

PERFORMANCE PERSPECTIVE OF SELECT EQUITY FUNDS IN INDIA

A. Bala Vignesh

II PGDME, Aachi Institute Of Management And Entrepreneurial Development, Chennai.

Introduction

“If you have the stomach for stocks, but neither the time nor the inclination to do the homework, invest in equity mutual funds.” - Peter Lynch,

He advises the individuals who have interest in shares but no time to research for it, to invest in equity mutual funds. Financial securities such as equity shares, bonds and debentures are issued by the government and public companies. These investments are done to beat inflation and to avoid taxation, as investors they to invest in Government securities through gilts or gilt edged securities instead of holding liquid cash. These securities have zero risk as the government is responsible for the money borrowed, besides having tradability and marketability; and allows the holder to sell it in the stock market and liquidate the security. Those investors who expect only stable returns normally tend and prefer to invest in these type of securities.

Small investors who are willing to invest are not in a position to take risk and appear unaffordable. Mutual funds offers Systematic Investment Plan (SIP), in which monthly investments are done by investors to professional fund managers, who invest the pooled money on investor’s behalf.

The mutual fund sector had gained popularity due to affordability to individuals from various income levels, starting from Rs.500 as SIP. In the last decade this created a huge trend in the investment sector and caused a craze among prospective investors across the country that slowly ebbed over a period of time. The trend is again picking up since recession and gained attention of investors from different segments. Hence this study on mutual funds comprising equity funds with a SIP of Rs.5000, is put forth to understand the working of mutual funds by analysing the performance of sample mutual funds was done to find out the role of performance index in the portfolio investments. The researcher has used various financial tools commonly applied by the industry to draw out meaningful interpretations from the calculations made.

Review of Literature

It is normally done by referring to published information in print like journals, magazines, newspapers and online media like search engines. This has helped the researcher to have a clear comprehension on the concept and identify the research gaps the referenced reviews have been collected as a snapshot for throwing light on the topic, as under:-

Table No 1: Table showing Snap Shot of Review of Literature

Research Paper	Authors	Sample period	Sample funds		Results
			Category	Sample Size	
A comparative analysis of mutual fund schemes in India. [1][2][3]	Dr. Sarita Bhal Meenakshi Rani	6 years (2005-2011)	Open Ended Growth Equity	29	48.27% done well as per sharpe 65.52% as per Treynor 65.52% positive Jensen Alpha
Performance Evaluation of Mutual Funds: A Study of Selected Diversified Equity Mutual Funds in India. [1][2]	Dr. Vikas Chowdary, Preethi Sehgal Chawala	8 years (2005-2013)	Equity Diversified	8	87.5 % done well as per Sharpe & Treynor
Performance evaluation of mutual funds in India with	Mohamed Zaheeruddin, Pinninti	3 years (July 2009-April 2012)	Equity	3	ICICI has high return and lower risk

special reference to selected financial intermediaries. [1][2][3]	Sivakumar, Srinivas Reddy				
Comparative performance evaluation of equity shares of Indian cement industry.[1][2][3]	Dr. Aparna Mishra	10 years (2005-2015)	Cement Equity	5	3 funds perform better in terms of sharpe All funds deliver better performance as per Treynor & Jensen Alpha
Performance evaluation of Equity mutual funds. [1][2][3]	Vangapandu Ramadevi Nooney Linen Kumar	5 years (2003-2007)	Equity Diversified, Equity Index, Equity Tax Saver & Equity Technology funds	102	89% Equity Diversified, 94.4% Equity Index, 57.14% Equity Tax Saver & All Equity Technology funds deliver better returns
Comparative Study on Performance Evaluation of Mutual Fund Schemes in Bangladesh: An Analysis of Monthly Returns. [1][2][3]	Md.Qamruzzaman	1year (2012-2013)	Growth Oriented funds	32	47% exceed benchmark in terms of Sharpe, 50% in terms of Treynor & 62.5% positive Jensen AI
A Study on Performance Evaluation of Mutual Funds Schemes in India. [1][2][3]	N. Bhagyashree, B. Kishori	5 Years (2011-2015)	Open Ended Diversified Equity	30	46.67% Better return in terms of Sharpe Index, 30% In terms of Treynor Index and Jensen Alpha is positive for all.
Performance Analysis of Growth Oriented Equity Diversified Mutual Fund Schemes Using Sortino Ratio.[4]	Dr.S Poonima, Sudhamathi	5 years (2006-2011)	Equity Diversified Scheme	102	95% produced maximum returns
A Comparative Study on Performance of Open and Close-ended Mutual Funds in Pakistan. [1][2][3][4][5]	Waqas Ahmad, Muhammad Sohaib Roomi, Muhammad Ramzan	5 years (2007-2012)	Open & Close ended of Income , Balanced, Equity funds	73	Open Ended Schemes performed better than closed ended funds
Investment performance of equity linked savings schemes (ELSS) of Indian mutual funds. [1][4]	Krishna Kumar Kadambat, Raghavendra T S & B M Singh	13 years (2000-2013)	ELSS with Equity diversified and Benchmark Index	43	As per Sharpe 61% vs Diversified, 45% vs Benchmark And 64% vs Diversified, 47% Benchmark Index

(Source: Computed)

Major Take-aways from Review of Literature

1. 90% of the research in reviews has used Sharpe ratio as a technical tool.
2. Information ratio and Sortino ratio have yet to gain importance to analyse the financial performance of the funds.
3. Equity funds have been categorized in accordance to the various types of investments namely Equity Index, Equity Tax Saver, Equity Technology funds etc.

Based on the above information sourced, the research gaps were identified and used by the research to formulate the following objectives.

Objectives of the Study

1. To analyse the performance of the selected equity funds using Sharpe, Treynor, Sortino, Information ratio's and Jensen alpha.
2. To suggest strategies for better investment to add to the fund's assets values.

Methodology

Sampling Design

The Research design used for the study is exploratory in nature, as the researcher has attempted to analyse the financial performance of the select equity funds. Purposive and judgemental sampling technique was followed keeping in mind the convenience of the researcher.

Data Collection

As this study is purely based on information available on the websites of the companies and performance computed accordingly, no primary data was used.

Other Secondary data used included information sourced from journals, magazines, newspapers, working papers, online information and official websites.

Sample Size – 10 Equity funds with SIP Rs.5000 were deliberately selected for the research

Table No 2: Table Showing List Of Selected Equity Funds	
BNP Paribas Midcap	L&T Midcap Fund
CanaraRobec Emerging Equity	Mirae Asset Emerging Bluechip
Franklin India Smaller Companies	Sundaram SMILE
ICICI Prudential Midcap	Tata Midcap
Invesco India Midcap	UTI Midcap Fund

Source: Secondary Data

Technical tools used

The data so collected was analysed using the following technical tools which are explained below

Table No 3: Table Showing details of Technical tools

Tools	Sharpe	Treynor	Jensen Alpha ()	Sortino	Information ratio
Based on	Average return beyond the risk free rate of volatility	Volatility in the market to the value of an investment adjusted risk	Return on an investment for the least amount of risk.	Return below a minimally expectable target	Portfolio in excess of a selected benchmark with excess risk faced

Formulas	$\frac{R_p - R_f}{\sigma_p}$	$\frac{R_p - R_f}{\beta}$	$R_p - R_f - (\beta(R_m - R_f))$	$\frac{R_p - R_f}{\sigma_d}$	$\frac{R_p - R_m}{\sigma(p - m)}$
Rule of Thumb	Greater Performance when Sharpe > 1	Greater Performance when Treynor > 1	Alpha values must be positive for better performance.	Higher the value, better the performance.	Information ratio have to be positive for better performance.

Source: Review of Literature

Results And Discussion

Based upon the understanding from the review the 10 equity funds taken and thier individual parameters such as returns risk beta downside deviation and tracking error were calculated.

Mutual Funds	Return	Risk		Downside Deviation	Tracking Error
BNP Paribas Midcap	26.61	22.89	0.99	1.73	10.31
CanaraRobec Emerging Equity	31.03	31.37	1.42	2.61	14.04
Franklin India Smaller Companies	32.76	26.33	1.14	1.76	12.31
ICICI Prudential Midcap	26.47	28.47	1.29	4.208	11.45
Invesco India Midcap	25.78	25.7	1.12	3.02	11.47
L&T Midcap Fund	28.91	28.32	1.31	3.5	9.55
Mirae Asset Emerging Bluechip	32.01	24.57	1.13	1.17	6.84
Sundaram SMILE	30.85	40.66	1.82	5.38	24.14
Tata Midcap	26.61	31.69	1.38	4.34	16.18
UTI Midcap Fund	28.82	29.06	1.21	3.32	16.06

Source: Computed

After computation of these useful parameters for the research the key financial tools are found using these parameters and are tabulated as below

Table No 5: Comprehensive table showing the performance ratios of the selected equity funds

Mutual Funds		BNP Paribas Midcap	Canara Robec Emerging Equity	Franklin India Smaller Companies	ICICI Prudential Midcap	Invesco India Midcap	L&T Midcap Fund	Mirae Asset Emerging Bluechip	Sundaram SMILE	Tata Midcap	UTI Midcap Fund	Nifty Midcap
Sharpe	Values	0.826	0.744	0.95	0.659	0.70392	0.749	0.99	0.569	0.6	0.727	0.3685
	Ranks	3	5	2	8	7	4	1	10	9	6	
Treynor	Values	19.146	16.445	22.065	14.61	16.183	16.19	21.527	12.725	13.73	17.472	8.14
	Ranks	3	5	1	8	7	6	2	10	9	4	
Jenson Alpha	Values	7.495	6.932	11.933	3.921	5.166	6.0674	11.2611	2.118	3.001	7.1505	
	Ranks	3	5	1	8	7	6	2	10	9	4	
Sortino	Values	10.88	8.94	14.24	4.46	5.91	9.26	28.25	4.3	4.38	6.35	
	Ranks	3	5	2	8	7	4	1	10	9	6	
Information Ratio	Value	0.7133	0.839	1.096	0.63	0.5691	1.109	1.864	0.4805	0.4604	0.596	
	Ranks	5	4	3	6	8	2	1	9	10	7	

(Source: Computed)

Interpretation

An analysis of the performance of Equity Funds based on Sharpe ratio it is found that all the sample funds are performing above the Benchmark Index of Nifty Midcap whose value is 0.3685. Among these sample funds the top 3 performing funds as per Sharpe Index are Mirae Asset Emerging Blue Chip ranking First whose Sharpe Ratio is 0.99, Franklin India Smaller Companies ranking Second whose Sharpe Ratio is 0.95 and BNP Paribas Midcap ranking Third having Sharpe Ratio 0.826. The top performing funds are around 2times higher than the Benchmark Index. The least performing funds are found to be Tata Midcap with a Sharpe ratio of 0.6 and Sundaram SMILE having Sharpe Ratio of 0.569.

The Evaluation based on Treynor Index shows that all the funds ave performed above Benchmark Performance of Nifty Midcap whose Treynor Ratio is 8.14. Based on the Sample funds taken for the study, top 3 perfuming funds based on Treynor Ratio are Franklin India Smaller Companies ranked first having ratio of 22.065, Mirae Asset Emerging Blue Chip with ratio 21.527 and the BNP Paribas Midcap third with a ratio of 19.146. The ratios of these funds are twice that of the Benchmark Index Treynor Ratio similar to Sharpe. On the other hand the poor performing funds in this sample are Tata Midcap fund with Treynor Ratio of 13.73 and Sundaram SMILE with ratio of 12.725.

The comparison of funds using Jensen Alpha in which all the funds are getting a positive alpha. The top three funds in the selected sample for the study are Franklin India Smaller Companies is ranked first with an Alpha value of 11.93; the second among is Mirae Asset Emerging Blue Chip with the Alpha value of 11.26; and the third is BNP Paribas Midcap having an Alpha value 7.495. The least performed funds based on this comparison using Jensen Alpha is Tata Midcap Alpha value is 3.001 and Sundaram SMILE has Alpha of 2.118.

These results are similar to the results derived in a study done by **Dr. Aparna Mishra, 2016** as the sample funds of 5 cement equity taken for a period of 10 years were analysed and found to be having a high Sharpe, Treynor and Jensen Alpha performance Index.

The comparison of the funds based on Sortino Index shows all the values are positive and the top three funds in this comparison is Mirae Asset Emerging Blue Chip ranking first having a Sortino Index value of 28.25; second is Franklin India Smaller Companies with the value of 14.24 while the third is BNP Paribas Midcap having a ratio value of 10.88. The less perfoming funds in the sample are Tata Midcap with 4.38 and Sundaram SMILE 4.3.

However in **2013, Dr.S.Poornima, R.K.Sudhamathi** did a study using Sortino Index and thier analysis revealed that Sundaram SMILE was a top performer then. However, with the current study undertaken it is found that the Sortino Index is 4.3 which is a clear indication that the performance of the fund has fallen over the years due to organizational and economic factors.

Normally when the funds are analysed using Sortino and Information Ratios, there will b a negative direction in the results. However in this study it is surprisingly found that the Information Ratio is also similar to the finding of Sortino Ratio. It is found that the top three funds are Mirae Asset Emerging Blue Chip ranked first with a Information Ratio of 1.86, the second one is L&T Midcap fund whose ratio is 1.109 and the third is Franklin India Smaller Companies with Information Ratio of 1.096.while the least performers are Sundaram SMILE obtained Information ratio of 0.4805 and Tata Midcap with ratio of 0.4604.

The top three rankings of the funds are displayed below

Table No 6: Table showing the top 3 performing funds

Ranks	Equity Funds
1	Mirae Asset Emerging Blue Chip
2	Franklin India Smaller Companies
3	BNP Paribas Midcap

Source: Computed

Table No 7: Table showing the Inferences drawn from the interpretations

Performance Index	Results	Inference
Sharpe	All funds exceeded the Benchmark Index	Risk of funds were minimum than the Benchmark Index
Treynor	All funds exceeded Benchmark Index	Market risk was minimal
Jensen Alpha	All values are positive	The fund returns were higher than the market returns which indicate growth
Sortino	All values are positive	The downward or negative deviation of funds are minimum which shows the funds have an upward trend
Information Ratio	All values are positive	The greater returns are delivered by the portfolio as compared to the market returns constantly

Source: Interpretation

Findings

From the study on the mixture of equity funds taken as sample, the important findings are classified as general findings and specified findings

General findings

These are the general findings found in the study

1. Midcap equity funds invest in various sectors of equities to diversify the investments. The sectors include automobile, banking, cement, chemicals, infrastructure, manufacturing, etc.
2. On studying the sectoral investment, banking sector provides great return due government steps to digitalization of currency. Also the working of the banking sector is controlled by RBI. Investments in banks are ideal as the investor is assured of the safety and liquidity of the investment.
3. The increasing use of de-mat and re-mat account and trading securities in online without using broker gives an edge over materialized account. This is used as an opportunity by banks to create trading websites for its customers. Due to the continuous improvement this sector always is in an uptrend.
4. The second is followed by manufacturing which is driven by the foreign direct investment to attract investors from abroad. Also the initiatives provided by the government which attracts a lot of Multinational companies to setup a manufacturing plant in India.

Table No 8: Table showing Specific findings of the study

Name of Performance Ratio	Calculation based on	Results	Outcome
Sharpe ratio	Funds risk	High performance	Exceeds expectation
Treynor ratio	Market risk	High performance	Exceeds expectation
Jenson Alpha	Funds return	High performance	Exceeds expectation
Sortino ratio	Downside deviation	High performance	Exceeds expectation
Information ratio	Tracking error	High performance	Exceeds expectation

Source: Interpretation

Suggestions

The study was done to calculate the impact of the performance index applied to measure the performance of the selected funds. It may also be remembered that the researcher has considered only a set of equity funds based on the SIP of Rs 5000 per month. The results may vary if the amount and the selected funds are changed. Based on the finding the following suggestions are put forth by the researcher.

1. The fund managers should approach investment in a holistic manner considering various environmental factors such as Political, Economical, Social, Technological and Legal environment, so that the returns generated will increase.
2. The fund managers should consider portfolio's performance-the returns delivered by the investment, expense ratio -all the expenses that the fund incurs, including management fee, administration and transaction costs, risks- the deviation in returns.
3. When the equity funds were analysed, the funds which invested in Banking and Finance was found to be higher as it is a growth sector. The investment in those sector has paid off. So, it is suggested that these portfolio investment continue to invest in Banking and Finance sector.
4. The Chemical Industry is already in an uptrend which will continue over a period of time as Western companies prefer to expand their presence in Asia since the Asian markets have emerged as a major consumption hub. Opportunities in segments such as Speciality Chemicals and Speciality Polymers are showing an growing demand. Investing in chemical industry is suggested as it is promising to delivers better returns.
5. Due to foreign investments in the manufacturing sector, several mobile phone, luxury and automobile brands, among others, those have been set up or are looking to establish their manufacturing bases in the country.

The move could help infrastructure sectors such as cement, power, oil and gas, and automobile manufacturing. The Make in India concept provides an interconnected growth between all sectors which majorly contribute to development of the manufacturing and banking sector.

6. Cement industry is currently witnessing a downfall, but is bound to witness a growth due to PradhanMantriAwaasYojana a scheme offered by Prime Minister Shri.NarendraModi.This scheme proposes to build 2crore houses for urban poor including economically weaker sections and low income groups in urban areas by the year 2022. Those initiatives by the government will pave way to a demand for cement leading the sector to rise again.
7. When Investors and fund managers follow the above mentioned services, there is likely to be higher nature for investor. This will surely attract more investment for portfolio from different walk of life.

Conclusion

Mutual Fund is a safe investment too and provides an opportunity for many investors to invest in an intelligent and diversified manner. Investment in debt or arbitrage schemes is ideal for those investors who want to eliminate the risk element but reap better returns (**Dr. J K Raju, Manjunath B R, Nagaraja G M,2015**). The risk appetite of an investor spanning risk associated with the investment, tax benefits, liquidity, and marketability plays an important role in selection of stocks (**Dr. Aparna Mishra, 2016**). Investors need to do a self-analysis of one's needs, risk-bearing capacity, and expected returns so as to develop a prudent investment ideology. For this, they have to be aware of the mutual fund regulations, the channelling of money, objectives of schemes, besides ensuring better diversification of investment.(**Dr.S.Poornima, Saranya PB, 2016**). In Karachi Stock Exchange, a comparison between open and close ended funds revealed a better performance of closed end funds (**Rana Yasir Hussain, Haroon Hussain and Arshad Hassan, 2016**). Despite 20 years of its existence,ELSS funds are not very popular with the retail investors as a tax saving investment option, basically due to its underperformance (**Krishna Kumar Kadambat,Raghavendra T S and B M Singh, 2015**). An analysis of 102 growth oriented equity diversified schemes shows that only 5 funds have performed below the minimum acceptable return. A cautious choice of mutual funds after evaluating their associated return and risk using suitable technical tools will surely provide the investor with attractive returns (**Dr.S.Poornima, R.K.Sudhamathi, 2013**). Fund managers should try to reduce downside deviations as investors are only concerned with downside returns which indicate losses. When the market conditions are highly volatile, prudent investors should invest in hybrid funds (**Ch. Usha**



Rekha & Dr. K. Rajender, (2014). Good performance occurs among small equity funds, low fee funds, funds whose trading activity is high and in some cases, funds with good past performance (**Magnus Dhalquist, Stefan Engstrom and Paul Soderlind 2000**). Performance measures used in previous mutual funds research have little ability to detect economically large magnitudes of abnormal fund performance.

(**S.P. Kothari and Jerold B. Warner 2001**). Investors derive utility from the socially responsible attribute, especially when returns are positive (**Nicolas P.B. Bollen 2002**). On an average, more concentrated funds perform better controlling for risk and style differences using various performance measures (**Marcin Kacperczyk, Clemens Sialm and Lu Zheng 2005**). Most mutual funds adopt investment styles that cluster around a broad market benchmark, an approach using portfolio characteristics predicts funds returns better. (**Louis K.C. Chan, Hsiu-Lang Chen, Josef Lakonishok 2008**).

“Approaches to determining stock values vary, but fundamentally each company judging itself undervalued is saying that its future stream of earnings justifies a higher price that the stock market is willing to accord it” - Carol Loomis

References

1. **Dr. Saritabahl, Meenakshi Rani** (2012), “A comparative analysis of mutual fund schemes in India”, International Journal of Marketing, Financial Services & Management Research Vol.1 Issue7.
2. **Dr Vikas Choudhary, Preeti Sehgal Chawla** (2014), “Performance Evaluation of Mutual Funds: A Study of Selected Diversified Equity Mutual Funds in India”, International Conference on Business, Law and Corporate Social Responsibility Vol.2 Issue 10.
3. **Mohamed.zaheeruddin, PinnintiSivakumar, K.Srinivas Reddy** (2013), “Performance evaluation of mutual funds in India with special reference to selected financial intermediaries”, IOSR Journal of Business and Management Vol.7 Issue 2.
4. **Dr. Aparna Mishra** (2016), “Comparative performance evaluation of equity shares of Indian cement industry”, International journal Of Business Quantitative Economics and Applied Management research Vol.3 Issue 3.
5. **VangapanduRamadevi, Nooney Linen Kumar** (2010), “Performance evaluation of Equity mutual funds”, The Journal of Indian Management & Strategy Vol.15 Issue 2.
6. **Md.Qamruzzaman** (2014), “Comparative Study on Performance Evaluation of Mutual Fund Schemes in Bangladesh: An Analysis of Monthly Returns”, Journal of Business Studies Quarterly Vol.5 Issue 4.
7. **N. BhagyasreeMrs. B. Kishori** (2016), “A Study on Performance Evaluation of Mutual Funds Schemes in India”, International Journal for Innovative Research in Science & Technology Vol.2 Issue 11.
8. **Dr.S.Poornima, R.K.Sudhamathi** (2013), “Performance Analysis of Growth Oriented Equity Diversified Mutual Fund Schemes Using Sortino Ratio”, Asia pacific Journal of Research Vol.I Issue 8.
9. **Waqas Ahmad, Muhammad Sohaib Roomi, Muhammad Ramzan** (2015), “A Comparative Study on Performance of Open and Close-ended Mutual Funds in Pakistan”, International Journal of Accounting and Financial Reporting Vol. 5 Issue 1.
10. **Krishna Kumar Kadambat, Raghavendra T S, B M Singh** (2015), “Investment performance of equity linked savings schemes(ELSS) of Indian mutual funds”, International Journal of Recent Scientific Research Vol. 6 Issue 5.
11. **Dr. J K Raju, Mr. Manjunath B R, Mr. Nagaraja G M** (2015), “Performance Evaluation Of Indian Equity Mutual Fund Schemes”, Journal of Business Management & Social Sciences Research Vol. 4 Issue 11.
12. **S. P. Kothari and Jerold B Warner** (2001), “Evaluating Mutual Fund Performance”, American Finance Association.
13. **Nicolas P. B. Bollen** (2002), “Mutual funds Attributes and Investor Behaviour”, Vanderbilt University-Owen Graduate School of Management.



14. **Louis K. C. Chan, Hsiu-Lang Chen and Josef Lakonishok** (2002), “Are Some Mutual Fund Managers Better than Others? Cross-Sectional Patterns in Behaviour and Performance”, University of Illinois at Urbana-Champaign and National Bureau of Economic Research.
15. **Magnus Dahlquist, Stefan Engstrom and Paul Soderlind** (2006), “Performance and Characteristics of Swedish Mutual Funds”, University of Washington School of Business Administration.
16. **Marcin Kacperczyk, Clemens Sialm and Lu Zheng** (2005), “On the Industry Concentration of Actively Managed Equity Mutual Funds”, American Finance Association.
17. **Dr. S Poornima, Saranya PB** (2016) “An application of Sharpe’s, Jensen and Treynor’s models to analyse the performance of growth funds” International Journal of Applied Research Vol.2 Issue1.
18. **Rana Yasir Hussain, Haroon Hussain & Arshad Hassan** (2016), “Risk Adjusted Performance Evaluation Of Mutual Funds And Selection Abilities Of Fund Managers In Pakistan”, Pakistan Business Review.
19. **Ch. Usha Rekha & Dr. K. Rajender** (2014), “Portfolio Performance Evaluation of Mutual Funds in India – A Study of Hybrid Growth Funds” Global Journal of Management and Business Research: C Finance, Vol.14 Issue 4.

Websites

1. www.moneycontrol.com.
2. www.mutualfundindia.com.
3. www.amfiindia.com.
4. www.crisilresearch.com.