A STUDY ON PERFORMANCE EVALUATION OF SELECTED INDIAN EQUITY MUTUAL FUNDS

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Abstract:In India the various investment avenues are provided by the capital market to the investors, to support them to invest in different investment tools and to make assured the profitable return. Mutual fund is subject to market risk and the mutual fund vary from fund to fund. In this context, the performance evaluation of mutual funds has become essential. Therefore, one of the main important issue is choosing profitable mutual fund for investment. This study, deals with the equity mutual funds that are offered by the various fund houses in India for investment. In the terms of risk – return relationship this study predominantly focus on the selected large cap equity mutual fund schemes. So through the statistical parameters, analysis financial parameters of selected mutual fund schemes is the main objective of this study.

Key words: **Equity mutual funds, Jensen's performance index, Net Asset Value, Sharpe index and Treynor index.**

I. 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 selectsecurities 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 farfetched 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)

II.OBJECTIVES OF THE STUDY

1. To evaluate the performance of a selected equity mutual funds in India.
2. To study and analyze Risk-Returns relationship.
3. To advise mutual fund investors in choosing better funds as investment avenues.

III. STATEMENT OF THE STUDY

Generally large companies are tend to invest their funds in the large cap equity mutual fund. Large companies which have a market capitalization of over 20,000 crores. These are well established companies with strong market share. Large cap equity funds are less unstable than the small and midcap equity mutual funds. Therefore 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.

IV. SCOPE OF THE STUDY

The study contains of 10 selected large cap equity mutual fund schemes launched by the different private sector fund house. The NAV of the selected scheme 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 schemes and these funds have been equated with the bench mark return to evaluate the performance of these schemes.

V. LITERATURE REVIEW

Sharpe, William F. (1966) suggested a measure for the evaluation of portfolio performance. Drawing on results obtained in the field of portfolio analysis, economist Jack L. Treynor has suggested a new predictor of mutual fund performance, one that differs from virtually all those used previously by incorporating the volatility of a fund's return in a simple yet meaningful manner.

Jensen Michael (1968)developed a composite portfolio evaluation technique concerning risk-adjusted returns. He evaluated the ability of 115 fund managers in selecting securities during the period 1945-66. Analysis of net returns indicated that, 39 funds had above average returns, while 76 funds yielded abnormally poor returns. Using gross returns, 48 funds showed above average results and 67 funds below average results. Jensen concluded that, there was very little evidence that funds were able to perform significantly better than expected as fund managers were not able to forecast securities price movements.

Fama (1972) developed methods to distinguish observed return due to the ability to pick up the best securities at a given level of risk from that of predictions of price movements in the market. He introduced a multi period model allowing evaluation on a period-by-period and on a cumulative basis. He branded that, return on a portfolio constitutes of return for security selection and return for bearing risk. His contributions combined the concepts from modern theories of portfolio selection and capital market equilibrium with more traditional concepts of good portfolio management.

M. Vijay Anand (2000)focused on the schemes of Birla Sunlife and the competitor’s schemes available in the market. Author studied the analysis of Performance of Equity fund for 3 years and SWOT Analysis of Birla Sunlife by Literature survey and Delphi technique. In depth financial review the author identifies among the selected equity funds that earns higher returns than benchmark and competitors and concluded that Birla Sunlife performs well compared to the benchmarks and competitors.

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.

Subha and Bharathi (2007) study was carried out for open end mutual fund schemes of sample of 51 schemes chosen by convenient sampling method. NAV’s were taken for a period of one year from 1st October 2004 to 30th September, 2005. Out of the 51 funds as many as 18 schemes earned higher returns than the market return. The remaining 33 funds generated lower returns than the market return.

Dubravo Mihaljek (2008) focused on particular the implications of policy responses. He has identified two important issues: i) under estimation of the build-up in credit risk arising from rapid credit growth, ii) Risk of a sharp slowdown or reversal in bank-intermediated capital flows.

Agarwal, R K. et al. (2010) has reviewed since long the performance of mutual funds has been receiving a great deal of attention from both practitioners and academics. With an aggregate investment of trillion dollars in India, the investing public's interest in identifying successful fund managers is understandable. From an academic perspective, the goal of identifying superior fund managers is interesting as it encourages development and application of new models and theories.

Dhanda (2011)made an attempt to study the performance evaluation of selected open ended schemes in terms of risk and return relationship by using rate of return, Beta, Standard Deviation, Sharp Ratio and Treynor Ratio. BSE-30 has been used as a benchmark to study the performance of mutual fund in India and the study period has been taken from April 1, 2009 to March 31, 2011. The finding of the study revealed that only three scheme have performed better than benchmark. Kumar Lenin Nooney and Devi Rama.

A Study of performance of mutual fund has become more controversial. Conversely, Rajesh Kumar, **Rituraj Chandrakar (2012)** evaluates the performance of 29 open-ended, growth-oriented equity schemes for the period from April 2005 to March 2011 (six years) of transition economy. The study revealed that 14 out of 29 (48.28 percent) sample mutual fund schemes had outperformed the benchmark return. The results also showed that some of the schemes had underperformed; these schemes were facing the diversification problem.

Dr.R.Narayanasamy, v.rathnamani, (2013) evaluate the performance of selected equity large cap mutual funds schemes in terms of risk- return relationship . The performance analysis of the selected five equity are large cap funds. The study may conclude that all the funds have performed well in the high volatile market movement expect Reliance vision.

VI. 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

1. Aditya Birla Sun Life Top 100 Fund
2. Invesco India Dynamic Equity Fund
3. Kotak Select Focus Fund
4. Aditya Birla Sun Life Frontline Equity Fund
5. ICICI Prudential Focused Bluechip Equity Fund
6. ICICI Prudential Top 100 Fund
7. Reliance Top 200 Fund
8. SBI Blue Chip Fund
9. BNP Paribas Equity Fund
10. DSP BlackRock Focus 25 Fund

Large Cap Funds

Large cap funds are those funds in which the investors wants 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, shape ratio is represented as the difference between the average return of a portfolio and the risk free invest divided by standard deviation.

$$S(P) = (Rp - Rf) / \sigma(p)$$

Where,Rp = Average return of portfolio, Rf = Risk free rate and σ = Standard deviation of portfolio

Treynor's Performance Index

The Treynor ratio have 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.

$$Tn\ (P) = (Rp - Rf) / \beta\ (p)$$

Where,Rp = Average return of portfolio, Rf = 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

$$Rp = \alpha + \beta\ (Rm - Rf)$$

Where,Rp = Average return of portfolio, Rf = Risk free rate, α = The intercept, β = Measure of systematic risk and Rm = 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.

VII. Data Analysis and Interpretation:

Table 1: Correlation Matrix

	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
Aditya Birla Sun Life Top 100 Fund	1.00									
Invesco India Dynamic Equity Fund	0.89	1.00								
Kotak Select Focus Fund	0.12	0.10	1.00							
Aditya Birla Sun Life Frontline Equity Fund	0.99	0.89	0.12	1.00						
ICICI Prudential Focused Bluechip Equity Fund	0.97	0.87	0.12	0.98	1.00					
ICICI Prudential Top 100 Fund	0.94	0.82	0.11	0.94	0.95	1.00				

Reliance Top 200 Fund	0.96	0.86	0.11	0.96	0.95	0.92	1.00			
SBI Blue Chip Fund	0.14	0.12	-0.06	0.14	0.12	0.12	0.13	1.00		
BNP Paribas Equity Fund	0.94	0.89	0.12	0.94	0.93	0.89	0.91	0.16	1.00	
DSP BlackRock Focus 25 Fund	0.85	0.78	0.08	0.85	0.83	0.79	0.84	0.22	0.82	1.00

Source: SPSS Extract

Interpretation

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.

Descriptive Statistics

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

	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	Sensex
Mean	0.07	0.06	0.07	0.06	0.06	0.04
Standard Error	0.03	0.02	0.03	0.03	0.03	0.03
Median	0.11	0.09	0.10	0.11	0.09	0.06
Standard Deviation	0.90	0.73	0.89	0.89	0.88	0.91
Sample Variance	0.81	0.53	0.79	0.79	0.78	0.82
Minimum	-6.29	-4.82	-6.50	-6.45	-6.52	-6.31
Maximum	3.25	2.95	2.94	3.24	3.04	3.64

Source: SPSS Extract

Interpretation

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	SBI Blue Chip Fund	BNP Paribas Equity Fund	DSP BlackRock 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	-6.02	-5.31	-6.51	-6.31
Maximum	2.73	3.91	3.19	2.74	2.95	3.64

Source: SPSS Extract

Interpretation

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 are 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: Author calculation

Interpretation

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 upbeat 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.

Table 4: Sharpe Performance Index

Funds	**Sharpe**	**Rank**	**SD**
Aditya Birla Sun Life Top 100 Fund	-0.015	1	0.90
Kotak Select Focus Fund	-0.016	2	0.89
Reliance Top 200 Fund	-0.018	3	0.96
Aditya Birla Sun Life Frontline Equity Fund	-0.026	4	0.89
SBI Blue Chip Fund	-0.027	5	0.84
ICICI Prudential Focused Bluechip Equity Fund	-0.027	6	0.88
DSP BlackRock Focus 25 Fund	-0.028	7	0.96
ICICI Prudential Top 100 Fund	-0.029	8	0.87
BNP Paribas Equity Fund	-0.030	9	0.85
Invesco India Dynamic Equity Fund	-0.046	10	0.73

Source: Author calculation

Interpretation

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.

Table 5: Treynor Performance Index

Funds	Treynor	Rank	Beta
Kotak Select Focus Fund	4.013	1	-0.02
BNP Paribas Equity Fund	2.079	2	-0.04
Reliance Top 200 Fund	1.904	3	-0.04
Invesco India Dynamic Equity Fund	1.851	4	-0.04
ICICI Prudential Top 100 Fund	1.565	5	-0.05
Aditya Birla Sun Life Frontline Equity Fund	1.486	6	-0.06
DSP BlackRock Focus 25 Fund	1.451	7	-0.06
Aditya Birla Sun Life Top 100 Fund	1.379	8	-0.06
ICICI Prudential Focused Bluechip Equity Fund	1.342	9	-0.06
SBI Blue Chip Fund	-1.483	10	0.05

Source: Author calculation

Interpretation

The results showas per the Treynor measure shows the top 3 performance of equity mutual fundKotak 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 9and 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 markets 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).

Table 6: Jensen Performance Index

Funds	Jenson	Rank	Beta
Kotak Select Focus Fund	-0.007	1	-0.02
Aditya Birla Sun Life Top 100 Fund	-0.009	2	-0.06
SBI Blue Chip Fund	-0.010	3	0.05
Reliance Top 200 Fund	-0.016	4	-0.04
Aditya Birla Sun Life Frontline Equity Fund	-0.018	5	-0.06
BNP Paribas Equity Fund	-0.018	6	-0.04
Invesco India Dynamic Equity Fund	-0.018	7	-0.04
ICICI Prudential Focused Bluechip Equity Fund	-0.019	8	-0.06
ICICI Prudential Top 100 Fund	-0.019	9	-0.05
DSP BlackRock Focus 25 Fund	-0.027	10	-0.06

Source: Author calculation

Interpretation

The result as per the Jenson 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.

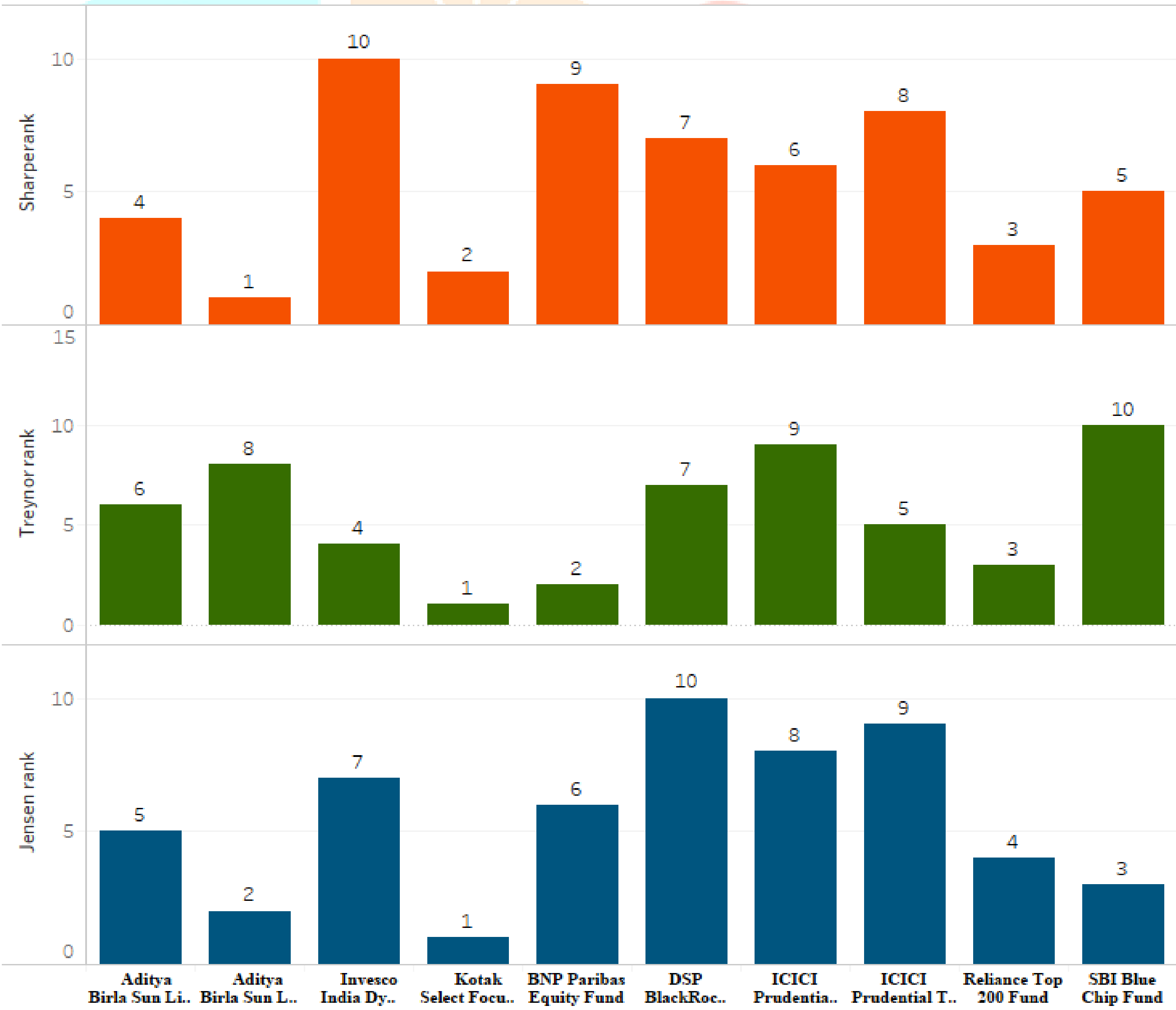
For the poor performance, the equity mutual funds are ICICI Prudential Focused Bluechip Equity Fund (-0.019) has rank 8, ICICI Prudential Top 100 Fund (-0.019) has rank 9 and DSP BlackRock Focus 25 Fund (-0.027) has rank 10.

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

Table 7: Summary of Sharpe, Treynor and Jensen's performance measure rank list for the selected funds

Funds	Sharperank	Treynorrank	Jensenrank
Aditya Birla Sun Life Top 100 Fund	1	8	2
Invesco India Dynamic Equity Fund	10	4	7
Kotak Select Focus Fund	2	1	1
Aditya Birla Sun Life Frontline Equity Fund	4	6	5
ICICI Prudential Focused Bluechip Equity Fund	6	9	8
ICICI Prudential Top 100 Fund	8	5	9
Reliance Top 200 Fund	3	3	4
SBI Blue Chip Fund	5	10	3
BNP Paribas Equity Fund	9	2	6
DSP BlackRock Focus 25 Fund	7	7	10

Source: Author calculation



Source: Tableau Extract

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 diversified 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 wants to go for less risk fund then they should go for higher rank in the Treynor measure. The investors who wants to diversify their funds and get higher rate of return should go for higher rank in Sharpe measure. The investors have to analyze the fund performance and portfolio manager performance through Jenson 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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