

# Long Term Performance of Equity Based Mutual Funds (Systematic Investment Plan)



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*This study focuses on the problem of mutual fund selection by investing the secret 'striking it rich' and high potential return funds among equity based mutual funds SIP (large cap, small & mid cap, diversified equity, thematic-infra, ELSS etc.), choice of fund based on performance & reputation of funds remains to be probed. Hypothetical assumption is that the Systematic Investment Plan is the best way to build up capital over a period of time for those who don't have lump sum amount to invest as the risk will be reduced in to investing long term equity based mutual funds SIP.*

**KeyWords:** Systematic Investment Plan, Long Term Performance of Mutual Fund, Financial Planning, Diversification of Risk

## 1. Introduction

### 1.1 Background of Research

In a country most of domestic savings go in to bank deposits, post office deposits & provident fund etc. Small investors are still not aware that inflation eats into a chunk of their saving & they need instruments that give healthy inflation adjusted returns. Very few investors are doing proper planning & determining investment objectives at right time investing systematically in the right avenues but the most of investors are not investing their money with proper financial planning. Mutual fund is one of the options for investors to invest their money into equity based mutual fund schemes. Mutual funds are a vehicle to mobilize money from investors, to invest in different market securities in line with investment objectives of mutual fund companies & investors. The most of mutual fund houses of objectives is to seek long term capital appreciation by investing in a portfolio that is substantial investment in equity & equity related securities of large cap, mid & small cap, diversified equity, thematic infrastructure, tax saving funds, etc.

Mutual fund companies save the interest of the investors by taking care of their investment with good returns. The fund manager has the flexibility to choose the investment portfolio, within the parameter of the investment objectives of the scheme. In the long run equity market is a good barometer of the economy but in short run markets can get fluctuating & volatile in nature which leads to greed and fear.

### 1.2 Motivation for Research

When several investors entrant in the market the question is to selecting the best choice of equity based mutual fund SIP. Study is focused on this problem of mutual fund selection by investing the secret 'striking it rich' and high potential return funds among equity based mutual funds SIP (large cap, small & mid cap, diversified equity, thematic-infra, ELSS and sector schemes etc.) & choice of fund based on performance & reputation of funds remains to be probed.

Systematic Investment Plan (SIP) is the best way to build up capital over a period of time for those who don't have lump sum amount to invest as the risk will be reduce in to investing long term equity based mutual funds SIP. SIP plans will build up investors gradually drop by drop. Here is equity funds best suited for the SIP Route. SIPs are the best way to build up a good corpus. Different equity based mutual fund growth schemes like large cap, Small & midcap, diversified equity, thematic infrastructure, ELSS and sector funds etc will be suited for SIP.

Equity based small and midcap funds offer the maximum scope for capital appreciation. There is lot of scope for investors residing in India.

- 1) Diversified equity growth funds is category of funds that invest in a diverse mix of securities cut across sectors like large cap, small & mid cap, micro cap and multi cap etc.
- 2) Sector funds invest only specific sectors like banking funds, Pharma funds, FMCG funds, etc.
- 3) Thematic funds invest in the line of investment theme. Like infrastructure thematic funds invest in the shares of companies that are infrastructure construction, cement, steel, telecom, power etc.
- 4) Equity linked saving schemes (ELSS) offer tax benefits to investors. However, the investors are expected to invest their money for at least three years.

## 2. Objectives of the Study

1. To evaluating and comparative analysis of the long term performances of selected equity based mutual funds SIP. ( Large cap, Small & Mid cap, Diversified Equity, Thematic Infrastructure, ELSS and Sector funds )

2. To identify the investment in equity based mutual fund Systematic investment plans (SIP) that can gain momentum and increase percentage of income.
3. To find out what way is the risk minimized in long term performance of Equity based mutual fund (SIP).

### 3. Research Methodology

#### 3.1 Literature Review

For the purpose of establishing a good conceptual framework, a comprehensive literature review has been carried out. Researcher advices to use Beta- coefficient instead of the total risk to measuring return. The argument is that using only naïve diversification, the unsystematic variability of returns of the individual assets in a portfolio typically averages out to zero. So, it is considered that measuring a portfolio's return relative to its systematic risk is more appropriate. (Treyner 1965) Measured the performance as the return in excess of the equilibrium return mandated by Capital Asset Pricing Mode. ( Jensen 1968). The Mutual Fund Performance shows the how the investor trade on unit, would Fund provided same return liked capital market provide. (Jayadev, M 1996). Research provides a viewpoint on not only to invest in mutual funds but also to select the right funds while designing a portfolio. (B. Sravana Kumar 2007). The attempt was to evaluate the financial performance of Mutual fund schemes on different parameters. Also she points out the importance of system of rating such as CRISIL to ensure that an investor gets an unbiased opinion on the funds. (Abhilashita Rao 2008). Systematic Investment Plan (SIP) is a regular investment plan enabling an investor to purchase units of a mutual fund scheme. This strategy is primarily modeled with the underlying concept of rupee-cost averaging. This unique strategy facilitates investors to restrict their unit purchase in a rising market and expands them in a falling market. According to the article the disciplined mechanism like SIP helps long term investors to reap good returns over a Period of time." (Garima Gupta and Prabhjot Kaur 2008)

They compared the performance of public and private sponsored nineteen ELSS mutual funds by using the Sharpe ratio and using S&P CNX Nifty as a market benchmark of six years (2003-2008). The study indicated that the private sponsored funds were able to outperform public sponsored funds. (Bapna, Yogesh Mehta & Visal Sood 2010). Research focused on financial performance analysis of Mutual fund schemes of selected banks. Performance through the statistical parameters (std. deviation, Beta and Alpha) ratio analysis (sharp ratio, Treynor ratio and Jensen ratio) recommended investors based on past performance analysis. ( Dr. Nilima Thasan and M.R. Kumar Gandhi 2012). They studies three different sector funds, which can offer high returns as well as pose high risk to the investor. Evaluate the performance of three different sector funds viz. banking, Pharma and FMCG for a period 2004 to 2011. This paper also compares the benchmark returns with the return of the fund. Conclusions are drawn from the sample analyses. Significance evidence concludes that the mean returns of fund matches with the index returns. (Prof. Milind V. Dalvi, Dr. Girija Shankar and Prof. Vishal Pradhan. 2012)

Concluded that the two growth funds have not performed better in terms of total risk and the funds are not offering advantages of diversification to the investors. The performance of Birla sun life dividend yield plus is poor. Birla sun life India Gen next fund- Growth is well diversified and has reduced its risk where as birla sun life India Gen Net fund- Growth did not. (Anuj Kumar and Rahat Ali 2013). To evaluate the performance of different mutual fund schemes on the basis of returns & comparison with their benchmark and also to appraise the performance of different category of funds using risk adjusted measures as suggested by Sharpe, Treynor and Jeanson. The study revealed the investors for investment below 2 years can choose large cap schemes and investment beyond 3 years can be made in small & mid cap schemes. (Dr. R. Karrupasamy & Professor V. Vanaja 2013).

#### 3.2 Secondary Research and Data Analysis

The most of information collected the factsheet of different mutual fund houses by using various websites like [www.valueresearchonline.com](http://www.valueresearchonline.com), [www.moneycontrol.com](http://www.moneycontrol.com), [www.mutualfundindia.com](http://www.mutualfundindia.com), etc. and also from the various publications of government of India, RBI, SEBI, AMFI and also from relevant reports, periodicals, and newspapers are collected and analyzed.

##### 3.2.1 Comparing and Evaluate Long Term Performance of Mutual Funds within the Various Equity Based Categories represent

Literature suggests that the different equity based mutual fund schemes seem to have the following potential risks.

1. Diversified equity funds have multiple sectors. Even if a few sectors poorly perform, other better performing sectors can make up. Diversified equity funds are less risky than sector funds.
2. Thematic funds are variation of sector funds. Here the investment as per thematic infrastructure fund, there is multiple sectors, like power, transportation, cement, steel, contracting in real estate are connected to infrastructure.
3. Mid-cap funds which are less liquidity and less researched in the market than the large cap fund. Thus the liquidity risk is more in such portfolio. As they are not strong as the frontline stocks, they become riskier during volatile market.
4. Sector fund suffers from concentration risk, the entire investment is in a single sector. If the sector performs poorly, then the scheme returns are seriously affected.

The following tools are available for performance evaluation & comparative analysis of different equity based mutual fund schemes.

- **Fluctuation in returns is used as measure of risk.** The fluctuation in returns can be assessed in relation to itself or in relation with benchmark. So the following measures are commonly used.

- **Standard Deviation:** To measure the fluctuation in periodic returns of a scheme to its own average return. Mutual funds with low standard deviation are considered as less volatile than one with high standard deviation.
- **Beta:** measures the fluctuation in periodic returns in the scheme, as compared to fluctuation in periodic return of a diversified stock index over the same period. The diversified stock index has beta 1. Schemes, whose beta is more than 1, are seen as more volatile than the market. Or less than 1 is considered as less volatile than the market.
- **Sharpe ratio:** an investor invests with government, and earns a risk free return. T- Bill index is a good measure of this risk free return. Through investment in scheme, a risk is taken, and return earned. The difference between two returns is risk premium. Sharpe ratio uses standard deviation as a measure of risk. So higher the Sharpe ratio better the scheme is considered or vice versa.
- **Alpha:** if the fund produces expected return at the level of risk assumed. The fund would have Alpha equal to zero. A positive Alpha indicates that the fund manager produced return greater than expected for the risk taken.
- **Benchmark:** benchmark is considered for comparison with schemes return. In this study used different benchmark for different category benchmark use for large cap

### 3.2.2 Equity based Mutual Funds Category

**Group1- Large Cap Equity mutual fund:** This study selected ten schemes which are operating from last five years for the period 2009 to 2014 on basis of top returns and benchmark returns. Use as benchmark in this category Viz. CNX Nifty, S&P BSE100, S&P BSE200.

**Table 3.2.1** Equity Large-Cap Mutual Fund Schemes based on the Annual Compounded Returns of 5 years & Rest Data is avg. of 5 Years.

Large cap Schemes	Return (%pa)	Mean	Std.dev	Sharpe	Beta	Alpha
ICICI Pru F focused Bluechip Eqty-IO	17.77	20.95	15.28	0.93	0.9	5.58
ICICI Pru Focused Bluechip Eqty (G)	16.60	20.09	15.26	0.87	0.9	4.73
UTI Equity Fund (G)	15.90	21.3	15.7	0.92	0.92	5.78
Birla Sun Life Top 100 (G)	15.80	22.5	17.51	0.9	1.03	5.94
UTI Opportunities Fund (G)	15.70	19.49	14.82	0.86	0.85	4.61
BNP Paribas Equity Fund (G)	15.50	21.47	14.97	0.98	0.84	6.67
Can Robeco Equity Divers (G)	15.40	18.64	15.6	0.76	0.9	3.27
L&T Equity Fund (G)	15.10	18.69	16.64	0.71	0.97	2.64
ICICI Pru Top 100 Fund (G)	15.10	21.79	16.54	0.91	0.95	5.95
Birla SL Frontline Equity (G)	14.80	21.69	16.72	0.89	0.99	5.49
CNX Nifty	10.73	16.94	16.94	0.6		
Category	11.62	16.97	16.05	0.64	0.94	1.23
S and P BSE 100	10.32	16.89	17.54	0.58		
Category	14.20	25.8	20.63	0.94	1.07	8.87
S & P BSE 200	10.29	16.61	17.75	0.55		
Category	13.41	19.52	16.68	0.77	0.96	3.64

Sources: [www.moneycontrol.com](http://www.moneycontrol.com) , [www.valueresearchonline.com](http://www.valueresearchonline.com)

As per table no.3.2.1, it clear that the annual compounded returns value range from 17.17% to 14.80 %. The highest returns of returns of the ICICI Pru focused Bluechip equity growth is 17.7% and followed by ICICI Pru focused (G) & UTI Equity fund (G) respectively returns are 16.60% and 15.90%. Table clear that the schemes are outperformed which is more than benchmark & category returns. The standard deviation of all the schemes ranges from is less than the benchmark index and category standard deviation it means all the schemes are less volatile.

Beta is the coefficient of mutual funds volatility. All the schemes of beta range from 1.03 to 0.84 which is less than one except Birla sun life top 100, however all schemes are less risky. Schemes Sharpe ratio ranges from 0.98 to 0.71 which is higher than the category and benchmark so all the schemes has a reward that the risk standard of its peers. All schemes Alpha ranges from 6.67 to 2.64 are positive & outperformed well. As per the comparison of all the above schemes it clear that all schemes returns are up to mark. Investor can invest their money into higher schemes like ICICI Pru focused Bluechip equity (G) followed by ICICI Pru focused (G) & UTI Equity fund (G) of large cap equity based mutual fund where risk is low .

**Group2-Small & Mid Cap Equity Mutual Fund:** For this study selected ten schemes which are operating in the market from last five years for the period 2009 to 2014 on basis of top returns and benchmark returns. Use as benchmark in this category Viz. CNX midcap, S&P BSE small cap.

**Table 3.2.2** Equity Small & Midcap Mutual Fund Schemes based on the Annual Compounded Returns of 5 Years & rest Data is avg. of 5 Years

Small and Midcap Schemes	Returns(%pa)	Mean	Std.dev	Sharpe	Beta	Alpha
DSP-BR Micro Cap Fund - RP (G)	26.2	29.26	21.45	1.05	1.09	12.12
Can Robeco Emerg-Equities (G)	25.60	30.94	21.96	1.1	1.08	13.86
Religare Invesco Mid N SmallCap (G)	25.00	27.92	19.45	1.09	1.03	11.36
HDFC MidCap Opportunities (G)	23.60	27.29	18.56	1.1	0.98	11.15
Franklin (I) Smaller Cos (G)	23.20	33.65	19.27	1.39	1.03	17.12
BNP Paribas Mid Cap Fund (G)	23.10	28.9	18.7	1.18	1.01	12.55
ICICI Pru Value Discovery Fund (G)	23.10	29.93	19.11	1.21	1.00	13.62
Birla Sun Life MNC Fund (G)	22.80	25.5	17.54	1.07	0.85	10.62
Religare Invesco Mid Cap (G)	22.60	26.72	19.82	1.01	1.03	10.14
UTI Mid Cap (G)	22.60	30.28	20.91	1.12	1.05	13.48
S & P BSE small cap	8.56	15.31	25.6	0.33		
Category	18.82	25.8	20.63	0.94	1.07	8.87
CNX Midcap	11.35	16.66	23.16	0.43		
Category						

Sources: [www.moneycontrol.com](http://www.moneycontrol.com) , [www.valueresearchonline.com](http://www.valueresearchonline.com)

As per table no.3.2.2 it clear that the annual compounded returns value range from 26.20% to 22.60 %. The highest returns of the DSP-BR micro cap fund (G) are 26.60% and Can Robeco Emerg. Equity (G) & Religare Invesco mid and small cap (G) respectively returns are 25.60% and 25.00%. Table clear that the schemes are outperformed which is more than benchmark & category returns. The standard deviation of all the schemes ranges are less than the benchmark index and category standard deviation it means all the schemes are less volatile. Beta is the coefficient of mutual funds volatility. All the schemes of beta range from 1.09 to 0.8 which is more than one, however all schemes are slightly high risky. Schemes Sharpe ratio ranges from 1.39 to 1.05 which is higher than the category and benchmark so all the schemes has a reward that the risk standard of its peers. All schemes Alpha ranges from 17.12 to 10.14 are positive & outperformed well. As per the comparison of all the above schemes it clear that all schemes returns are up to mark. Investor can invest their money into higher returns schemes like DSP-BR micro cap fund (G), Can Robeco Emerg. Equity (G) & Religare Invesco mid and small cap (G) small & midcap equity based mutual fund where risk is slightly high .

**Diversified Equity Mutual Fund:** This study selected 10 schemes which are operating from last five years for the period 2009 to 2014 on basis of top returns and benchmark returns. Use as benchmark in this category Viz. CNX 500 and CNX Service sector.

**Table 3.2.3** Diversified Equity Mutual Fund Schemes based on the Annual Compounded Returns of 5 years & Rest Data is avg. of 5 Years

Diversified Equity Schemes	Returns(%pa)	Mean	Std.dev	Sharpe	Beta	Alpha
UTI MNC Fund (G)	22.70	24.32	15.81	1.11	0.72	10.17
ICICI Pru Exp&Other Services-RP (G)	21.90	31.57	17.07	1.45	0.63	18.81
Reliance Equity Oppor - RP (G)	21.70	24.7	18.18	0.99	0.98	8.6
Birla SL India GenNext (G)	19.70	22.63	16.26	0.97	0.87	7.6
Franklin High Growth Cos (G)	18.80	28.1	18.27	1.17	1.04	11.46
Mirae (I) Opportunities-RP (G)	18.00	23.05	16.34	1.00	0.95	7.21
ICICI Pru Dynamic Plan - Inst.	17.70	21.17	15.44	0.93	0.86	6.24
BNP Paribas Dividend Yield (G)	17.00	20.8	15.23	0.92	0.83	6.11
Franklin India Prima Plus (G)	16.70	20.97	15.64	0.91	0.9	5.61
Quantum Long-Term Equity (G)	16.70	20.88	16.28	0.87	0.93	5.23
CNX 500	10.40	16.88	18.26	0.55		
Category	11.50	20.33	18.75	0.75	1.03	3.72
CNX Service sector	12.01	17.55	17.6	0.61		
CNX MNC	14.25	20.33	17.79	0.76		
CNX 200	10.20	16.81	18.14	0.55		
Category	12.20	20.33	18.75	0.75	1.03	3.72
CNX NIFTY	10.73	16.94	16.94	0.6		

Sources: [www.moneycontrol.com](http://www.moneycontrol.com) , [www.valueresearchonline.com](http://www.valueresearchonline.com)

As per table no.3.2.3 it clear that the annual compounded returns value range from 22.70% to 16.70 %. The highest returns of returns of the UTI MNC fund growth is 22.70% and followed by ICICI Pru Export & other services (G) & Reliance equity opportunity (G) respectively returns are 21.90% and 21.70%. Table clear that the schemes are outperformed which is more than benchmark & category returns. The standard deviation of all the schemes ranges from is less than the benchmark index and category standard deviation it means all the schemes are less volatile.

Beta is the coefficient of mutual funds volatility. All the schemes of beta range from 1.04 to 0.64 which is less than one except Franklin high growth cos. (G), however all schemes are less risky. Schemes Sharpe ratio ranges from 1.45 to 0.87 which is higher than the category and benchmark so all the schemes has a reward that the risk standard of its peers. All schemes Alpha ranges from 18.81 to 5.23 are positive & outperformed well. As per the comparison of all the above schemes it clear that all schemes returns are up to mark. Investor can invest their money into higher schemes like UTI MNC fund (G), ICICI Pru Export & other services(G) and Reliance Equity opportunity regular (G) of Diversified equity based mutual fund where risk is low .

**Group4-Thematic Infrastructure Equity mutual fund:** This study selected 9 schemes which are operating from last five years for the period 2009 to 2014 on basis of top returns and benchmark returns. Use as benchmark in this category Viz. CNX Infra., S&P BSE Oil & gas.

**Table 3.2.4** Equity Thematic Infrastructure Mutual Fund Scheme based on the Annual Compounded Returns of 5 Years & Rest Data is avg. of 5 Years.

Thematic Infrastructure Schemes	Returns(%pa)	Mean	Std.dev	Sharpe	Beta	Alpha
Franklin Build India Fund (G)	19.30	29.89	20.33	1.14	1.13	12.39
Can Robeco Infrastructure (G)	12.00	17.81	22.99	0.48	1.18	-0.16
PineBridge Infra&Eco. Reform-SP (G)	11.50	18.18	23.27	0.49	1.15	0.5
Birla SL Infrastructure (G)	9.40	20.46	26.34	0.52	1.45	-0.14
DSP-BR Natural Resources-RP(G)	9.30	11.07	21.08	0.2	1.01	-5.31
DSP-BR India TIGER - RP (G)	8.30	18.39	26.92	0.43	1.49	-2.56
HDFC Infrastructure Fund (G)	7.90	19.99	31.89	0.41	1.75	-3.38
ICICI Pru Infrastructure (G)	7.80	16.98	24.93	0.41	1.34	-2.57
Taurus Infrastructure (G)	6.60	15.84	26.3	0.34	1.42	-4.4
CNX Infra	-1.21	7.83	24.43	0.04		
Category	6.84	15.49	25.3	0.35	1.36	-4.24
S & P BSE oil and gas	1.37	11.76	20.47	0.24		

Sources: [www.moneycontrol.com](http://www.moneycontrol.com) , [www.valueresearchonline.com](http://www.valueresearchonline.com)

As per table no.3.2.4 it clear that the annual compounded returns value range from 19.30% to 6.60 %. The highest returns of the Franklin Build India fund (G) is 19.30% and followed by Can Robeco Infra., (G) & Reliance investment infra., (G) respectively returns are 12.00% and 11.50%. Table clear that the schemes are outperformed which is more than benchmark & category returns. The standard deviation of all the schemes ranges from is less than the benchmark index and category standard deviation it means all the schemes are less volatile.

Beta is the coefficient of mutual funds volatility. All the schemes of beta range from 1.75 to 1.02 which is more than one, however all schemes are high risky. Schemes Sharpe ratio ranges from 1.14 to 0.20 which is higher than the category and benchmark so all the schemes has a reward that the risk standard of its peers. All schemes Alpha ranges from 12.39 to -5.31 are negative & underperformed except Franklin Build India fund (G). As per the comparison of all the above schemes it clears that all schemes returns are not up to mark. Investor can invest their money into higher scheme Franklin Build India fund (G) of thematic infrastructure large cap equity based mutual fund where risk is low .

**Group5-ELSS Tax saving Equity mutual fund:** This study selected ten schemes which are operating from last five years for the period 2009 to 2014 on basis of top returns and benchmark returns.

**Table 3.2.5** Tax Saving Mutual Fund Schemes based on the Annual Compounded Returns of 5 years & Rest Data is avg. of 5 Years

ELSS Tax saving Schemes	Returns(%pa)	Mean	Std.dev	Sharpe	Beta	Alpha
Reliance Tax Saver (ELSS) (G)	21.20	30.17	24.26	0.96	1.26	11.38
ICICI Pru Tax Plan (G)	18.80	23.68	17.88	0.94	0.99	7.54
Religare Invesco Tax Plan (G)	17.70	21.98	16.41	0.93	0.92	6.43
Franklin India Tax Shield (G)	17.70	20.96	15.13	0.94	0.87	5.9

<u>BNP Paribas Long Term Equity (G)</u>	17.00	22.87	15.43	1.04	0.81	7.84
<u>Quantum Tax Saving Fund (G)</u>	16.60	21.16	16.2	0.89	0.93	5.58
<u>Can Robeco Eqty TaxSaver (G)</u>	16.60	19.86	15.3	0.85	0.89	4.66
<u>HDFC Long Term Advantage (G)</u>	16.10	21.14	16.64	0.86	0.96	5.26
<u>HDFC Tax Saver (G)</u>	15.70	21.64	19.02	0.78	1.05	4.85
<u>DSP-BRTax Saver Fund (G)</u>	15.50	23.36	17.11	0.97	0.99	7.22

Sources: [www.moneycontrol.com](http://www.moneycontrol.com), [www.valueresearchonline.com](http://www.valueresearchonline.com)

As per table no.3.2.5 it clear that the annual compounded returns value range from 21.20% to 15.50 %. The highest returns of the Reliance TaxSaver (G) is 21.20% and followed by ICICI Pru tax plan (G) & Religare Invesco Tax plan (G) respectively returns are 18.80% and 17.70%. Table clear that the schemes are outperformed which is more than benchmark & category returns. The standard deviation of all the schemes ranges from is less than the benchmark index and category standard deviation it means all the schemes are less volatile. Beta is the coefficient of mutual funds volatility. All the schemes of beta range from 1.27 to 0.87 which is less than one except the Reliance TaxSaver (G), however all schemes are less risky. Schemes Sharpe ratio ranges from 1.04 to 0.85 which is higher than the category and benchmark so all the schemes has a reward that the risk standard of its peers. All schemes Alpha ranges from 11.38 to 4.66 are positive & outperformed well.

As per the comparison of all the above schemes it clear that all schemes returns are up to mark. Investor can invest their money into higher schemes like the Reliance TaxSaver (G), ICICI Pru Tax (G) & Religare Invesco Tax plan (G) of Tax saver equity based mutual fund where risk is low.

**Group6 Equity Sector Mutual Fund:** This study selected ten schemes which are operating from last five years for the period 2009 to 2014 on basis of top returns and benchmark returns. Use as benchmark in this category Viz. CNX FMCG, B & S BSE FMCG.

**Table 3.2.6** Equity Sector Mutual Fund Schemes based on the Annual Compounded Returns of 5 Years & Rest Data is avg. of 5 years.

Equity Sector Schemes	Returns(%pa)	Mean	Std.dev	Sharpe	Beta	Alpha
<u>UTI Transportation and Logistics Fund</u>	29.77	37.61	23.7	1.3	1.14	20.01
<u>SBI FMCG Fund</u>	28.83	24.69	14.68	1.22	0.88	5.74
<u>SBI Pharma Fund</u>	28.48	29.30	17.43	1.05	0.87	9.42
<u>Reliance Pharma Fund</u>	26.62	27.40	17.85	1.12	0.82	7.55
<u>ICICI Prudential Technology Fund</u>	25.10	29.21	18.12	1.24	0.70	11.05
<u>UTI Pharma and Healthcare Fund</u>	24.19	24.99	13.58	1.34	0.92	-2.71
<u>ICICI Prudential FMCG Fund</u>	24.00	20.75	13.85	1.01	0.85	2.17
<u>Birla Sun Life MNC Fund</u>	23.82	25.5	17.54	1.07	0.85	10.65
<u>UTI MNC Fund</u>	23.22	24.32	15.81	1.11	0.72	10.7
<u>Franklin Build India Fund</u>	19.83	29.89	20.33	1.14	1.13	12.39
CNX FMCG	23.47	23.16	15.8	1.04		
Category	26.43	22.72	14.27	1.11	0.86	3.95
S & P BSE FMCG	22.40	22.3	15.72	0.99	1.95	
Category	26.42	22.72	14.27	1.11	0.86	3.95

Sources: [www.moneycontrol.com](http://www.moneycontrol.com), [www.valueresearchonline.com](http://www.valueresearchonline.com)

As per table no. 3.2.6 it clear that the annual compounded returns value range from 29.77% to 19.83 %. The highest returns of returns of the UTI Transport & logistic fund (G) is 29.77% and followed by SBI FMCG fund (G) & SBI Pharma fund (G) respectively returns are 28.77% and 28.83%. Table clear that the schemes are outperformed which is more than benchmark & category returns. The standard deviation of all the schemes is more than the benchmark index and category standard deviation it means all the schemes are high volatile. Beta is the coefficient of mutual funds volatility. All the schemes of beta range from 1.14 to 0.70 which is less than one except UTI Transport & logistic fund (G). However, all schemes are less risky.

Schemes Sharpe ratio ranges from 1.30 to 0.86 which is higher than the category and benchmark so all the schemes has a reward that the risk standard of its peers. All schemes Alpha ranges from 20.01 to -2.71 are positive & outperformed well except UTI Pharma & Healthcare. As per the comparison of all the above schemes it clear that all schemes returns are up to mark. Investor can invest their money into higher schemes UTI Transport & logistic fund (G), SBI FMCG Fund & SBI Pharma.

**2.2.2 Systematic Investment Plan (SIP) ;** performance evaluation of SIP plan through collected data from returns calculator [www.moneycontrol.com](http://www.moneycontrol.com), the data taken for last five year information related to NAV of various schemes from various category of Equity Based mutual fund from 1 Nov 2009 to 31 Oct 2014

**Table 3.2.7 Comparison of Systematic Investment Plan & one Time Investment based on SIP Per Month Rs. 1000 for 5 Years without Interrupt**

Equity based Mutual Fund Schemes	SIP Invest.(Rs)	return (%PA)	SIP value(Rs)	One time invite.(Rs)	First NAV	Last NAV	Total Value(Rs)
ICICI Pru. Focused Bluechip equity (G)	60,000	20.62	1,01,063	60,000	12.35	29.95	1,45,506
ICICI Pru. Focused (G)	60,000	21.58	1,03,473	60,000	12.17	28.34	1,39,720.6
UTI Equity fund (G)	60,000	21.79	1,04,473	60,000	42.62	96.55	1,35,922
DSP-BR Micro cap fund (G)	60,000	32.56	1,43,926	60,000	9.985	33.36	2,00,478.72
Can Robeco Emerging Equity (G)	60,000	32.4	1,34,461	60,000	41.57	90.33	1,30,377.67
Religare Invesco mid & small cap (G)	60,000	29.88	1,26,598	60,000	9.62	30.91	1,92,785.863
HDFCFC Midcap Opportunity (G)	60,000	29.64	1,25,822	60,000	10.667	32.9	1,85,056
UTI MNC F UND (G)	60,000	27.94	1,20,991	60,000	42.23	122.9	1,74,552.688
ICICI Pru. Export & other service (G)	60,000	30.98	1,30,161	60,000	13.97	39.68	1,70,422
Franklin Build Infra. Fund (G)	60,000	29.95	1,26,883	60,000	10.166	25.3	1,49,291.75
ICICI Pru. Tax plan (G)	60,000	23.523	1,08,523	60,000	103.48	259.4	1,50,411.67
Religare Invesco Tax Plan (G)	60,000	23.14	1,07,635.82	60,000	13.27	31.83	1,43,918.6
UTI Transport & Logistic Fund	60,000	40.49	1,62,950.91	60,000	9.73	77.74	4,79,383
SBI Pharma Fund (G)	60,000	33.22	1,37,271.13	60,000	31.28	111.8	2,14,373

*Source: www.moneycontrol.com*

As per table no.3.2.7 supposed to be one of investor start their investment through SIP from 1 Nov 2009 & the same investor invest one time. After calculations it is clear that both way investors can earn good amount.

#### 4. Observation and Findings

- Long term returns of large cap equity growth fund schemes are comparatively less than small & mid cap, Tax Saving fund schemes & equity sector fund schemes. But this schemes risk is low as compare to small & mid cap, equity sector fund schemes.
- Investors those who don't want to take big risk they can invest their money into large cap equity schemes like ICICI Pru focused Bluechip equity (G) followed by ICICI Pru focused (G) & UTI Equity fund (G) .
- This research shows that long term return of midcap & small cap funds, some schemes are giving high returns as compared to other equity based mutual fund which is generally in probe & neglect investors.
- Investor can invest their money into higher returns schemes like DSP-BR micro cap fund (G), Can Robeco Emerg. Equity (G) & Religare Invesco mid and small cap (G) small & midcap equity based mutual fund where risk is slightly high.
- Present Researchers found that the high-return funds which are "striking it rich" is the way to invest in equity sectors fund schemes & small cap & midcap funds. The investors those who can afford high risk investment may have the result of equity sector fund & small & midcap fund which have high potential return on mutual funds.
- The highest-return funds are Equity Sector fund schemes, investor can invest their money into UTI Transport & logistic fund (G), SBI FMCG Fund & SBI Pharma.
- The investor who cannot offered lump sum amount of investment they can start their long term investment in Equity based Mutual fund schemes through SIP and get a good amount of returns.

#### 5. Final Conclusion and Recommendations

From this research it is quite clear that the equity based mutual fund schemes have lot of potential to give high returns but investors should be aware about the Schemes those are really operating & giving high returns. Here some suggested funds are small & midcap funds i.e. DSP-BR micro cap fund (G), Can Robeco Emerg. Equity (G) & Religare Invesco mid and small cap (G) & in Sector funds i.e. into UTI Transport & logistic fund (G), SBI FMCG Fund & SBI Pharma which provide high returns of equity based mutual funds schemes. Investors have options to invest by way of SIP or to invest by lump sum amount. Small investors can invest through Systematic Investment Plan by way to build high capital to reduce investment as risk in Equity based Mutual fund Schemes.

## 6. References

### 6.1 Research Papers

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2. Prof. Milind V. Dalvi, Dr. Girija Shankar and Prof. Vishal Pradhan.(2012) article “Comparative analysis of sector funds (with reference to Banking, Pharma & FMCG for the period 2004 to 2011) published in Apeer reviewed international Journal of Asian academic research journal of social science and humanities.
3. Anuj Kumar and Rahat Ali (2013) article “Financial performance of selected Equity large-cap mutual fund scheme” published in Bookmark international journal of accounts, economics and management. Vol.2 No.2.
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5. Bapna, Yogesh Mehta & Visal Sood 2010)
6. (Garima Gupta and Prabhjot Kaur 2008) in their article “Wealth Accumulation through SIP” published in Portfolio Organizer.
7. Kanwar Vivek in his article, “Building and managing portfolio with mutual funds” published in Financial Planning, July -Sept 2007.
8. Abhilashita Rao in her article “Measuring Mutual Fund Performance –How to decide which fund to invest in?” published in Portfolio organizer April 2008.

### 6.2 Web links

- [www.valuresearchonline.com](http://www.valuresearchonline.com)
- [www.moneycontrol.com](http://www.moneycontrol.com)
- [www.mutualfundindia.com](http://www.mutualfundindia.com)
- [www.equitymaster.com](http://www.equitymaster.com)