"A Study on Performance Evaluation of Systematic Investment Planning of Mutual Funds"

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Abstract

Saving is an important aspect of human life and its effect the growth of economy also. Earlier the saving was not so attractive for the middle class people and it was in initial stage. The financial market in the present day is an advanced and highly analyzed move, as previously investment is not done just for grater or moderator return. Now a day the different financial investment tool involves different level of risk and return.

As compared the stock market involves more risk and return also and the number of investors who lost their money is also in stock market. Recent trend in investment is wealth management or wealth creation and so many institutions are on to it. Mutual funds are one of the best wealth creation investment vehicles. After 2010 Systematic Investment planning is the most popular tool of investing the savings made every month. This scheme will help the people to meet regular expenditure and in the long term it will be the huge return on investment where one can expect more than the bank rates. Thus this paper aims to study the performance evaluation of Systematic investment Plan of different equity based mutual funds under different caps for five years.

Keywords - *Investment, Mutual Fund, Systematic Investment Plan, Performance Ratios*.

I. INTRODUCTION

Among the financial vehicle in the market mutual funds are the most popular and fastest growing vehicle and recent trend in it is Systematic investing planning. Because every investor want to yield maximum return for what they are invested by handling less risk, at the same time SIPs also enable tax benefit for long term. Hence, this study has been undertaken by me which enables me to find out which SIP is doing better in selected schemes under each selected category of equity based mutual funds.

Geojit BNP Paribas Financial Services Ltd, Kormangala branch has a big network of clients of more than 3000 in past five years. Geojit BNP Paribas is the leading service provider in financial services company which has 509 branches all over the India and two union territory having more than 840000 clients. The company has a rich experience in capital market providing portfolio solutions and investment avenues for customers and its self is a listed company in NSE.

II. SCOPE AND NEED OF THE STUDY

This study is conducted in Geojit BNP Paribas Financial Services Ltd, Kormangala. And the study is conducted on the basis of recent data which is purely a secondary data provided by the company and official websites.

The study is undertaken to understand and find out better performing equity based systematic investment plan in mutual funds among different mutual fund schemes, as these are the most selling product in the financial market. So this study is to ascertain the performance of different equity based mutual funds.

III. RESEACH METHODOLOGY

Research design: Descriptive study

Secondary Data: For gathering secondary data, following sources has been used:

- Company's annual reports.
- Books and magazines published by the company.
- Official website of company.

Statistical tools used for the study include:

Performance evaluation is done by using:

Sharpe's Performance Index: $S_p = R_p – R_f / \sigma p$
Treynor's Performance Index: $Tp = Rp – R_f / \beta p$
Jensen's Performance Index: $\alpha = Rp – \{ R_f + \beta (R_m – R_f)\}$

IV. OBJECTIVES

1. To understand the concept of Equity Mutual Scheme.
2. To evaluate the selected funds on the basis of performance.
3. To offer suggestions to improve the performance.

V. LITERATURE REVIEW

Dr. Ashish (April 2016), author studied on the subject, investment made in mutual funds through the loan against property (LAP) amount by one time investment and systematic investment plan. He has identified that the return on investment made in mutual funds on one time investment will be more than the returns on systematic investment plan. Because of year by year reducing interest on loan and compounded returns in mutual fund.

Dr. Rathnamani et al (2015), in this study authors made a comparison between the recurring deposits and systematic investment planning and came out with the findings that, the investment made in the systematic investment plans are giving more returns than the recurring deposits for all periods from short term one year to long term more than five years. And they also concluded by suggesting that it all in the hand of people while choosing their investments which will satisfy their needs in future.

Ms. Leelawati (April 2014), identified that the systematic investment planning (SIP) is the most powerful financial product which has better features like liquidity, tax benefits, makes market time irrelevant, power of compounding and opportunity cost saved by investors, when compared to other products. And suggested that the government should promote SIP especially for the people of rural areas those who want to invest and in order to see cash flow in the market.

Dr.Shantanu et al (2012), the authors describes that the investor should diversify their investments but not over diversification which leads to nothing. And also said that don't just judge the performances of investment by net asset value but also consider the measurement risk ratios like Sharpe, Treynor, and Standard deviation etc. They also observed that the investors still prefer more on savings rather than investing followed by mutual funds, gold or silver, shares and fixed deposits and so on.

Dr.Punita et al (2010), the author identified by comparative study between systematic investment plan and other investment avenues available, that the SIP protects the individual investor from volatility of market by monthly fixed recurring investments. This benefits the investor in reverse maximum return and averages the cost of purchase of securities. Also identified that SIP is the best suitable for small investors who are capable of investing and this will help in better wealth creation with small investment when compared to other investments.

VI. ANALYSIS AND INTERPRETATION

A. Analysis of Performance Index under Large Cap:

Table 6.1: Sharpe Performance Index for large cap:

Name of the scheme	Sp	Rank	
Birla SL Top 100 Fund (G)	2.54	SBI	1
ICICI Pru Top 100 Fund	2.61	ICICI	2
SBI Blue-chip Fund-Reg	3.27	Birla	3
Reliance Top 200 Fund	2.13	Reliance	4
HDFC Top 200 Fund (G)	1.51	HDFC	5
Market Return (NIFTY 50)	1.10		

B. Analysis and Interpretation:

From the above calculations it is clear that the SBI Blue-chip Fund is having greater Sharpe's ratio of 3.27 for 5 years followed by ICICI, Birla, Reliance and HDFC's funds which are less than the ratio 3. Hence under the large-cap funds considering Sharpe ratio, SBI's scheme has reached the ratio of 3, so it is considered as excellent in its performance and to invest expecting higher return then followed by ICICI, Birla and HDFC Top 200 Fund is least performer for both three and five years in the selected schemes.

Table 6.2: Treynor's Performance Index for large cap

Name of the scheme	Tp	Rank	
Birla SL Top 100 Fund (G)	11.03	SBI	1
ICICI Pru Top 100 Fund	13.81	ICICI	2
SBI Blue-chip Fund-Reg	14.24	Birla	3
Reliance Top 200 Fund	9.31	Reliance	4
HDFC Top 200 Fund (G)	6.62	HDFC	5
Market Return (NIFTY 50)	-		

C. Analysis and Interpretation

From the above data summary it is understandable that the SBI Blue-chip Fund is having the higher Treynor's ratio of 14.24 for 5 years followed by ICICI, Birla, and Reliance's funds. Hence it is clear that the SBI's fund is performing 14 units better per unit of risk (beta) for 5 years followed by ICICI, Birla and so on. So under the large-cap funds considering Treynor ratio, SBI's fund is fetching more returns and the HDFC's fund is generating less returns when compared with in the selected schemes with beta as risk factor.

Table 6.3: Jensen's Performance Index for large cap:

Name of the scheme	α_P	Rank	
Birla SL Top 100 Fund (G)	6.7484	SBI	1
ICICI Pru Top 100 Fund	6.3974	Birla	2
SBI Blue-chip Fund-Reg	8.734	ICICI	3

Reliance Top 200 Fund	5.2906	Reliance	4
HDFC Top 200 Fund (G)	2.5558	HDFC	5
Market Return (NIFTY 50)	-		

D. Analysis and Interpretation:

From the above calculations and rankings it can be analyse that the SBI Blue-chip Fund is having higher Jensen ratio of 8.73 for 5 years followed by Birla, Reliance, ICICI and HDFC for 3 years and for 5 years ICICI takes place of Reliance and HDFC remains at last.

Hence it is clear that under Large-cap funds considering Jensen ratio all the schemes are showing positive values means all are generating more than the predicted, in spite of that SBI Blue-chip Fund scheme is attaining more than the predicted level of return in the long run for 5 years then followed by Birla SL Top 100 fund and HDFC Top 200 fund is at last in both years in the selected schemes.

E. Analysis of Performance Index under Flexi-cap

Table 6.4: Sharpe Performance Index for Flexi Cap

Name of the scheme	Sp	Rank	
ICICI Pru Value Discovery Fund (G)	3.267748	ICICI	1
HDFC Capital Builder Fund	2.464435	SBI	2
SBI Magnum Multicap Fund-Reg	3.064444	Birla	3
Birla SL Equity Fund	2.992048	HDFC	4
Reliance Growth Fund	2.092979	Reliance	5
Market Return(NIFTY 50)	1.104623		

F. Analysis and Interpretation

From the above calculations it is clear that for 5 years ICICI Pru Value Discovery Fund having 3.26 then followed by SBI, Birla, HDFC and Reliance's funds. Hence under the Flexi-cap funds considering Sharpe ratio, ICICI and SBI's funds have reached the ratio of more than 3, so it is considered as excellent in its performance and to invest expecting higher return for 5 years.

Table 6.5: Treynor's Performance Index for Flexi Cap:

Name of the scheme	Tp	Rank	
ICICI Pru Value Discovery Fund (G)	15.056075	ICICI	1
HDFC Capital Builder Fund	10.907407	Birla	2
SBI Magnum Multicap Fund-Reg	13.653465	SBI	3
Birla SL Equity Fund	13.681818	HDFC	4
Reliance Growth Fund	9.8482143	Reliance	5
Market Return(NIFTY 50)	-		

G. Analysis and Interpretation

From the above data summary it is understandable that the ICICI Pru Value Discovery fund is having the higher Treynor's ratio for 5 years of 15.05 followed by Birla, SBI, HDFC and Reliance's funds. Hence it is clear that in Flexi-cap funds the ICICI Pru Value Discovery is performing 15 units better per unit of risk (beta). So under the Flexi-cap funds considering Treynor's ratio, ICICI's fund is generating more returns and the Reliance's fund is generating less returns when compared with in the selected schemes with beta as risk factor.

Table 6.6: Jenson's Performance Index for Flexi Cap:

Name of the scheme	α_p	Rank	
ICICI Pru Value Discovery Fund (G)	11.2522	ICICI	1
HDFC Capital Builder Fund	6.8768	Birla	2
SBI Magnum Multicap Fund-Reg	9.2046	SBI	3
Birla SL Equity Fund	10.056	HDFC	4
Reliance Growth Fund	5.9452	Reliance	5
Market Return(NIFTY 50)	-	-	-

H. Analysis and Interpretation

From the above calculations and rankings it can be analyse that the ICICI Pru Value Discovery Fund is having higher Jensen ratios of 11.25 for 5 years followed by Birla, SBI, HDFC and reliance's funds. Hence it is clear that under the Flexi-cap considering Jensen ratio all the schemes are showing positive values, which means all are generating more than the predicted return, in spite of that ICICI Pru Value Discovery Fund is generating more than the predicted level of return.

I. Analysis of Performance Index under Mid & Small cap

Table 6.7: Sharpe Performance Index for Mid & Small Cap

Name of the scheme	Sp	Rank	
SBI Small & Midcap Fund-Reg	4.158182	SBI	1
HDFC Mid-cap	3.910417	HDFC	2

Opportunities Fund			
Reliance Small Cap Fund	3.588415	Reliance	3
Birla SL MNC Fund	3.365949	ICICI	4
ICICI Pru Midcap Fund	3.463415	Birla	5
Market Return (NIFTY MID CAP 100)	2.36983		

J. Analysis and Interpretation

From the above calculations it is clear that the SBI Small & Midcap Fund is having greater Sharpe's ratios 4.15 for 5 years followed by HDFC, Reliance, ICICI and Birla's funds. Hence under the Mid & Small cap funds considering Sharpe ratio, all the selected schemes are performing above the ratio of 3, so it can be concluded that the schemes are performing excellent and in this selected schemes SBI small and mid cap funds are at the top level.

Table 6.8: Treynor's Performance Index for Mid & Small Cap:

Name of the scheme	Tp	Rank	
SBI Small & Midcap Fund-Reg	25.98	SBI	1
HDFC Mid-cap Opportunities Fund	18.77	Reliance	2
Reliance Small Cap Fund	19.14	HDFC	3
Birla SL MNC Fund	16.86	ICICI	4
ICICI Pru Midcap Fund	16.94	Birla	5
Market Return (NIFTY MID CAP 100)	-		

K. Analysis and Interpretation

From the above calculations it is clear that the SBI Small & Midcap Fund is having greater Sharpe's ratios 25.98 for 5 years followed by Reliance, HDFC, ICICI and Birla's funds. Hence under the Mid & Small cap funds considering Treynor's ratio, all the selected schemes are performing well, so it can be concluded that the schemes are performing excellent and in this selected schemes SBI small and mid cap funds are at the top level.

Table 6.9: Jenson's Performance Index for Mid & Small Cap:

Name of the scheme	αp	Rank	
SBI Small & Midcap Fund-Reg	14.30	SBI	1
HDFC Mid-cap Opportunities Fund	9.03	Reliance	2
Reliance Small Cap Fund	11.56	HDFC	3
Birla SL MNC Fund	7.27	ICICI	4
ICICI Pru Midcap Fund	7.84	Birla	5
Market Return (NIFTY MID CAP 100)	-		

L. Analysis and Interpretation

From the above calculations and rankings it can be analyze that the SBI Small & Midcap Fund is having higher Jensen ratio of 14.29 for 5 years then followed by Reliance, HDFC, ICICI's and Birla schemes. Hence it is clear that under Mid and Small cap funds considering Jensen ratio all the schemes are showing positive values, which means all are generating more than the predicted level of return.

Table 6.10 Showing Consolidated Raking

Large Cap						***Flexi Cap***						***Mid & Small Cap***					
Sharpe's		**Treynor's**		**Jenson's**		**Sharpe's**		**Treynor's**		**Jenson's**		**Sharpe's**		**Treynor's**		**Jenson's**	
Co	*Rank*	*Co*	*Rank*	*Co*	*Rank*	*Co*	*Rank*	*Co*	*Rank*	*Co*	*Rank*	*Co*	*Rank*	*Co*	*Rank*	*Co*	*Rank*
SBI	1	SBI	1	SBI	1	ICICI	1.	ICICI	1.	ICICI	1	SBI	1	SBI	1.	SBI	1.
ICICI	2	ICICI	2	Birla	2	SBI	2.	Birla	2.	Birla	2	HDFC	2	Reliance	2.	Reliance	2.
Birla	3	Birla	3	ICICI	3	Birla	3.	SBI	3.	SBI	3	Reliance	3	HDFC	3.	HDFC	3.
Reliance	4	Reliance	4	Reliance	4	HDFC	4.	HDFC	4.	HDFC	4	ICICI	4	ICICI	4.	ICICI	4.
HDFC	5	HDFC	5	HDFC	5	Reliance	5.	Reliance	5.	Reliance	5	Birla	5	Birla	5.	Birla	5.

M. Analysis and Interpretation

From the above table it can be concluded that under Large cap in all the performance index SBI company is performing well but HDFC is the least performing company, under Flexi cap ICICI is the well and Reliance is the least performing company& under Mid and Small Cap company SBI is the top and Birla is the least performing company.

VI. FINDINGS

- ✓ Considering Sharpe's ratio under the category of Large-cap funds the SBI Blue-chip fund, in case of Flexi-cap funds it is ICICI Pru Value Discovery Fund (G) fund and in case of Mid & Small cap funds it is SBI Small & Midcap fund is ranked first for the period of five years.
- ✓ Considering Treynor's ratio under the category of Large-cap funds the SBI Blue-chip fund, in case of Flexi-cap funds it is ICICI Pru Value Discovery fund and in case of Mid & Small cap funds it is SBI Small & Midcap fund is ranked first for the period of five years.
- ✓ Considering Jensen's ratio under the category of Large-cap funds the SBI Blue-chip fund, in case of Flexi-cap funds it is ICICI Pru Value Discovery fund and in case of Mid & Small cap funds it is SBI Small & Midcap fund is ranked first for the period of both three and five years.
- ✓ Considering all the three performance ratios in Large and Flex caps the HDFC's funds are ranked last in the selected schemes and in case of Mid & Small cap fund it is ICICI Pru Midcap fund and Birla MNC fund is listed at last.
- ✓ In case of large cap HDFC Top 200 Fund (G) company is the least performing company in all the three index measures.
- ✓ In case of Flexi cap Reliance Growth fund is the least performing company in all the three index measures.
- ✓ In case of Mid & Small Cap Birla SL MNC Fund is the least performing company in all the three index measures.

VII. SUGGESTIONS

- ✓ Sharpe performance index is based on evaluating the relationship between risk and return of a company, hence HDFC, Reliance & Birla companies should think of reducing its risk component.
- ✓ Treynor's performance index is based on analyzing the extra return on the investment than the risk free rate of return, so HDFC, Reliance & Birla companies should concentrate on earning more return than their risk free rate of actual return.
- ✓ Jensen performance index is based on the concept that the company should able to achieve more expected return by reducing its overall risk, Hence HDFC, Reliance & Birla companies have to increase its overall average returns by decreasing the unsystematic risk.
- ✓ Overall in all the three performance index techniques commonly HDFC, Reliance and Birla companies are the least performing companies. So they should try to increase their overall return by reducing both systematic & unsystematic risk.

VIII. CONCLUSION

Looking at the study and observation in the market and secondary data collected it is understandable that investing in Systematic investment planning over the long period of time may not give negative or not less than bank rates by any of the schemes selected and the SBI fund house schemes are generating even nearer to the triple of bank rates in the study.

It is also observed from the study that equity based mutual funds are having lot of potential of generating high returns for long term. It can be concluded that from the study considering all the parameters the SBI Blue-chip Fund, ICICI Pru Value Discovery Fund and SBI Small & Midcap Fund are the excellent performer and one can expect a good return over the long period of time in Large, Flexi and Mid & Small cap funds respectfully.

On the other hand the mutual funds are subjected to the market risks and may deviate at any time investor should consider the trend in the market and decide the investment, it's advisable to go for investing in portfolio to reduce the risk and maintain the returns consistency.

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