



PERFORMANCE EVALUATION OF SELECTED MUTUAL FUNDS IN INDIA- A STUDY

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INTRODUCTION

Mutual fund savings create a confidence that can pool the investment of large number of investors who contribute to a general economic objective. Compared to direct investing in individual securities mutual funds have benefits and disadvantages. Mutual funds are managed by professional managers, provide economies of scale, higher level of diversification. On the other hand, mutual fund investors have to pay various fees and expenses and the income in the mutual fund is can't be predictable. The fund manager in a mutual fund known as the portfolio manager, realizing capital gain or loss, trades the fund's underlying securities, and collects the dividend or interest income. The net asset value per share (NAV) is the value of the mutual fund and it is calculated on daily basis on the total value of the fund divided by the number of shares currently issued and outstanding.

In India, there are 44 Asset Managed Companies (AMC) that are offering mutual funds. In each segment, all these fund houses have various mutual fund schemes like debt, gilt, equity and liquid funds. Out of these, the equity segment is prospered and most of the investors are attracted towards equity mutual fund schemes.

In the year 1963, the first mutual fund in India introduced when the government of India launched UTI (unit trust of India). UTI launched the first mutual fund scheme in 1964. Until 1987 UTI enjoyed a monopoly in the Indian mutual fund market. Indian mutual fund industry had a quick growth as a result of development of infrastructure, rise in foreign participation and increase in personal financial asset. When compared to the other investment vehicles like FD's (Fixed deposit) and postal savings, mutual funds in India are becoming an ideal investment option but give comparatively low returns according to "Indian mutual fund industry". In the year 1996 SEBI set the uniform standard for all mutual fund in India. The SEBI and AMFI launched various investor awareness programs with an objective to educate the investors and make them informed about the mutual fund industry.



Today, Indian mutual fund industry is playing an active role in the capital market. Mutual fund have the organization structure as per the SEBI guidelines. The authority and responsibility of Trustee and Asset management companies are specified by the Security Exchange Board of India (SEBI). Mutual funds are managed by professional managers, handling the funds and strategic investment on scrip. Managers select securities as per the objective of particular scheme. Mutual fund manager have high responsibility of how to minimize the risk and maximize the returns. In the year 1980s and 90s, mutual funds have really captured the public's attention when mutual fund investment sensation record high and investors saw far fetched return. Though the idea of merging agreement for investment purposes has been around for a long time. In 1894, in Switzerland the next wave of the near mutual funds included an investment trust launched followed by the similar vehicles in Scotland. The spreading of risk using closed-end investment and the idea of pooling resources soon took in Great Britain and France. In the year 1893, the Boston Personal Property has formed and it was the first Closed-end fund in U.S. The arrival of the modern mutual fund indicated by the creation of the Massachusetts Investor's Trust in Boston in the year 1924. The fund went public in 1928. Today spawning the mutual fund firm known as Mutual Fund Schemes (MFS) Investment Management. The custodian of the Massachusetts Investor's Trust was the Trust of the State Street Investors.

There were 19 open-ended mutual funds competing with approximately 700 closed-ended funds in the year 1929. The dynamic began to change as high-leverage closed-ended funds were wiped and small open-ended funds managed to survive with the stock market crash of 1929. The number of open-ended funds topped 100 at the beginning of the 1950. In the year 1960s, the aggressive growth fund has been rise with more than 100 new funds established and billions of dollars in new asset inflows.

- First stage from 1964-1987 (Establishment and Growth of Unit Trust of India)
- Second Stage from 1987-1993 (Entry of public Sector Funds)
- Third Stage from 1993-2003 (Emergence of Private Sector Funds)
- Fourth Stage Since February 2003 (Growth and Consolidation)

NEED FOR THE STUDY

1. Growing Popularity of Mutual Funds in India

The mutual fund industry in India has seen significant growth over the past few decades. With increasing awareness among retail investors, more people are turning to mutual funds as a means to diversify their investment portfolios. Equity diversified mutual funds, in particular, are popular because they offer potential for higher returns compared to other traditional investment options. An empirical study helps evaluate how well these funds are performing relative to their benchmarks, other funds, and market indices, providing insight into their effectiveness as an investment vehicle.

2. Investment Decision-Making

For investors, especially individual investors and institutional bodies, evaluating the performance of mutual funds is crucial for making informed decisions. By evaluating these funds using a combination of performance metrics such as alpha, beta, Sharpe ratio, and others, an empirical study can provide insights into which funds are delivering value in terms of risk-adjusted returns. This is particularly important as investors aim to balance risk and reward, and seek funds that are able to outperform the broader market or their respective benchmarks.

3. Understanding Fund Manager Skill

One of the primary reasons behind the success or failure of a mutual fund is the skill of its fund managers. An empirical study can help assess whether the superior performance of certain funds is due to the ability of the fund managers to select stocks wisely and make good investment decisions, or if the performance is largely driven by market conditions. This can help investors determine whether they are paying a premium for managerial expertise that results in consistently higher returns.

4. Market Trends and Volatility in India

The Indian stock market is known for its volatility and susceptibility to both domestic and global economic factors. Studying the performance of equity diversified mutual funds during



different market conditions (bull markets, bear markets, or periods of economic downturn) helps in understanding how resilient these funds are during periods of uncertainty.

This can offer insights into which funds are more adaptive to changing market dynamics and better positioned to deliver consistent returns across cycles.

5. Regulatory Environment and Risk Considerations

India's regulatory environment for mutual funds, governed by the Securities and Exchange Board of India (SEBI), has seen several changes over the years. These regulations aim to improve transparency, reduce risk, and increase investor confidence. An empirical study can explore how these regulations impact the performance of equity diversified mutual funds. Furthermore, by evaluating the risk metrics of these funds, the study could also provide an understanding of the degree of risk associated with various schemes and their ability to manage market risks, credit risks, and liquidity risks.

6. Comparison Across Fund Categories

Equity diversified mutual funds are one of several types of mutual funds available to Indian investors. By evaluating the performance of equity diversified schemes, the study can also draw comparisons with other categories of mutual funds, such as debt funds, hybrid funds, or sector-specific equity funds. This can give investors a clearer picture of how equity diversified mutual funds stand in comparison in terms of returns, risk, and overall performance.

7. Benchmarking and Alpha Generation

One of the critical aspects of evaluating the performance of mutual funds is assessing how well the fund has performed relative to its benchmark (e.g., Nifty 50 or BSE Sensex). An empirical study can provide insights into whether the fund has generated "alpha" (returns above the benchmark), which indicates the fund manager's ability to generate value beyond what would be expected from the market's performance.

8. Market Efficiency and Mutual Fund Performance

A study on mutual fund performance can also provide insights into the efficiency of the Indian stock market. In an efficient market, it would be difficult for actively managed mutual funds to



consistently outperform passive investments. Analyzing the performance of actively managed equity diversified mutual funds can provide valuable insights into how well the Indian market is functioning and whether active fund management offers a sustainable advantage.

9. Investor Confidence and Trust

As mutual funds are a collective investment vehicle, understanding how well they perform over the long term can help enhance investor confidence. Empirical research can help in identifying funds that are consistently delivering good returns, which can encourage more investments and contribute to the overall development of the mutual fund industry in India.

10. Guidance for Future Investment Strategies

An empirical study on the performance of mutual fund schemes can also guide future strategies for both fund managers and investors. By understanding which factors contribute most to fund performance—such as asset allocation, sectoral exposure, or the timing of stock picking—both fund managers and investors can make more strategic decisions moving forward.

Choosing to conduct an empirical study on the performance of selected Indian equity diversified mutual fund schemes allows for a deeper understanding of their return characteristics, risk management, and overall effectiveness as an investment option. With growing investor interest in mutual funds in India, this kind of research provides critical data and analysis to help investors make informed decisions, manage their portfolios more effectively, and choose funds that align with their financial goals. Additionally, the findings from such studies can contribute to broader discussions about market efficiency, the role of fund managers, and the overall performance of the Indian financial market.

OBJECTIVES OF THE STUDY

1. To study the performance of selected equity mutual funds in terms of their return and risk from various fund schemes in India.
2. To know mutual fund performance of selected equity mutual funds by using Sharpe and Treynor.
3. To evaluate the performance of a selected equity mutual fund in India.

4. To study and analyze Risk-Returns relationship.
5. To advise mutual fund investors in choosing better funds as investment avenues.

SCOPE OF THE STUDY

The study contains 10 selected large cap equity mutual fund schemes launched by the different private sector fund houses. The NAV of the selected schemes have been taken for five years with an annual return i.e., 1st Jan 2013 to 29th December 2017. This study focuses on the comparison of risk and return of each equity scheme and these funds have been equated with the benchmark return to evaluate the performance of these schemes.

REVIEW OF LITERATURE

Droms and Walker (1994) used a cross-sectional/time series regression methodology. Four funds were examined over 20 years (1971-1990), and 30 funds were analyzed for a six-year period (1985-1990). The funds were compared to the Standard and Poor's 500 Index, the Morgan Stanley Europe, Australia, and Far East Index (EAFE) which proxies non-U. S. stock markets, and the World Index. Applying the Jensen, Sharpe, and Treynor indices of performance, they found that international funds have generally underperformed the U. S. market and the international market. Additionally, their results indicated that portfolio turnover, expense ratios, asset size, load status and fund size are unrelated to fund performance.

Afza and Rauf (2009) in their investigation of open-ended Pakistani mutual funds' performance utilizing the quarterly information for the time of 1996-2006. The examination measures the fund performance by utilizing the Sharpe ratio with the assistance of pooled time-arrangement and cross-sectional information and centered around various properties, for example, fund size, expenses, age, turnover, and liquidity. The outcomes discovered a noteworthy effect on fund performance.

Garg (2011) inspected the performance of the top ten mutual funds that were chosen based on earlier year's return. The examination dissected the performance based on return, standard deviation, beta just as Treynor, Jensen, and Sharpe index. The examination additionally utilized

Carhart's four-factor model to investigate the performance of mutual funds. The outcomes uncovered that Reliance Regular Saving Scheme Fund had accomplished the most noteworthy last score and Canara Robeco Infra had accomplished the least last score in the one-year class.

Nimalathasan et al. (2012) conducted a study to do the financial performance analysis, A comparative study on equity diversified schemes and equity mid-cap and the results found that among the Open ended – Tax Saving schemes, the Canara Robeco Equity Diversified fund was preferred and was ranked the top most, whereas among the open ended mid-cap schemes, HDFC Asset management company is the preferred and ranked top.

Sahri et al. (2015) stated that in measuring the performance of mutual funds, it's not enough the calculation is merely based on the entire return, but it's necessary to think about the risk factors. It's supported the measurement of the performance of mutual funds that if risk factors are considered, it will provide more indepth information to investors about the performance of the mutual funds associated with the risks taken to realize such performance.

RESEARCH METHODOLOGY

This paper make an attempt to study and analyze the performance evaluation of top 10 Indian equity mutual funds (on the basis of CRISIL). The mutual funds were analyzed in detail from January 2013 to December 2017 and this study is based on the secondary data obtained from the various sources like websites, journals, magazines etc. For the performance of these mutual fund schemes, different statistical and financial tools are to be used. The tools and techniques are alpha, beta, correlation, Sharpe, Treynor and Jenson measure.

Top ranked Large Cap Equity Mutual Fund in India on the basis of CRISIL

- Aditya Birla Sun Life Top 100 Fund
- Invesco India Dynamic Equity Fund
- Kotak Select Focus Fund
- Aditya Birla Sun Life Frontline Equity Fund
- ICICI Prudential Focused Bluechip Equity Fund
- ICICI Prudential Top 100 Fund
- Reliance Top 200 Fund
- SBI Blue Chip Fund
- BNP Paribas Equity Fund
- DSP BlackRock Focus 25 Fund

Large Cap Funds

Large cap funds are those funds in which the investors want to invest their larger share of their amount in companies with large market capitalization. Large cap equity funds are less unstable than the small and midcap equity mutual funds. When compared with mid-cap and small-cap funds, large cap funds deliver steady returns with relatively lower risk on the risk return scale. Large cap funds are ideal for investors with lower risk and well-diversified.

Performance Evaluation Techniques:

Sharpe's Performance Index

The Sharpe ratio is most extensively used for the calculation of risk – adjusted return. This ratio is the average return earned in excess of the risk-free rate per unit of volatility or total risk. Sharpe ratio evaluates risk and return together to help the investors to choose the investment that generates higher return but optimal risk taken.

The difference between the average return of a fund and the risk free investment gives us return generated by the fund by taking risk and standard deviation is the risk of portfolio.

Mathematically, Sharpe ratio is represented as the difference between the average return of a portfolio and the risk free invest divided by standard deviation.

$$S(P) = (R_p - R_f) / \sigma(p)$$

Where, R_p = Average return of portfolio, R_f = Risk free rate and σ = Standard deviation of portfolio

Treynor's Performance Index

The Treynor ratio has the similarities with the Sharpe ratio. The difference between two metrics is that to measure volatility instead of using total risk (standard deviation). The Treynor ratio utilizes beta and the ratio is based on the principle that risk intrinsic to the entire market (represented by beta).

Treynor ratio is the difference between the average return of a fund and the risk free investment divided by the beta. The risk premium depends on the systematic risk assumed in a portfolio.

$$T_n(P) = (R_p - R_f) / \beta(p)$$

Where, R_p = Average return of portfolio, R_f = Risk free rate and β = Measure of systematic risk

Jensen's Performance Index

The risk adjusted performance measure known as the Jensen's measure, that denotes the



average return portfolio or investment above or below that projected by CAPM (capital asset pricing model) given the portfolio's or investment's beta and the average market return. In this measure a definite standard is set and against that the performance is measured, so it is mentioned as a measure of absolute performance. The standard is based on the manager's predictive ability. The basic model of Jensen is given below

$$R_p = \alpha + \beta (R_m - R_f)$$

Where, R_p = Average return of portfolio, R_f = Risk free rate, α = The intercept, β = Measure of systematic risk and R_m = average market return

Correlation

The correlation analysis is the statistical tool that can use to describe the degree to which one variable is linearly related to another. Correlation indicate a predictive relationship that can be exploited in practice hence it is more useful. Correlation analysis is required for testing whether certain data is consistent with hypothesis, predicting one variable on the basis of the knowledge of the others, grouping measure for tightfisted interpretation of data and isolating influence of variables.

- If r lies between 0 to 1, that means positive correlation where r lies between 0 to 0.3 is weak positive correlation and r lies between 0.3 to 0.7 is moderate positive correlation and r lies between 0.7 to 1 is strong positive correlation
- If r is exactly 1, the correlation is perfect positive correlation
- If r lies between -1 to 0, that means negative correlation where r lies between 0 to -0.3 is weak negative correlation and r lies between -0.3 to -0.7 is moderate negative correlation and r lies between -0.7 to -1 is strong negative correlation.
- If r is -1, that implies perfect negative correlation.

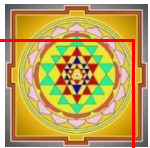


Data Analysis and Interpretation:

Table1: Correlation Matrix

	AdityaBirlaSun Life Top100Fund	InvescoIndia Dynamic EquityFund	KotakSelect FocusFund	AdityaBirlaSun LifeFrontline EquityFund	ICICI PrudentialFocused Bluechip EquityFund	ICICI Prudential Top 100Fund	Reliance Top 200Fund	SBI Blue ChipFund	BNP Paribas EquityFund	DSP BlackRock Focus 25Fund
AdityaBirla SunLifeTop100 Fund	1.00									
Invesco IndiaDynamic EquityFund	0.89	1.00								
Kotak SelectFocusFund	0.12	0.10	1.00							
Aditya BirlaSunLife FrontlineEquityFund	0.99	0.89	0.12	1.00						
ICICI PrudentialFocused Bluechip EquityFund	0.97	0.87	0.12	0.98	1.00					
ICICI Prudential Top100 Fund	0.94	0.82	0.11	0.94	0.95	1.00				
Reliance Top200 Fund	0.96	0.86	0.11	0.96	0.95	0.92	1.00			
SBI BlueChip Fund	0.14	0.12	-0.06	0.14	0.12	0.12	0.13	1.00		
BNP Paribas EquityFund	0.94	0.89	0.12	0.94	0.93	0.89	0.91	0.16	1.00	
DSP BlackRockFocus25Fund	0.85	0.78	0.08	0.85	0.83	0.79	0.84	0.22	0.82	1.00

Source: Mutual Fund Reports

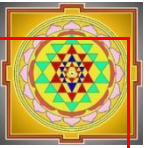


This result shows that all the equity mutual funds are almost strongly positively correlated except Kotak Select Focus Fund and SBI Blue Chip Fund as they are negatively correlated. Aditya Birla Sun Life Top 100 Fund is very strongly positively correlated with Aditya Birla Sun Life Frontline Equity Fund ($r = 0.99$), ICICI Prudential Focused Bluechip Equity Fund ($r = 0.97$) and Reliance Top 200 Fund ($r = 0.96$). Similarly, Aditya Birla Sun Life Frontline Equity Fund is strongly positively correlated with ICICI Prudential Focused Bluechip Equity Fund ($r = 0.98$) and Reliance Top 200 Fund ($r = 0.96$). SBI Blue Chip Fund and Kotak Select Focus Fund are negatively correlated with $r = -0.06$.

Table-2(A) : Summary of basic descriptive statistics parameters

	Aditya BirlaSunLife Top100 Fund	Invesco IndiaDynam ic EquityFund	Kotak SelectFocusF und	Aditya BirlaSun LifeFrontli neEquityF und	ICICI PrudentialF ocusedBlue chipEquityF und	Sensex
Mean	0.07	0.06	0.07	0.06	0.06	0 . 0 4
StandardError	0.03	0.02	0.03	0.03	0.03	0 . 0 3
Median	0.11	0.09	0.10	0.11	0.09	0 . 0 6
StandardDeviation	0.90	0.73	0.89	0.89	0.88	0 . 9 1
SampleVariance	0.81	0.53	0.79	0.79	0.78	0 . 8 2
Minimum	-6.29	-4.82	-6.50	-6.45	-6.52	- 6 . 3 1
Maximum	3.25	2.95	2.94	3.24	3.04	3 . 6 4

Source: Mutual Fund Reports



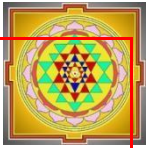
Descriptive statistics will give a summary of funds and nature of funds. The above table depicts that all the funds have mean return more than the market return (benchmark) Sensex. Aditya Birla Sun Life Top 100 Fund, Kotak Select Focus Fund, Aditya Birla Sun Life Frontline Equity Fund, ICICI Prudential Focused Bluechip Equity Fund have almost equal standard error compared to Sensex whereas, Invesco India Dynamic Equity Fund have less. The median value compared with Sensex have above the distribution.

The risk (SD) of fund Aditya Birla Sun Life Top 100 Fund (0.90), Invesco India Dynamic Equity Fund (0.73), Kotak Select Focus Fund (0.89), Aditya Birla Sun Life Frontline Equity Fund (0.89), ICICI Prudential Focused Bluechip Equity Fund (0.88) have less than the market risk (0.91).

All the funds are in line with market (Sensex) minimum returns and maximum returns. However, the risk is comparatively less or almost equal.

Table 2(B): Summary of basic descriptive statistics parameters

	ICICI Prudential Top 100 Fund	Reliance Top 200 Fund	SBIBlu eChip Fund	BNP Paribas Equity Fund	DSP Black Rock Focus 25 Fund	Sensex
Mean	0.06	0.07	0.07	0.06	0.06	0.04
Standard Error	0.02	0.03	0.02	0.02	0.03	0.03
Median	0.10	0.11	0.10	0.11	0.09	0.06
Standard Deviation	0.87	0.96	0.84	0.85	0.96	0.91
Sample Variance	0.76	0.92	0.71	0.73	0.92	0.82
Minimum	-7.04	-7.09	-6.0	-5.31	-6.51	-6.31



			2			
Maximum	2.7 3	3.91	3 . 1 9	2. 74	2. 95	3. 64

Source: Mutual Fund Reports

Descriptive statistics will give a summary of funds and nature of funds. The above table depicts that all the funds have mean return more than the market return (benchmark) Sensex. Reliance Top 200 Fund, DSP BlackRock Focus 25 Fund have almost equal standard error compared to Sensex whereas, ICICI Prudential Top 100 Fund, SBI Blue Chip Fund, and BNP Paribas Equity Fund have less. The median value compared with Sensex have above the distribution. The risk (SD) of fund ICICI Prudential Top 100 Fund (0.87), SBI Blue Chip Fund (0.84), BNP Paribas Equity Fund (0.85) have less risk and Reliance Top 200 Fund (0.92), DSP BlackRock Focus 25 Fund (0.96) have more risk compared to market risk (0.91).

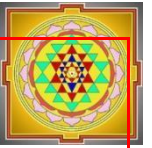
The fund Reliance Top 200 Fund and DSP BlackRock Focus 25 Fund have more variation compared to benchmark Sensex. As the funds selection is based on top ten CRISIL ranking, it is understood and validated that funds' performance is in-line with the benchmark Sensex.

Table 3: Risk-Return Relationship

Funds	Beta	SD	Avg return
Aditya Birla Sun Life Top 100 Fund	-0.06	0.90	0.0734
Invesco India Dynamic Equity Fund	-0.04	0.73	0.0635
Kotak Select Focus Fund	-0.02	0.89	0.0739
Aditya Birla Sun Life Frontline Equity Fund	-0.06	0.89	0.0644
ICICI Prudential Focused Bluechip Equity Fund	-0.06	0.88	0.0635
ICICI Prudential Top 100 Fund	-0.05	0.87	0.0628
Reliance Top 200 Fund	-0.04	0.96	0.0656
SBI Blue Chip Fund	0.05	0.84	0.0679
BNP Paribas Equity Fund	-0.04	0.85	0.0635
DSP BlackRock Focus 25 Fund	-0.06	0.96	0.0557
Sensex	1.00	0.91	0.0396

Source: Mutual Fund Reports

From the table it is clear that all the selected funds' performance is best and outperformed against benchmark Sensex. This shows that how mutual funds up beat the market performance and the fund's managers role in bringing best kind of portfolio with right mix of securities is excellent and hence investors will have better returns compared to market.

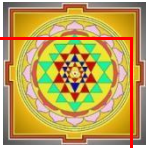
**Table4:Sharpe PerformanceIndex**

Funds	Sharpe	R a n k	SD
AdityaBirlaSunLifeTop100Fund	- 0.01 5	1	0.90
KotakSelectFocusFund	- 0.01 6	2	0.89
RelianceTop200Fund	- 0.01 8	3	0.96
AdityaBirlaSunLife FrontlineEquityFund	- 0.02 6	4	0.89
SBIBlueChipFund	- 0.02 7	5	0.84
ICICIPrudentialFocusedBluechipEquityFund	- 0.02 7	6	0.88
DSPBlackRockFocus25 Fund	- 0.02 8	7	0.96
ICICIPrudentialTop100Fund	- 0.02 9	8	0.87
BNPParibasEquityFund	- 0.03 0	9	0.85
InvescoIndiaDynamicEquityFund	- 0.04 6	1 0	0.73

Source:Mutual Fund Reports

The above result shows the performance ranking of various funds under Sharpe performance index measures. As per the Sharpe, the top 3 performance of equity mutual funds are Aditya Birla Sun Life Top 100 Fund (-0.015) has rank 1, Kotak Select Focus Fund (-0.016) has rank 2 and Reliance Top 200 Fund (-0.018) has rank 3. For the poor performance, the equity mutual funds are ICICI Prudential Top 100 Fund (-0.029) rank 8, BNP Paribas Equity Fund (-0.030) has rank 9, and Invesco India Dynamic Equity Fund (-0.046) has rank 10. The investor has to select the three best performance of equity mutual fund for the better investment decision.

Standard deviation will make us to understand how much the returns are deviated from each other. The better investment choice will be those which have a less variation and more of returns. Funds such as Reliance Top 200 Fund (0.96), DSP BlackRock Focus 25 Fund (0.96) and Aditya Birla Sun Life Top 100 Fund (0.90) have high risk and Invesco India Dynamic Equity Fund (0.73), SBI Blue Chip



Fund (0.84), BNP Paribas Equity Fund (0.85) have less risk.

Table5:TreynorPerformanceIndex

Funds	Treynor	Rank	Beta
KotakSelectFocusFund	4.013	1	-0.02
BNPParibasEquityFund	2.079	2	-0.04
RelianceTop200Fund	1.904	3	-0.04
InvescoIndiaDynamicEquityFund	1.851	4	-0.04
ICICIPrudentialTop100Fund	1.565	5	-0.05
AdityaBirlaSunLife FrontlineEquityFund	1.486	6	-0.06
DSPBlackRockFocus25 Fund	1.451	7	-0.06
AdityaBirlaSunLifeTop100Fund	1.379	8	-0.06
ICICIPrudentialFocusedBluechipEquityFund	1.342	9	-0.06
SBIBlueChipFund	-1.483	10	0.05

Source:Mutual Fund Reports

The results show as per the Treynor measure shows the top 3 performance of equity mutual fund Kotak Select Focus Fund (4.013) rank 1, BNP Paribas Equity Fund (2.079) has rank 2 and Reliance Top 200 Fund (1.904) has rank 3.

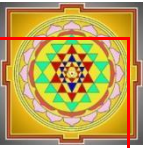
Contrary, the poor performance of the equity mutual funds are Aditya Birla Sun Life Top 100 Fund (1.379) has rank 8, ICICI Prudential Focused Bluechip Equity Fund (1.342) has rank 9 and SBI Blue Chip Fund (-1.483) has rank 10. The investor has to select the three best performance of equity mutual fund for the better investment decision.

Beta measures the sensitivity of a fund to the market index, higher the beta indicates the fund has risen more than the market's returns, lower the beta indicates the lesser the market return. The funds have lesser beta are Kotak Select Focus Fund (-0.02), BNP Paribas Equity Fund (-0.04), Reliance Top 200 Fund (-0.04).

The funds have higher beta are Aditya Birla Sun Life Frontline Equity Fund (-0.06), DSP BlackRock Focus 25 Fund (-0.06), Aditya Birla Sun Life Top 100 Fund (-0.06), ICICI Prudential Focused Bluechip Equity Fund (-0.06).

Table6:JensenPerformanceIndex

Funds	Jenson	Rank	Beta
KotakSelectFocusFund	-0.007	1	-0.02
AdityaBirlaSunLifeTop100Fund	-0.009	2	-0.06
SBIBlueChipFund	-0.010	3	0.05
RelianceTop200Fund	-0.016	4	-0.04



AdityaBirlaSunLife FrontlineEquityFund	-0.018	5	-0.06
BNPParibasEquityFund	-0.018	6	-0.04
InvescoIndiaDynamicEquityFund	-0.018	7	-0.04
ICICIPrudentialFocusedBluechipEquityFund	-0.019	8	-0.06
ICICIPrudentialTop100Fund	-0.019	9	-0.05
DSPBlackRockFocus25 Fund	-0.027	10	-0.06

Source: Mutual Fund Reports

The result as per the Jensen measure shows the top 3 performance of equity mutual fund and they are Kotak Select Focus Fund (-0.007) has rank 1, Aditya Birla Sun Life Top 100 Fund (-0.009) has rank 2 and SBI Blue Chip Fund (-0.010) has rank 3.

For the poor performance, the equity mutual funds are ICICI Prudential Focused Bluechip Equity Fund (-0.019) has rank 8, ICICI Prudential Top 100 Fund (-0.019) has rank 9 and DSP BlackRock Focus 25 Fund (-0.027) has rank 10.

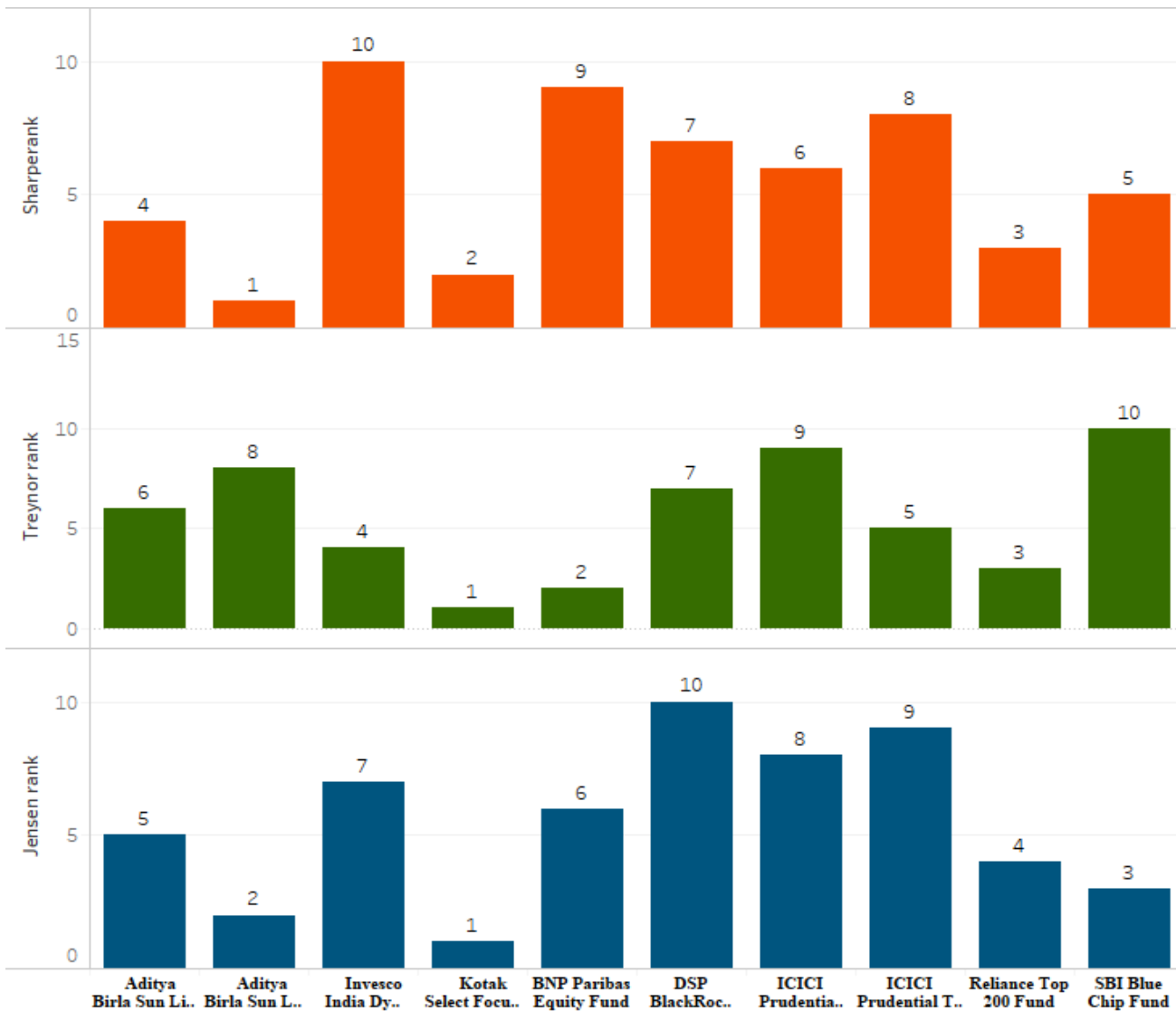
Therefore, investor has to select the three best performance of equity mutual fund for the better investment decision

Table7: Summary of Sharpe, Treynor and Jensen's performance measure rank list for these selected funds

Funds	Sharperank	Treynorrank	Jensenrank
AdityaBirlaSunLifeTop100Fund	1	8	2
InvescoIndiaDynamicEquityFund	10	4	7
KotakSelectFocusFund	2	1	1
AdityaBirlaSunLife FrontlineEquityFund	4	6	5
ICICIPrudentialFocusedBluechipEquityFund	6	9	8
ICICIPrudentialTop100Fund	8	5	9
RelianceTop200Fund	3	3	4
SBIBlueChipFund	5	10	3
BNPParibasEquityFund	9	2	6
DSPBlackRockFocus25 Fund	7	7	10

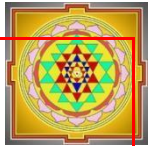
Source: Mutual Fund Reports

Source: Tableau Extract



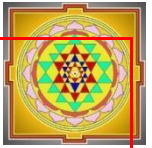
FINDINGS OF THE STUDY:

- All the equity mutual funds are almost strongly positively correlated except Kotak Select Focus Fund and SBI Blue Chip Fund as they are negatively correlated. Aditya Birla Sun Life Top 100 Fund is very strongly positively correlated with Aditya Birla Sun Life Frontline Equity Fund ($r = 0.99$), ICICI Prudential Focused Bluechip Equity Fund ($r = 0.97$) and Reliance Top 200 Fund ($r = 0.96$). Similarly, Aditya Birla Sun Life Frontline Equity Fund is strongly positively correlated with ICICI Prudential Focused Bluechip Equity Fund ($r = 0.98$) and Reliance Top 200 Fund ($r = 0.96$). SBI Blue Chip Fund and Kotak Select Focus Fund are negatively correlated with $r = -0.06$.
- All the funds have mean return more than the market return (benchmark) Sensex. Aditya Birla Sun Life Top 100 Fund, Kotak Select Focus Fund, Aditya Birla Sun Life Frontline Equity Fund, ICICI Prudential Focused Bluechip Equity Fund have almost equal standard error compared to Sensex whereas, Invesco India Dynamic Equity Fund has less. The median value



compared with Sensex have above the distribution.

- All the funds have mean return more than the market return (benchmark) Sensex. Reliance Top 200 Fund, DSP BlackRock Focus 25 Fund have almost equal standard error compared to Sensex whereas, ICICI Prudential Top 100 Fund, SBI Blue Chip Fund, and BNP Paribas Equity Fund have less. The median value compared with Sensex have above the distribution. The risk (SD) of fund ICICI Prudential Top 100 Fund (0.87), SBI Blue Chip Fund (0.84), BNP Paribas Equity Fund (0.85) have less risk and Reliance Top 200 Fund (0.92), DSP BlackRock Focus 25 Fund (0.96) have more risk compared to market risk (0.91).
- All the selected funds' performance is best and outperformed against benchmark Sensex. This shows that how mutual funds up beat the market performance and the fund's managers role in bringing best kind of portfolio with right mix of securities is excellent and hence investors will have better returns compared to market.
- The performance ranking of various funds under Sharpe performance index measures. As per the Sharpe, the top 3 performance of equity mutual funds are Aditya Birla Sun Life Top 100 Fund (-0.015) has rank 1, Kotak Select Focus Fund (-0.016) has rank 2 and Reliance Top 200 Fund (-0.018) has rank 3. For the poor performance, the equity mutual funds are ICICI Prudential Top 100 Fund (-0.029) rank 8, BNP Paribas Equity Fund (-0.030) has rank 9, and Invesco India Dynamic Equity Fund (-0.046) has rank 10. The investor has to select the three best performance of equity mutual fund for the better investment decision.
- the top 3 performance of equity mutual fund Kotak Select Focus Fund (4.013) rank 1, BNP Paribas Equity Fund (2.079) has rank 2 and Reliance Top 200 Fund (1.904) has rank 3. Contrary, the poor performance of the equity mutual funds are Aditya Birla Sun Life Top 100 Fund (1.379) has rank 8, ICICI Prudential Focused Bluechip Equity Fund (1.342) has rank 9 and SBI Blue Chip Fund (-1.483) has rank 10. The investor has to select the three best performance of equity mutual fund for the better investment decision. Beta measures the sensitivity of a fund to the market index, higher the beta indicates the fund has risen more than the market's returns, lower the beta indicates the lesser the market return. The funds have lesser beta are Kotak Select Focus Fund (-0.02), BNP Paribas Equity Fund (-0.04), Reliance Top 200 Fund (-0.04).
- The top 3 performance of equity mutual fund and they are Kotak Select Focus Fund (-0.007) has rank 1, Aditya Birla Sun Life Top 100 Fund (-0.009) has rank 2 and SBI Blue Chip Fund (-0.010) has rank 3. For the poor performance, the equity mutual funds are ICICI Prudential Focused Bluechip Equity Fund (-0.019) has rank 8, ICICI Prudential Top 100 Fund (-0.019) has rank 9 and DSP BlackRock Focus 25 Fund (-0.027) has rank 10. Therefore, investor has to select the three best performance of equity mutual fund for the better investment decision.



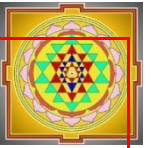
CONCLUSION:

From the study we depict that the mutual fund is a safe investment tool. Mutual fund is a diversified fund where the investor can diversify their funds. For the investment decision process the portfolio performance measure should be a key aspect. These tools provide the necessary information for investors to assess how effectively their money has been invested or may be invested. An investor cannot conceivably see the whole investment picture which may involuntarily lead to clouded decision without evaluating risk-adjusted returns. After analyzing the different mutual fund schemes, it is concluded that while making the investment decision the first and most important consideration is risk and return aspect followed by the safety and liquidity. If the investors want to go for less risk fund then they should go for high rank in the Treynor measure. The investors who want to diversify their funds and get a high rate of return should go for higher rank in Sharpe measure. The investors have to analyze the fund performance and portfolio manager performance through Jensen measure.

The investors who have the moderate knowledge should go for the mutual fund investment. For the investors there will be various stocks available to invest, among those avenues has to select the right one and keep track of the investment made. The investors have the proper information about the asset management companies in order to get the good return and also contact the advisory securities of knowing which fund gives good return for their investment.

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