

REVIEW OF RESEARCH



IMPACT FACTOR : 5.7631(UIF)

UGC APPROVED JOURNAL NO. 48514

VOLUME - 8 | ISSUE - 5 | FEBRUARY - 2019

A COMPARATIVE ANALYSIS OF SELECTED MUTUAL FUNDS SCHEMES OFFER BY DIFFERENT FUNDS HOUSE IN INDIA

Ritesh Kumar Research scholar , Department of Commerce, University of Delhi.

ABSTRACT:

The Indian mutual fund industry show the sufficient growth in all aspects e.g. in numbers of schemes, number of fund houses, value of asset under management etc. It provides an opportunity to those investors who want to invest in market but due to lack of time, skill and knowledge, they are unable to do. Mutual funds attract the saving of investors, here investors select schemes as per their objectives but the problem with the investors is that which schemes should be selected and which types of parameters



ISSN: 2249-894X

are use while selecting mutual fund schemes. The present study will try to look the answer of this question. This paper evaluates the performance of different mutual fund schemes offer by different fund house by using measurement ratio (Sharpe ratio, Treynor ratio) and statistical tools (alpha, beta, correlation, R-square, annual standard deviation). The objectives of this paperto gauge the appropriate usage of measure like alpha annualized standard deviation, beta, r-square, Sharpe ratio, Treynor ratio in order to identify the best scheme for investment.

KEYWORDS : Sharpe ratio, Treynor ratio, NAV.

INTRODUCTION:

The mutual fund industry in India begins in 1963 by the Unit Trust of India (UTI). First scheme launched by UTI was US 64 as an open-ended scheme. Until 1986, worth of this industry were around 6700 crores and there was a monopoly of UTI in mutual fund industry. After 1986, in 1987 two insurance companies (general insurance company and Life insurance Company) and public sector banks made an entry in this industry. From 1993, public sector players were allowed in this industry. Until year 1993 worth of this industry was 47004 crores. The worth of mutual fund industry's reached of 10 Lakh Crore as on 31st May 2014 and within a 3 years the size of has crossed 20 lakh crore in July 2016 and further reached at 22.60 lakh crore as on 31st may 2018.

MEANING OF MUTUAL FUND

Mutual fund setup as a trust that pools the money (saving) collected from different investors. It provides indirect way through which investors can invest in markets by selecting different schemes according to their needs. Mutual funds provide a platform to those investors who want to invest their money in markets but they are unable to do this because lack of sufficient knowledge about market, for these types of investors Mutual funds plays a very important role. The regulation of mutual fund 1996 defines a mutual fund as "a fund establishment in form of a trust to raise money through the sale of units to the public or section of the public under one or more schemes for the investing in securities, including money market instrument."

LITERATURE REVIEW

Literature Review on performance evaluation of mutual fund is vast. A large numbers of studies have been done in India and abroad to evaluate the performance of mutual funds schemes from time to time.

Treynor (1965) introduced reward to volatility ratio to measure the performance of portfolio of fund. Reward to volatility ratio is the ratio of excess returns to systematic risk of portfolio.

William Sharpe (1966) introduced reward to variability ratio known as Sharpe ratio to measure the performance of mutual funds.

Gupta and Ramesh (1989) evaluates the performance of mutual funds by using Treynor ratio, Jensen alpha, Sharpe ratio and found manager have market timing and stock selection ability.

M.JayaDev (1996) evaluates the performance of mutual funds by using Treynor ratio, Jensen alpha, Sharpe ratio.

Yadavand Mishra (1996) evaluates the performance of mutual funds by using Treynor ratio, Jensen alpha, Sharpe ratio and found funds generate more return than market return.

Gupta and Sehgal (1998) evaluates the performance of mutual funds by using Treynor ratio, Jensen measure, Sharpe ratio and found that those mutual funds that were well diversified were perform better.

Gupta Amitabh (2001) evaluates the performance of mutual funds by usingTreynor ratio, Jensen measure, and Sharpe ratio.

Pandow,B.A. (2016) examined the stock selectivity skills of fund managers by using Jensen's Alpha and Fama's

RESEARCH METHODOLOGY

The study is an empirical study of analysis of performance of mutual funds schemes offer by different fund houses. Sample is taken based on simple random sampling technique and sample size consist of 15 schemes each from Equity fund, Tax saving fund and ETF fund. All the data are required for this study collected is from the secondary sources (AMFI, money control, *mutual fund SahiHai*, yahoo finance, etc. of three years. (2015-16, 2016-14, 2017-18). Performance evaluation of mutual funds schemes carried out with the help of performance measurement ratio for three time period.

TOOLS USED FOR MEASUREMENT OF PERFORMANCE

Performance evaluation of mutual funds schemes carried out with the help of performance measurement ratio and other tools.

Performance measurement ratio and tools Return

N 4. .+.

Mutual fund return calculated by using NAV at the beginning and NAV at the closing. NAV is the current market value of single mutual fund unit. For each schemes return are calculated as per following formula.

$Return = \frac{NAV \ at \ the \ closing \ - \ NAV \ at \ the \ beginning}{NAV \ at \ the \ beginning}$

Alpha

Jensen alpha used for measure the absolute performance of portfolio on a risk adjusted basis in relation to expected market return where expected market return with the help of CAPM.

A COMPARATIVE ANALYSIS OF SELECTED MUTUAL FUNDS SCHEMES OFFER BY DIFFERENT FUNDS .. VOLUME - 8 | ISSUE - 5 | FEBRUARY - 2019

Computation

Alpha= Actual return on portfolio - Expected return on portfolio

Higher positive alpha is the best for an investment decision/ Investors are often advised select those funds with has high Jensen Alpha.

Beta

Beta is a statistical measure that explains how sensitive a fund return to the market index moves. It identifies the relation between fund return and market index moves.

$Beta = \frac{std \, dev \, of \, fund}{std \, dev \, of \, benchmark}$

A risk taker investors are advised to select those funds with has beta value exceed one and risk averse investors are advised to select those funds with has beta value less than one.

Annualized Standard Deviation

Standard deviation (SD) measures the volatility the fund's returns in relation to its average .It show how much the returns of a fund different from the historical mean return of the scheme.

Computation:

Standard Deviation (SD) = $\sqrt{Variance}$

Decision

Investors are advised to select those funds with has lower volatility technique was developed by William f. Sharpe (1966) to measure the risk adjusted performance of portfolio by ratio knows as Sharpe ratio.

Computation SR = (TOTAL RETURN – RISK FREE RATE) / STANDARD DEVIATION OF FUND

Sharpe ratio = $\frac{AR_p - AR_f}{\sigma_p}$

ARp = Average Return on portfolio ARf= Average Risk Free Rate of Return op= standard deviation of portfolio

Decision

Investors are advised to select those funds with has higher Sharpe ratio.

4.8. Treynor ratio

This ratio was developed by jack Treynor in 1965 ,which is used for measure how much particular investment has provide return for a given level of systematic risk, this is also known as reward to volatility ratio.

Treynor ratio = $\frac{AR_P - AR_F}{\sigma_P}$

ARp = Portfolio Average Return

ARf =Risk Free Rate of Returnβp =Beta Coefficient of PortfolioDecisionInvestors are advised to select those funds withhas higher Sharpe ratio.

Objectives of the study

In view of many empirical studies being conducted in this domain but conclusive results for individual investors are still lacking for which the present study has been undertaken with the following objectives.

- 1. To determine the performance of open ended mutual funds schemes offer by different fund houses.
- **2.** To gauge the appropriate usage of measure like alpha annualized standard deviation, beta, r-square, Sharpe ratio, Treynor ratio in order to identify the best scheme for investment.

Data analysis and interpretation

1. Performance analysis of Tax saving schemes

Table1 (calendar year performance by %)

	Return
Tax saving funds	(%)
	3 yr
BOI AXA Tax Advantage Fund-Eco-Growth	11.2
DSP Tax Saver Fund-Growth	12.6
HDFC Long Term Advantage Fund-Growth	15.4
Quant Tax Plan-Growth	14.4
Quant Tax Plan-Direct-Growth	14.7
Tata Infrastructure Tax Saving Fund-Growth	6.9
Aditya BSL Frontline Equity Fund-Direct-Growth	13.1
Aditya BSL Tax Relief '96-Direct-Growth	14.1
Reliance Tax Saver (ELSS) Fund-Direct Growth	8.6
Union Tax Saver Scheme-Direct-Growth	8
UTI-Long Term Equity (Tax Saving)-Growth-Direct	11.2
LIC MF Tax Plan-Growth	12.4
Kotak Tax Saver-Scheme-Growth-Direct	14.2
Taurus Tax Shield-Growth	13.7
L&T Tax Advantage Fund-Direct-Growth	13.9
Invesco India Tax Plan-Direct-Growth	14.3

Table-1 depicts that the comparative analysis of Fund return for last year. According to the analysis, it infers the following:

1. HDFC Long Term Advantage Fund-Growth shows the highest returns 15.4%, Quant Tax Plan-Direct-Growth shows return 14.7% and Tata Infrastructure Tax Saving Fund-Growth shows least returns 6.9%.

Table-1.1 Performance analysis based on technical analysis				
Tax saving funds	Alpha	A.S.D	Beta	R-Square
	3Yr			
BOI AXA Tax Advantage Fund-Eco-Growth	-0.20	17.77	1.11	0.75
DSP Tax Saver Fund-Growth	0.00	16.23	1.08	0.89
HDFC Long Term Advantage Fund-Growth	0.21	15.20	1.03	0.93
Quant Tax Plan-Growth	0.50	15.23	0.93	0.75
Quant Tax Plan-Direct-Growth	0.52	15.17	0.93	0.75
Tata Infrastructure Tax Saving Fund-Growth	-0.23	17.87	0.32	0.65
Aditya BSL Frontline Equity Fund-Direct-Growth	0.01	13.79	0.96	0.97
Aditya BSL Tax Relief '96-Direct-Growth	0.32	13.23	0.88	0.78
Reliance Tax Saver (ELSS) Fund-Direct Growth	-0.28	17.92	1.21	0.80
Union Tax Saver Scheme-Direct-Growth	-0.36	13.58	0.97	0.89
UTI-Long Term Equity (Tax Saving)-Growth-Direct	-0.04	13.89	1.00	0.92
LIC MF Tax Plan-Growth	-0.20	15.58	1.03	0.87
Kotak Tax Saver-Scheme-Growth-Direct	0.05	14.18	1.00	0.85
Taurus Tax Shield-Growth	0.17	14.93	1.03	0.94
L&T Tax Advantage Fund-Direct-Growth	0.20	13.61	0.95	0.87
Invesco India Tax Plan-Direct-Growth	0.25	13.64	1.00	0.94

Table 4.4 D 1.1.1.1.1.

Table1.1 depicts that the comparative analysis based on Alpha, Beta, A.S.D, Correlation, R-squared of schemes.

1. An investors should select a Fund with a lesser Beta because as it would be less volatile as compare to other funds. Tata Infrastructure Tax Saving Fund-Growth has the lowest Beta value 0.32 among the entire above fund, which means it is comparatively less volatile. Aditya BSL Tax Relief '96-Direct-Growth has the next lowest beta 0.88.

2. An investors should select a Fund with higher alpha because measure the absolute performance of portfolio on a risk adjusted basis in relation to expected market return. Quant Tax Plan-Direct-Growth has the highest alpha with value 0.52 and Quant Tax Plan-Growth has the second highest value 0.50.

3. A funds with higher Annual standard deviation are more violate than low standard deviation. Investors should select schemes with low standard deviation. Aditya BSL Tax Relief '96-Direct-Growth has the lowest ASD value 13.23 among the entire above fund, which means it is comparatively less volatile and Union Tax Saver Scheme-Direct-Growth has the next lowest ASD value 13.58.

4. R-squared used to determine the significance of beta or alpha. Generally, investors should select schemes with value of higher R-squared. Aditya BSL Frontline Equity Fund-Direct-Growth has the highest R-squared value 0.97 and Aditya BSL Tax Relief '96-Direct-Growth has value 0.88.

Table1.2 (Performance analysis based on Sharpe and Treynor ratio)		
S.R	T.R	
3Yr	3Yr	
0.02	0.08	
0.06	0.26	
0.11	0.46	
0.17	0.80	
0.17	0.82	
-0.05	-0.78	
0.07	0.27	
0.19	0.81	
	S.R 3Yr 0.02 0.06 0.11 0.17 0.17 -0.05 0.07	

Table1.2 (Performance analysis based on Sharpe and Treyner ratio)

Reliance Tax Saver (ELSS) Fund-Direct Growth	0.05	0.22
Union Tax Saver Scheme-Direct-Growth	0.02	0.08
UTI-Long Term Equity (Tax Saving)-Growth-Direct	0.11	0.42
LIC MF Tax Plan-Growth	0.02	0.07
Kotak Tax Saver-Scheme-Growth-Direct	0.12	0.50
Taurus Tax Shield-Growth	0.10	0.42
L&T Tax Advantage Fund-Direct-Growth	0.16	0.66
Invesco India Tax Plan-Direct-Growth	0.18	0.70

From the comparative analysis based on the Sharpe ratio and Jensen Alpha depicts in the Table -1.2, and it is observed

1. Sharpe ratio for Aditya BSL Tax Relief '96-Direct-Growth has highest value of 0.19, hence, higher the Sharpe ratio is the risk-adjusted measure, better is the performance compared to other funds and will be ranked first. Quant Tax Plan-Direct-Growth and Quant Tax Plan-Growth have the next higher Sharpe ratio 0.17. Tata Infrastructure Tax Saving Fund-Growth has lowest Sharpe Ratio -0.05 that reveals that the fund has low returns compare to market returns.

2. Treynor ratio for Quant Tax Plan-Direct-Growth has high return with a value of 0.82, which means it has yield better returns over other schemes at same risk level. Aditya BSL Tax Relief '96-Direct-Growth has the next higher Treynor ratio and Tata Infrastructure Tax Saving Fund-Growth has lowest Treynor ratio -0.78 it shows very less return as compared to other schemes.

2. Performance analysis of Equity schemes:

Table-2(Performance analysis on based Calendar year performance by %)

	Return
	%
Equity fund	3 yr
ICICI Prudential US Bluechip Equity Fd-Growth	13
SBI Blue Chip Fund-Growth	10.5
Invesco India Largecap-Direct-Growth	13
MotilalOswal Focused 25 Fund-Direct-Growth	11.6
Sundaram Select Focus-Growth	13.1
Sundaram Select Focus-Institutional-Growth	14.1
CanaraRobeco Emerging Equities-Growth	13.3
DSP Equity Opportunities-Growth	13.1
Sundaram Large and Mid Cap Fund-Growth	14.2
Kotak Standard Multicap Fund-Direct-Growth	15.7
SBI Focused Equity Fund-Growth	12.6
SBI Focused Equity Fund-Dir-Gth	13.7
SBI Magnum Multicap Fund-Growth	11.8
SBI Magnum Multicap Fund-Direct-Growth	13
HDFC Mid-Cap Opportunities Fund-Growth	12.6

1. Kotak Standard Multicap Fund-Direct-Growth shows the highest returns 15.7%, Sundaram Large and Mid Cap Fund-Growth shows second highest return 14.2% and SBI Blue Chip Fund-Growth shows least returns 10.5% in the 2017.

Table-2.1(Performance analysis based on technical analysis)				
				R-
Equity fund	alpha	A.S.D	Beta	Square
ICICI Prudential US Bluechip Equity Fd-Growth	-0.25	10.48	1.01	0.73
SBI Blue Chip Fund-Growth	-0.10	13.48	0.92	0.93
Invesco India Largecap-Direct-Growth	0.04	13.45	0.93	0.95
MotilalOswal Focused 25 Fund-Direct-Growth	-0.03	13.26	0.83	0.78
Sundaram Select Focus-Growth	0.03	13.47	0.93	0.95 📈
Sundaram Select Focus-Institutional-Growth	0.10	13.49	0.93	0.95
CanaraRobeco Emerging Equities-Growth	0.11	18.99	1.21	0.79
DSP Equity Opportunities-Growth	0.04	16.96	1.11	0.87
Sundaram Large and Mid Cap Fund-Growth	0.14	13.85	0.91	0.85
Kotak Standard Multicap Fund-Direct-Growth	0.20	14.28	0.98	0.94
SBI Focused Equity Fund-Growth	0.11	14.90	0.88	0.69
SBI Focused Equity Fund-Dir-Gth	0.19	14.91	0.88	0.69
SBI Magnum Multicap Fund-Growth	0.02	15.05	1.01	0.90
SBI Magnum Multicap Fund-Direct-Growth	0.12	15.06	1.01	0.91
HDFC Mid-Cap Opportunities Fund-Growth	-0.01	17.55	1.11	0.78

Table-2.1(Performance analysis based on technical analysis)

Table-2.1 depicts that the comparative analysis based on Alpha, Beta, A.S.D, Correlation, R-squared of schemes. It infers the following

1. An investors should select a Fund with a lesser Beta because as it would be less volatile as compare to other funds. Motilal Oswal Focused 25 Fund-Direct-Growth has the lowest beta 0.83 and SBI Focused Equity Fund-Growth has the second lowest beta value 0.88.

2. An investors should select a Fund with higher alpha because measure the absolute performance of portfolio on a risk adjusted basis in relation to expected market return. Kotak Standard Multi cap Fund-Direct-Growth has the highest alpha with value 0.20 and has the SBI Focused Equity Fund-Dir-G the second highest value 0.19.

3. A funds with higher Annual standard deviation are more violate than low standard deviation. Investors should select schemes with low standard deviation. ICICI Prudential US Blue-chip Equity Fd-Growth has the lowest ASD value 10.48 among the entire above fund, which means it is comparatively less volatile and Motilal Oswal Focused 25 Fund-Direct-Growth has the next lowest ASD value 13.26.

4. R-squared used to determine the significance of beta or alpha. Generally, investors should select schemes with value of higher R-squared. Sundaram Select Focus-Growth, Sundaram Select Focus-Institutional-Growth has the highest R-squared value 0.95 and Kotak Standard Multicap Fund-Direct-Growth has the second highest value 0.94.

	S.R	T.R
Equity fund	3 Yr	3Yr
ICICI Prudential US Bluechip Equity Fd-Growth	0.25	0.73
SBI Blue Chip Fund-Growth	0.04	0.15
Invesco India Largecap-Direct-Growth	0.07	0.30
MotilalOswal Focused 25 Fund-Direct-Growth	0.05	0.22
Sundaram Select Focus-Growth	0.07	0.29
Sundaram Select Focus-Institutional-Growth	0.09	0.37
CanaraRobeco Emerging Equities-Growth	0.08	0.35
DSP Equity Opportunities-Growth	0.07	0.30
Invesco India Largecap-Direct-Growth MotilalOswal Focused 25 Fund-Direct-Growth Sundaram Select Focus-Growth Sundaram Select Focus-Institutional-Growth CanaraRobeco Emerging Equities-Growth	0.07 0.05 0.07 0.09 0.08	0.30 0.22 0.29 0.37 0.35

Table-2.2(Performance analysis based on Sharpe and Treynor ratio)

Sundaram Large and Mid Cap Fund-Growth	0.09	0.42
Kotak Standard Multicap Fund-Direct-Growth	0.11	0.46
SBI Focused Equity Fund-Growth	0.08	0.38
SBI Focused Equity Fund-Dir-Gth	0.10	0.47
SBI Magnum Multicap Fund-Growth	0.07	0.28
SBI Magnum Multicap Fund-Direct-Growth	0.09	0.37
HDFC Mid-Cap Opportunities Fund-Growth	0.05	0.25

From the comparative analysis based on the Sharpe ratio and Jensen Alpha depicts in the Table -2.2, and it is observed

1. Sharpe ratio for ICICI Prudential US Bluechip Equity Fd-Growth has highest value of 0.25, hence, higher the Sharpe ratio is the risk-adjusted measure, better is the performance compared to other funds and will be ranked first. Kotak Standard Multi-cap Fund-Direct-Growth has the next higher Sharpe ratio 0.11 and SBI Focused Equity Fund-Dir-Growth has the third highest Sharpe ratio 0.10. SBI Blue Chip Fund-Growth has lowest Sharpe Ratio 0.04 that reveals that the fund has low returns compare to market returns and Motilal Oswal Focused 25 Fund-Direct-Growth HDFC Mid-Cap Opportunities Fund-Growth has the second lower value of Sharpe ratio 0.05.

2. Treynor ratio for ICICI Prudential US Blue-chip Equity Fd-Growth has high return with a value of 0.73, which means it has yield better returns over other schemes at same risk level. SBI Focused Equity Fund-Dir-Growth has the next higher Treynor ratio 0.47SBI Blue Chip Fund-Growth has lowest Treynor ratio -0.78 it shows very less return as compared to other schemes.

(Performance analysis based on Calendar year	performanc
	Return%
ETF	3yr
Invesco India Nifty Exchange Traded Fund	14
Kotak Nifty ETF	17.4
Kotak PSU Bank ETF	7
MotilalOswal M50 ETF	12.9
MotilalOswal Midcap 100 ETF	10
Reliance ETF PSU Bank BeES	6.8
Reliance ETF Bank BeES	20.1
Reliance ETF Junior BeES	13.5
Reliance ETF Nifty BeES	13.8
Reliance ETF ShariahBeES	9.9
ICICI Prudential Nifty 100 ETF	13.5
Invesco India Nifty Exchange Traded Fund	14
Reliance ETF Nifty 100	12.9
SBI-ETF BSE 100	13.2
	-

3. Performance analysis of Exchange traded fund schemes

Table 3 (Performance analysis based on Calendar year performance by %)

According to the analysis, it infers the following

1.Reliance ETF Bank BeES shows the highest returns 20.1%, Invesco India Nifty Exchange Traded Fund Shows the second highest return 46.30% and . Reliance ETF PSU Bank BeES shows least returns 6.8% and Reliance ETF Bank BeES second least return 7%.

Table-3.1 (Performance analysis based on technical analysis)					
ETF	alpha	A.S.D	Beta	R- Square	
Invesco India Nifty Exchange Traded Fund	0.08	13.22	0.98	0.99	
Kotak Nifty ETF	0.08	13.16	0.98	0.98	
Kotak PSU Bank ETF	-1.51	32.44	1.29	0.52	
MotilalOswal M50 ETF	-0.01	13.16	0.98	0.99	
MotilalOswal Midcap 100 ETF	0.02	16.79	1.08	0.74	
Reliance ETF PSU Bank BeES	-1.51	32.41	1.29	0.52	
Reliance ETF Bank BeES	0.06	18.02	0.92	0.85	
Reliance ETF Junior BeES	0.17	15.95	1.06	0.79	
Reliance ETF Nifty BeES	0.07	13.23	0.98	0.99	
Reliance ETF ShariahBeES	-0.03	12.75	0.85	0.80	
ICICI Prudential Nifty 100 ETF	0.08	13.84	0.97	1.00	
Invesco India Nifty Exchange Traded Fund	0.10	13.91	0.97	0.99	
Reliance ETF Nifty 100	0.03	14.00	0.99	1.00	
SBI-ETF BSE 100	0.02	14.43	1.01	0.99	

Table-3.1 depicts that the comparative analysis based on Alpha, Beta, A.S.D of schemes. It infers the following

1. An investors should select a Fund with a lesser Beta because as it would be less volatile as compare to other funds. Reliance ETF Shariah BeEShas the lowest beta 0.85 and Reliance ETF Bank BeES has the second lowest beta value 0.92.

2. An investors should select a Fund with higher alpha because measure the absolute performance of portfolio on a risk adjusted basis in relation to expected market return. Reliance ETF Junior BeEShas the highest alpha with value 0.17 and the Invesco India Nifty Exchange Traded Fund second highest alpha value 0.10.

3. A funds with higher Annual standard deviation are more violate than low standard deviation. Investors should select schemes with low standard deviation. Reliance ETF Shariah BeEShas the lowest ASD value 12.75 among the entire above fund, which means it is comparatively less volatile and Kotak Nifty ETF has the next lowest ASD value 13.16.

4. R-squared used to determine the significance of beta or alpha. Generally, investors should select schemes with value of higher R-squared. Reliance ETF Nifty 100 and ICICI Prudential Nifty 1.00 ETF has the highest Rsquared value 1Reliance ETF Nifty BeEShas the second highest value 0.99.

	S.R	T.R
ETF	3 Yr	3 Yr
Invesco India Nifty Exchange Traded Fund	0.14	0.54
Kotak Nifty ETF	0.14	0.54
Kotak PSU Bank ETF	-0.06	-0.41
MotilalOswal M50 ETF	0.12	0.45
MotilalOswal Midcap 100 ETF	0.11	0.47
Reliance ETF PSU Bank BeES	-0.06	-0.42
Reliance ETF Bank BeES	0.15	0.83
Reliance ETF Junior BeES	0.14	0.61
Reliance ETF Nifty BeES	0.14	0.52
Reliance ETF ShariahBeES	0.10	0.42
ICICI Prudential Nifty 100 ETF	0.08	0.34
Invesco India Nifty Exchange Traded Fund	0.09	0.36

Reliance ETF Nifty 100	0.07	0.29
SBI-ETF BSE 100	0.07	0.28

From the comparative analysis based on the Sharpe ratio and Jensen Alpha depicts in the Table -3.2, and it is observed

1. Sharpe ratio of Reliance ETF Bank BeES has highest value of 0.15, Reliance ETF Nifty BeES, Reliance ETF Junior BeES has the next higher Sharpe ratio 0.14. Reliance ETF PSU Bank BeES, Reliance ETF PSU Bank BeES has lowest Sharpe Ratio -0.06 that reveals that the fund has low returns compare to market returns and SBI-ETF BSE 100, SBI-ETF BSE 100 has the second lower value of Sharpe ratio 0.07.T

2. Treynor ratio for Reliance ETF Junior BeES has high value of 0.61, which means it has yield better returns over other schemes at same risk level.

From the above analysis, it has been observed that Reliance ETF Junior BeES and Reliance ETF Bank BeES are good schemes for investment. Reliance ETF PSU Bank BeES and Kotak PSU Bank ETF are poor scheme.

CONCLUSION

Growth of financial market is most important for the sustainable development of any country because inflow of capital in market support the growth of economic development. In India the mutual funds, industry plays a vital role in this regard. It pools the saving of investors. The Indian mutual funds industry grows rapidly in past few years. However, despite this growth the penetration level in India is low as compared to other country. One of the main reason of this is investors are less financially literate; they do not know which parameters consider before investing in mutual funds.

This paper is effort to gauge the appropriate usage of measure like alpha annualized standard deviation, beta, r-square, Sharpe ratio, Treynor ratio in order to identify the best scheme for investment. It is advisable to investors before investing in any mutual funds they should consider above broad parameters carefully, and then select any mutual funds scheme.

Investors who want to higher return in equity schemes should invest in Kotak Standard Multicap Fund-Direct-Growth as it has yield 15.7% highest return among all selected equity schemes and it has highest alpha (.20) and Sharpe ratio (.11). Second best fund is Sundaram Select Focus-Institutional-Growth as it has yield 14.2%. Investors who want to higher return in Tax saving funds schemes should invest in HDFC Long Term Advantage Fund-Growth as it has yield 15.4% highest return among all selected tax saving schemes and Quant Tax Plan-Direct-Growth, Invesco India Tax Plan-Direct-Growth, Quant Tax Plan-Growth are second, third and fourth best funds in tax savings schemes respectively. Investors who want to higher return in ETF should invest in Reliance ETF Bank BeES as it yield highest return 20.1% and Kotak Nifty ETF, Invesco India Nifty Exchange Traded Fund, Investors who want to higher return in equity schemes should invest are second, third and fourth best funds respectively.

REFERENCES

Treynor, J. L. (1965). *How to rate management of investment funds. Harvard business review, 43(1), 63-75. Sharpe, W. F.* (1966). *Mutual fund performance. The Journal of business, 39(1), 119-138.*

- Treynor, J., & Mazuy, K. (1966). Can mutual funds outguess the market? Harvard business review, 44(4), 131-136.
- Jensen, M. C. (1968). The performance of mutual funds in the period 1945–1964. The Journal of finance, 23(2), 389-416.

Jayadev, M.(1996). Mutual fund performance: An analysis of monthly returns. Finance India, 10(1), 73-84.

Ippolito, R. A. (1989). Efficiency with costly information: A study of mutual fund performance, 1965–1984. The Quarterly Journal of Economics, 104(1), 1-23

Books:

Gupta Amitabh, (2000). "Investment Performance of Indian Mutual Funds: An Empirical Study", Finance India, 14(3), 833-866.

Gupta, Ramesh,(1989). "Mutual Funds", The Management Accountant, 24(5),320-322 e-sources:

www.mutualfundindia.com www.moneycontrol.com www.morningstar.in www.crisil.com.



Ritesh Kumar

Research scholar , Department of Commerce, University of Delhi.