.280376	0.051664
Jan	-0.24756	-0.70957	-0.70957	-0.17329	-0.29376
Feb	-0.07994	-0.3588	-0.3588	-0.49869	0.159131
Mar	0.297738	0.34904	0.34904	-0.13125	0.411185
Year	Return	at it	and the same		
2009-	10 0.059	9427007	No.	. ac	China na n
2010-	11 -0.16	687665	A LL	The same of the	The value
2011-	12 0.135	5026391			Aur.
2012-	13 -0.02	376671			War.
2013-	14 0.183	3202257			



#### GRAPH: 1 SHOWING RETURN OF CNX NIFTY MIDCAP



#### INTERPRETATION:

The above graph represents return of CNX Nifty Midcap. The market had high returns during the year 2013-14 and no return during 2010-11 and 2012-13. We can see fluctuation in return between 2009 and 2014.



#### Details about the funds discussed

#### **BIRLA MIDCAP**

**Assets Allocation** 

Equity and equity related instruments- 92.5%

Money market and debt - 7.5%

#### Objective:

To achieve long term growth of capital at controlled level of risk by primarily investing in mid-cap stocks.

**Top 5 Holding** 

Name of holdings	Instrument	% of Net Assets
Union Bank of India	Equity	3.55
Solar Explosives	Equity	3.18
Simplex Infrastructure	Equity	3.14
Blue Star	Equity	2.68
Akruti City	Equ <mark>it</mark> y	2.4

**Top Five Sectors:** 

Top Tive Dectors.	
Sectors	% of Net Assets
Construction	16.56
Metal and Metal Products	13.09
Diversified	10.85
Services	8.93
Energy	7.76



TABLE 4: CALCULATION OF RISK AND RETURN OF UTI MUTUAL FUND

Month	2009-10	2010-11	2011-12	2012-13	2013-14
Apr	0.32083	0.61176	1.30849	1.51678	1.51678
May	0.85922	1.14385	1.06096	-3.07433	-3.07433
Jun	2.7097	0.57636	-2.45611	1.307	1.307
Jul	-0.3176	-0.9247	-2.92004	3.51141	2.4177
Aug	-1.01363	-1.71678	-1.602	1.95253	2.45763
Sept	-0.09908	-1.92144	3.12289	-3.78283	-1.96617
Oct	-0.09884	2.61212	0.58403	0.02747	0.02747
Nov	-0.79135	-0.50584	-1.37744	3.62923	3.62923
Dec	-0.4176	-0.33396	-1.3056	-2.2184	-2.2184
Jan	0.04811	-1.69249	-1.61743	1.53822	9.05157
Feb	1.36483	1.61918	0.91448	-1.2517	5.74598
Mar	0.35556	-0.58611	-1.06356	-0.98903	2.47065

Year	Return	Standard deviation	Beta
2009-10	0.23386	0.6761	0.3694
2010-11	-0.13288	0.52044	0.09287
2011-12	-0.43728	0.50667	0.1285
2012-13	0.06699	0.34196	0.35382
2013-14	0.42475	0.74129	0.81751

#### Calculation of risk and return:

Average Return: total return /n

3.108811248

Standard deviation:  $[\sqrt{}$ /n-1

0.55729123

Beta: 
$$\beta = ( - )( - )/( - )$$

0.352420305

Treynor Ratio=Ra-Rf/B

-12.6659806

Coefficient of variation=σ/μ

= 0.606055691

**Coefficient of correlation (r):** 

$$r = \frac{\sum (X - \overline{X})(Y - \overline{Y})}{\sqrt{\sum (X - \overline{X})^2} \sqrt{(Y - \overline{Y})^2}}$$

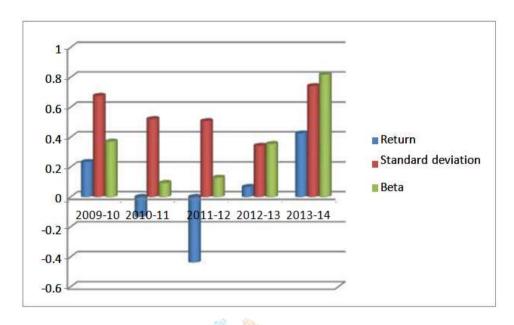
Where,  $\overline{X}$  = mean of X variable

 $\overline{Y}$ =mean of Y variable

=0.06044854



#### GRAPH: 4 SHOWING RISK AND RETURN ANALYSIS OF UTI MUTUAL FUNDS:



#### INTERPRETATION:

The above graph tells us that the company's return is more in 2013-14 and more fluctuations in beta values of the company and, in 2010-11 and 2011-12 we can see a negative return or no return in the company.

### Portfolio performance:

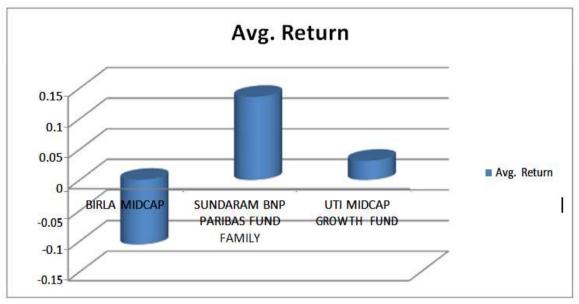
**Top 5 Holdings:** 

BIRLA	SUNDARAM BNP PARIBAS	UTI THEMATICS
Union Bank of India	Welspum Gujarat Sathl Rohen	Gujarat Development Mineral Corporation
Solar Ex <mark>pl</mark> osives	Tata Chemicals	Rallis India
Simplex Infrastructure	Union Bank of India	Rupin Commodities
Blue Star	Federal Bank	Jyothi Structure
Akruti City	Madhucon Projects	Lupin ltd
Top 5 sectors:	1000	Section of the sectio
BIRLA	SUNDARAM BNP PARIBAS	UTI THEMATICS
Financial Services	Metal and Metal Products	Construction
Diversified	Construction	Metal and Metal Products
Construction	Financial Services	Diversified
Metal and Metal Products	Services	Services
Services	Chemicals	Energy

#### TABLE5: COMPARISION OF RETRUN OF ALL THE 3 MUTUAL FUNDS:

	BIRLA MIDCAP	SUNDARAM BNP PARIBAS FUND FAMILY	UTI MIDCAP GROWTH FUND
Avg. Return	-0.105427352	0.135474871	0.031088112

#### **COMPARISION OF** RETURN OF ALL THE 3 MUTUAL FUNDS **GRAPH:5 SHOWING**



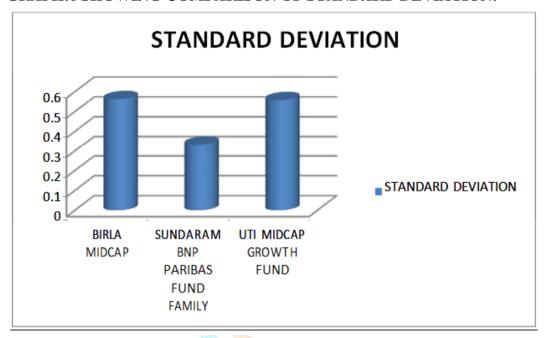
#### INTERPRETATION:

Average is one of the forms to measure the risk. This above graph shows that Sundaram has average of 13.54%, birla has -10.54% and UTI Thermatic has 3.10%. As the average of sundaram is more, the return of that fund will also be more as compared to others.

TABLE6: COMPARISON OF STANDARD DEVIATION OF ALL THE 3 MUTUAL FUNDS:

TIBLEO. COM TIKE	BIRLA MIDCAP	SUNDARAM BNP PARIBAS FUND FAMILY	UTI MIDCAP GROWTH FUND
STANDARD DEVIATION	0.562353077	0.332647	0.55729123

#### GRAPH:6 SHOWING COMPARISON OF STANDARD DEVIATION:



#### INTERPRETATION:

Standard deviation is one the measures of calculating the risk. This above graph shows UTI has a standard deviation of 55.72%, Sundaram has 33.26% and Birla has 56.23%. Birla has high standard deviation where the risk is more and Sundaram has SD where the risk is less.

#### 5. SUMMARY OF FINDINGS

- 1. Sundaram Midcap Mutual Fund is popular among investors because performance is better as compared to other funds related risk and return analysis made.
- Union Bank of India is included in top five holdings of Sundaram and Birla Mutual Fund Schemes because it is providing better investments made.
- 3. Birla has the highest Standard Deviation and average expected return which tells there is high risk. But Sundaram has moderate risk and highest return as compared to Birla and UTI Mutual Funds.
- The Beta of UTI, Birla and Sundaram is below one, which says they are conservative in nature.
- 5. The metal and metal product sector, construction sector and diversification have been included in top five in all Mutual Fund Schemes.
- 6. By calculating the correlation, it is found that all the three funds (Birla, Sundaram and UTI) are showing positive sign, which indicates that the funds and nifty are positively correlated. Also the correlation tells that all the three variables are moving towards the same direction. When Nifty increases, funds also increases in the market and moves in the same direction.

#### 6. RECOMMENDATION

In a nutshell, the Birla fund does not display characteristics of being aggressive, especially given amount of diversification and the kind of midcaps it invests in.

It is advisable for an investor to buy more shares of Sundaram, since it has higher return compared to other funds, risk is also low unlike other funds.

UTI is high, wherein the investor gives the last preference to this fund.

It is also found that that CV of

All the three Mutual Funds that is Birla, Sundaram and UTI is performing as per the market indices.

#### Conclusion

The primary motive of the security analysis is to analyze the security from the point of view of their price, risk and returns. The security analysis helps to predict the national economy, because economic activities affect the corporate profit, investor's attitudes and expectations as well as ultimately security prices. It establishes linkage between activity and stock market, because the overall economic manifests itself in the behavior of in general.

However from the above data analysis and interpretation it can be concluded that:

- 1. The investors should be aware before investing in equity funds, since the risk and return factors plays a major role based on the fluctuations of the market.
- 2. More inflow to the stock market has lead to an increase in the shares of the funds.
- 3. There are other factors such as interest rates, global factors, market sentiments, performance of the company, natural calamities etc., which affect the share prices of Indian stock market.

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