

# Performance Evaluation of Selected open Ended Mutual Fund Schemes In India: An Empirical Study

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## Abstract

Mutual fund is one of the fastest growing sectors in India and it plays significant role in the Indian capital market. The common investors are facing the problem in choosing the suitable product among the multiple institutions offering variety of products and multiple options attached with each product. This research paper is an attempt to evaluate the performance of selected schemes of different mutual funds in India. The sample consists of 20 schemes from the selected asset management companies over a study period of 5 years spanning from January 2010 to December 2014. The performance of selected funds is evaluated by using statistical tools like average rate of return of funds, standard deviation, beta, correlation, regression analysis and risk adjusted techniques are used by using Sharpe ratio, Treynor ratio and Jensen ratio. Benchmark index has also done for the purpose of analysis.

*Keywords: Mutual fund, NAV, Schemes, Benchmark Index scenario*

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## Introduction

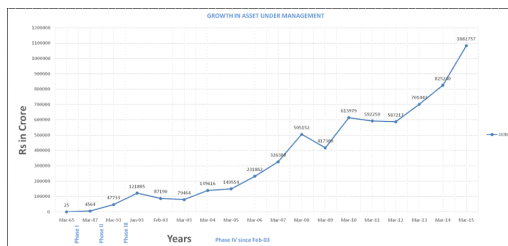
Mutual fund refers to an institution which is professionally managed by the portfolio managers. Asset management companies mobilize the savings from the small investors and invest in various types of securities like shares, bonds, debentures, and commodities in the market based on the fund's objective. The income earned from these investments will be distributed to the unit holders in percentage according to the number of units owned by them. The main advantage of the mutual fund is risk diversification, offering tax benefits etc. Mutual funds offer close ended and open

ended schemes. Close ended schemes have some stipulated time period that is normally between 3 to 15 years. Open ended schemes are available for subscription during the all time period. These are further available in growth, income, balanced, ELSS, FMCG, ETF, gold fund and sector specific. Mutual fund industry is doing every effort to attract the investors to invest in mutual funds by offering innovative schemes. Moreover Investors have great expectations from mutual funds.

The world's first mutual fund industry was established in the US. In India, the mutual fund industry was established

by UTI in the year of 1963 under the act of parliament to serve as an investment vehicle for small investors. In 1964, UTI launched first scheme the unit 64 scheme. Frequently, UTI offered various schemes to the investors were the only option available to the investors for investment in mutual fund in India. After 1991, the government of India has permitted to start the bank and financial institutions enter into the mutual fund business. From a single player the number of players has increased to 43 and the number of schemes has increased to more than 723 with managed assets of Rs.1, 245,077.100 Cr. as on June 2015 in India. The mutual fund companies are regulated by securities and exchange board of India. There are many parties involved in the mutual fund companies namely, Asset Management Company, Sponsoring institutions, Custodians and Trustees.

The following graph shows the growth of assets under management from 1965 to 2015.



**Source:** Association of Mutual Funds in India

### Need of the Study

Mutual fund investment is quite popular among the small and household investors, who mobilize their savings for investment in capital market. In India, majority of the peoples are expecting yield higher return on their investment by taking less risk. In

banks and post offices investment is safe but due to lower interest rates, while in mutual fund through professional sound fund management. It helps to diversify the risk and yield high rate of return. In order to analyze the best mutual fund in terms of risk and return, this study is an attempt to evaluate the performance of selected mutual fund schemes based on asset under management.

### Scope of the Study

At present scenario, there are numerous investment avenues available for investors in India. However, the investors before go for the investment decision, they should analyze the asset management companies in term of fundamental like economic, industry and company wise. The investors are facing huge problems to select the mutual fund in terms of risk and return. Hence, this study would help to the investors to choose the asset management companies according to the performance of the funds.

### Review of Literature

Several studies conducted by the researcher which is related to the performance evaluation of mutual funds in the Indian context.

A study conducted by Kour et al. (2011) had examined the performance evaluation of open ended equity mutual fund schemes in India. They found that, open ended equity mutual fund schemes have not performed well against benchmark index. The fund managers are found to be poor in terms of the ability of market timing and selectivity. Bahl et al. (2012) also found evidence

that the 14 out of 29 (48.27%) sample mutual fund schemes had outperformed the benchmark return in India. The result of Treynor measure shows that, 19 out of 29 schemes had outperformed the benchmark. It shows that some of the schemes had underperformed. Result of Jensen measure shows that, 19 out of 29 (65.52%) schemes were shown positive alpha which indicated superior performance of the schemes. On the other hand, Narayanasamy et al. (2013) came with the evidence that there was a decrease in a Nifty in the year 2011 which was 1493.15 point. This shows a great fall in the stock market growth due to high inflation and interest rate. Similarly, a study conducted by Vasantha et al. (2013) examined evaluating the performance of selected open ended equity diversified mutual fund in India. They found that, all the selected fund shows beta value of less than one which means the funds will be less volatile than the market. They suggest the investors who have lower risk appetite should invest in HDFC Top 200 fund and Birla Sun Life Front Line Equity fund. Zaheeruddin et al. (2013) examined the performance evaluation of selected financial intermediaries' mutual funds. They found that, the investors can invest in ICICI fund as it is ranked in the top position as per the Sharpe, Treynor and Jensen. Similarly, Burlacanti et al. (2013) examined the performance evaluation of selected equity funds in India. The study found that, all the equity mutual funds are given higher return against the benchmark return in India. They suggest investor's don't invest short term perspective. A study conducted by Revathi et al. (2013) had examined performance evaluation of selected bank equity mutual funds. They found that, when compared all other equity mutual funds, HDFC

mutual funds gave high return and risk also less. Jacob et al. (2013) have conducted comparative study of mutual fund schemes of State Bank of India and Unit Trust of India. They found that, the SBI Mutual fund, SBI FMCG fund is the best one in terms of risk and return, as it shows highest Sharpe ratio with higher risk. UTI floating rate fund is the best one. It shows the highest Sharpe ratio. The investor can invest in these two schemes. Pal et al. (2014) examined the critical analysis of selected mutual funds in India. The study finds that, the HDFC Midcap Opportunities and Quantum Long Term Equity outperformed among all other schemes. Gupta et al. (2011) examined consideration of sources of information as selection criteria in mutual fund purchase especially the comparative study of retail and non retail investors. They found that, there is a significant difference between retail and non retail mutual fund investors with respect factors of advertisement, shows and published returns. Another comparative analysis done by Das et al. (2008) have conducted a study on mutual fund Vs Life insurance towards the retail investors. It is found that, the different investment pattern do not provide the same level of services with respect to age of the retail investors in India. Although the investment patterns provide more or less the same service, the existing differences depend on the education level of the investors. Bansal et al. (2012) came with the evidence that there are three mutual fund schemes are outperformed well against the market namely HDFC Liquid fund, L&T Liquid fund and Unit Trust of India bond return according to Sharpe ratio. The remaining 9 mutual fund schemes underperformed against the market index.

Several studies conducted by the researcher which is related to the performance evaluation of mutual funds in the overseas context.

Athanasios G. et al. (2005) investigated Performance of mutual funds of Greece equity funds based on the risk and return. They found, all the equity mutual funds show positive value in the first three years after that due to fall in the stock market mutual funds show negative return in 2000. Panayiotis et al. (2004) examined performance evaluation of the bond mutual funds operating in Greece. They found that the performance of five mutual funds aggressive and remaining 33 mutual funds are defensive in relation to the bond index and the performance 25 mutual funds are defensive in relation to the general index of the Athens stock exchange. K.Hari et al. (2014) conducted a study on Choice and Satisfaction towards the Mutual Fund Investment. They found that the return factor is considered by the investor and second factor is investment choice and third factor is analysis and reference considered by the investors. Sundaram (2012) came with evidence that the last 20 years the mutual fund markets have observed tremendously diverse industry. Each country observed different challenges faced by the country historical against political, structural and legal framework. Similarly, Otten et al. (2002). also found that When compare with asset allocation of European and US industry Europeans prefers fixed income securities and US investors mostly invested in equity funds. They conclude four out of five countries (France, Italy, Netherland and UK show positive alpha and Germany underperformed against the market. Panayiotis et al. (2004 came with

the evidence that the performance of five mutual funds aggressive and remaining 33 mutual funds are defensive in relation to the bond index and the performance 25 mutual funds are defensive in relation to the general index of the Athens stock exchange.

### **Objectives of the Study**

1. To evaluate the performance of selected mutual fund schemes in India.
2. To examine the risk and return relationship of market volatility of the selected equity diversified mutual funds.
3. To identify the relationship between Net Asset Value and market portfolio return (Index).
4. To analyze the risk adjusted performance of selected equity diversified mutual funds by applying the measures of Sharpe, Treynor and Jensen.

### **Research Methodology**

The study is descriptive and analytical in nature. For the purpose of research, there is a comparison among different open ended mutual fund schemes and also the analysis is been done on the overall performance of various mutual fund schemes. The study is purely based on secondary data which are collected through the official website of Association of Mutual Funds in India, National Stock Exchange and Bombay Stock Exchange. To evaluate the performance of open ended schemes, top ten asset management companies were selected as per AUM as on 30th June 2015. Sample consists of 20 open ended mutual fund schemes were selected for the purpose of study (taking two schemes each from the selected AMCs) over a period of five years spanning from January

2010 to December 2014. The NSE Nifty used as a surrogate for market portfolio. Daily net asset values (NAV) data of the schemes and the daily closing values for the benchmark market index (NSE Nifty) is used in this study. The daily returns are converted into natural logarithm making for further analysis. Commercial Bank's Savings bank deposit rate of 4 percent is used as a proxy for risk free rate of return. In order to evaluate the performance of

mutual fund schemes various measures used in this study such as return, beta, standard deviation, correlation, regression analysis and risk adjusted performance measures also used such as Sharpe, Treynor and Jensen measures

The following table shows that asset under management of AMC and selected Mutual fund schemes

**Table-1: Names of the Asset Management companies, Assets under management  
As on June 2015 and Selected Equity Mutual Fund Schemes**

<b>Mutual Funds</b>	<b>Assets under management (as on June 2015) (Rs. Crore)</b>	<b>Mutual Fund Schemes</b>
HDFC Mutual fund	165,013	HDFC Medium Term Opportunities Fund - Growth Option
		HDFC Capital Builder Fund - Growth Option
ICICI Prudential Mutual Fund	155.522	ICICI Prudential Mid Cap Fund - Regular Plan - Growth
		ICICI Prudential Corporate Bond Fund - Regular Plan - Growth
Reliance Mutual Fund	144,693	Reliance Income Fund - Growth Plan Growth Option
		Reliance Dynamic Bond Fund-Growth Plan-Growth Option
Birla Sun life Mutual Fund	125,502	Birla Sun Life Dynamic Bond Fund - Growth - Regular Plan
		Birla Sun Life Income Plus - Growth - Regular Plan
UTI Mutual Fund	92,730	UTI Opportunities Fund-Growth Option
		UTI - Equity Fund-Growth Option
SBI Mutual fund	83,693	SBI Corporate Bond Fund - Regular Plan
		SBI Blue Chip Fund-Regular Plan Growth
Franklin Templeton Mutual Fund	74,312	Franklin India Savings Plus Fund - Growth Option
		Franklin India Income Opportunities Fund - Growth
IDFC Mutual fund	54,498	IDFC Dynamic Bond Fund – Growth
		IDFC-Money Manager Fund-Investment Plan-Regular Plan-Growth

Kotak Mahindra Mutual fund	48,077	Kotak Flexi-Debt - Regular Plan – Growth
		Kotak Equity Arbitrage Fund – Growth
DSP Black Rock Mutual Fund	36,036	DSP BlackRock MIP Fund- Regular Plan - Growth
		DSP BlackRock Income Opportunities Fund - Regular Plan –Growth

Source: Association of Mutual Funds in India

**Table – 2: Return, Standard deviation and Risk of open ended mutual fund schemes**

Schemes	Average daily returns	Standard deviation	Beta
HDFC Medium Term Opportunities Fund - Growth Option	0.03	0.26	0.002
HDFC Capital Builder Fund - Growth Option	0.06	0.88	0.114
ICICI Prudential Mid Cap Fund - Regular Plan - Growth	0.07	0.93	0.115
ICICI Prudential Corporate Bond Fund - Regular Plan - Growth	0.03	0.12	0.001
Reliance Income Fund - Growth Plan Growth Option	0.03	0.25	0.004
Reliance Dynamic Bond Fund-Growth Plan-Growth Option	0.04	0.22	0.003
Birla Sun Life Dynamic Bond Fund - Growth - Regular Plan	0.04	0.12	0.009
Birla Sun Life Income Plus - Growth - Regular Plan	0.03	0.24	-0.001
UTI Opportunities Fund-Growth Option	0.06	0.89	0.133
UTI - Equity Fund-Growth Option	0.06	0.90	0.141
SBI Corporate Bond Fund - Regular Plan	0.04	0.03	0.007
SBI Blue Chip Fund-Regular Plan Growth	0.05	0.93	-0.04
Franklin India Savings Plus Fund - Growth Option	0.03	0.01	0.001
Franklin India Income Opportunities Fund – Growth	0.04	0.09	0.006
IDFC Dynamic Bond Fund - Growth	0.04	0.23	0.002
IDFC-Money Manager Fund- Regular Plan-Growth	0.03	0.05	0.008

Kotak Flexi-Debt - Regular Plan - Growth	<b>0.03</b>	<b>0.09</b>	<b>0.001</b>
Kotak Equity Arbitrage Fund - Growth	<b>0.03</b>	<b>0.04</b>	<b>0.003</b>
DSP Black Rock MIP Fund- Regular Plan – Growth	<b>0.04</b>	<b>0.24</b>	<b>0.007</b>
DSP Black Rock Income Opportunities Fund - Regular Plan –Growth	<b>0.03</b>	<b>0.06</b>	<b>0.002</b>
<b>Average</b>	<b>0.041</b>	<b>0.329</b>	-
<b>Market</b>	<b>0.04</b>	<b>1.064</b>	<b>1.000</b>

**Sources:** calculated from NAV

### *Return*

The above table exhibits that, the ICICI Prudential mid cap fund-growth performed well in terms of highest returns (0.07%) of all selected mutual funds. HDFC Capital builders fund growth, Both UTI Opportunities fund and equity fund has earned the next highest returns (0.06%), followed by SBI Blue chip fund (0.05%) etc. ICICI Prudential corporate bond fund, Reliance income fund, Birla sun life income plus fund, Franklin India savings plus fund, IDFC Money manager fund, Kotak flexi debt fund, both DSP Black rock MIP fund and DSP Income opportunities fund gives lowest returns (0.03%) among all the funds.

### *Standard Deviation*

Higher standard deviation means higher risk. Franklin India savings plus fund (0.01%), IDFC Money manager fund (0.05%), ICICI Prudential corporate bond fund (0.12%), IDFC Dynamic bond fund (0.23%), DSP Black rock MIP fund (0.24%)

and Birla Sun life dynamic bond fund growth has the lowest standard deviation which means it is comparatively less risky to the other funds as its returns are less volatile. ICICI Prudential mid cap fund-growth (0.93%), SBI Blue chip fund (0.93%), UTI - Equity Fund-Growth Option (0.90), UTI Opportunities Fund-Growth Option (0.89%) gives highest volatility among all the funds which means it is comparatively more risky as its return are more volatile.

### *Beta*

Since, Beta value is less than 1 means the fund reacts less than market reaction. All the funds has beta less than 1, which indicates that the security price will be less volatile than the market.

In order to calculate the risk-adjusted returns of investment portfolios the most important widely used measures of performance are:



**Table-3: Risk-Adjusted Performance Measures of Selected Mutual Fund Schemes**

<b>Schemes</b>	<b>Sharpe ratio</b>	<b>Treynor ratio</b>	<b>Jensen Alpha</b>
HDFC Medium Term Opportunites Fund - Growth Option	<b>-0.031</b>	<b>-3.228</b>	<b>0.04</b>
HDFC Capital Builder Fund - Growth Option	<b>0.028</b>	<b>0.212</b>	<b>0.04</b>
ICICI Prudential MidCap Fund - Regular Plan - Growth	<b>0.032</b>	<b>0.042</b>	<b>0.04</b>
ICICI Prudential Corporate Bond Fund - Regular Plan - Growth	<b>-0.058</b>	<b>-7.065</b>	<b>0.04</b>
Reliance Income Fund - Growth Plan Growth Option	<b>-0.035</b>	<b>-2.173</b>	<b>0.04</b>
Reliance Dynamic Bond Fund-Growth Plan-Growth Option	<b>-0.013</b>	<b>-0.972</b>	<b>0.04</b>
Birla Sun Life Dynamic Bond Fund - Growth - Regular Plan	<b>-0.023</b>	<b>-2.972</b>	<b>0.04</b>
Birla Sun Life Income Plus - Growth - Regular Plan	<b>-0.030</b>	<b>5.962</b>	<b>0.03</b>
UTI Opportunities Fund-Growth Option	<b>0.023</b>	<b>0.157</b>	<b>0.04</b>
UTI - Equity Fund-Growth Option	<b>0.021</b>	<b>0.136</b>	<b>0.04</b>
SBI Corporate Bond Fund - Regular Plan	<b>-0.125</b>	<b>-5.272</b>	<b>0.04</b>
SBI Blue Chip Fund-Regular Plan Growth	<b>0.016</b>	<b>-0.370</b>	<b>0.04</b>
Franklin India Savings Plus Fund - Growth Option	<b>-0.185</b>	<b>-3.776</b>	<b>0.04</b>
Franklin India Income Opportunities Fund – Growth	<b>-0.032</b>	<b>-5.024</b>	<b>0.04</b>
IDFC Dynamic Bond Fund – Growth	<b>-0.019</b>	<b>-1.856</b>	<b>0.04</b>
IDFC-Money Manager Fund-Regular Plan-Growth	<b>-0.125</b>	<b>-7.968</b>	<b>0.04</b>
Kotak Flexi-Debt - Regular Plan - Growth	<b>-0.089</b>	<b>-6.422</b>	<b>0.04</b>
Kotak Equity Arbitrage Fund – Growth	<b>-0.148</b>	<b>-2.4769</b>	<b>0.04</b>
DSP Black Rock MIP Fund- Regular Plan – Growth	<b>-0.014</b>	<b>-0.465</b>	<b>0.04</b>
DSP Black Rock Income Opportunities Fund - Regular Plan –Growth	<b>-0.109</b>	<b>-2.833</b>	<b>0.04</b>
<b>Average</b>	<b>-0.045</b>	<b>-1.676</b>	<b>-</b>
<b>Market</b>	<b>0.002</b>	<b>-2.318</b>	<b>-</b>

Sources: calculated from NAVs



### Sharpe Measure

The above table shows that, the ICICI Prudential Mid cap fund (0.032%), HDFC Capital builder fund (0.028%), UTI Opportunities fund (0.023%), UTI Equity fund growth (0.021%) and SBI Blue chip fund (0.016%) gives the positive sharpe ratio which means these funds outperformed well when compare to the other funds as per sharpe ratio. Out of these funds all other funds gives negative sharpe ratio which means these funds not performed well.

### Treynor Measure

The above table depicts that, the birla sun life income plus growth gives the highest treynor ratio (5.961%) followed by UTI opportunities fund growth (0.157%), UTI

equity fund growth (0.136%), HDFC capital builders fund (0.212%) and ICICI prudential mid cap fund (0.04%). The other funds such as HDFC medium term opportunities fund (-3.227%), ICICI Prudential corporate bond fund (-7.065%), SBI corporate bond fund (-5.272%) and franklin savings plus fund (-3.776) etc gives the negative treynor ratio.

### Jensen Measure

The above table shows that, 19 out of 20 schemes gives the highest Jensen ratio (0.04%) and birla sun life income plus – growth gives the lowest Jensen ratio (0.03%).

**Table 4: Correlation Analysis of selected mutual fund schemes**

Correlation						
Mutual fund schemes	Nifty	NSE MID CAP	NSE 200	NSE JUNIOR	BSE Small cap	BSE S&P
Birla Income Plus	0.16	0.167	0.169	0.177	0.129	0.166
Birla Sun Life Dynamic Bond	0.167	0.199	0.179	0.202	0.182	0.18
DSP Block Rock	0.179	0.129	0.099	0.127	0.124	0.103
DSP MIP FUND	0.735	0.579	0.56	0.571	0.554	0.569
Franklin saving scheme	0.128	0.099	0.064	0.102	0.125	0.125
Franklin income opportunities	0.165	0.119	0.081	0.117	0.118	0.087
HDFC Capital Builder	0.931	0.884	0.949	0.853	0.72	0.9
HDFC income fund	0.154	0.163	0.164	0.164	0.067	0.071
ICICI Corporate Bond	0.164	0.176	0.178	0.087	0.079	0.074
ICICI Mid Cap Fund	0.733	0.895	0.796	0.835	0.82	0.778
IDFC Dynamic Bond fund	0.143	0.15	0.155	0.159	0.114	0.151
IDFC Monthly Return	0.142	0.173	0.148	0.067	0.08	0.056
Kotak Equity Arbitrage Fund	-0.339	-0.294	-0.334	-0.269	-0.171	-0.299
Kotak Flexi fund	0.14	0.186	0.154	0.111	0.121	0.101

Reliance Dynamic Bond Fund	0.165	0.17	0.175	0.119	0.11	0.105
Reliance Income Fund	0.161	0.163	0.169	0.108	0.096	0.092
SBI Blue Chip Fund	0.964	0.874	0.972	0.882	0.778	0.973
SBI Corporate Bond	0.101	0.167	0.133	0.167	0.189	0.144
UTI Equity fund Growth	0.972	0.891	0.982	0.857	0.729	0.931
UTI Opportunities fund	0.959	0.865	0.965	0.838	0.709	0.916

The above table exhibits, there is a positive correlation between the mutual fund schemes and selected market indices represented by  $r$ . Similarly, It is been observed that there is a negative correlation between the Kotak arbitrage fund and Nifty (-34%) followed by NSE Midcap (-29.4%), NSE 200 (-33.4%), NSE Junior (-26.9%), BSE Mid cap (-17.1%) and BSE S&P (-29.9%).

**Table 5: Impact of mutual fund schemes on selected market indices**

Coefficients						
Dependent Variable	Independent Variable	Un standardized Coefficients		Std. Coef.	t	Sig.
		B	Std. Error	Beta		
Birla Sun Life Dynamic Bond	NSE Junior	0.025	0.013	0.232	1.994	0.046
DSP Block Rock	Nifty	0.016	0.003	0.280	6.100	0.000
DSP MIP Fund	Nifty	0.175	0.007	0.792	26.203	0.000
	NSE MID CAP	0.066	0.016	0.306	4.207	0.000
	NSE Junior	0.036	0.014	0.172	2.512	0.012
Franklin Savings Scheme	Nifty	0.007	0.002	0.205	4.432	0.000
	BSE Small cap	0.005	0.002	0.154	2.160	0.031
Franklin income opportunities	Nifty	0.022	0.004	0.258	5.960	0.000
HDFC Capital Builder	Nifty	0.302	0.094	0.369	3.218	0.001
	NSE MID CAP	0.182	0.031	0.228	5.906	0.000
	NSE 200	0.288	0.114	0.344	2.527	0.012
ICICI Mid Cap Fund	NSE MID CAP	0.502	0.044	0.589	11.319	0.000
	NSE 200	0.411	0.164	0.461	2.503	0.012
	BSE Small cap	0.31	0.024	0.374	12.657	0.000
	BSE S&P	-0.278	0.056	-0.301	-4.942	0.000
IDFC Monthly Return	NSE MID CAP	0.012	0.004	0.255	3.383	0.001
Kotak Equity Arbitrage Fund	Nifty	-0.054	0.028	-0.672	-1.931	0.054
	NSE MID CAP	-0.030	0.009	-0.391	-3.339	0.001
	BSE Small cap	0.020	0.005	0.259	3.903	0.000
Kotak flexi Fund	NSE MID CAP	0.010	0.003	0.233	3.030	0.002
SBI Blue Chip Fund	Nifty	0.9210	0.246	0.332	3.739	0.000
SBI Corporate Bond	BSE Small cap	0.002	0.001	0.164	2.297	0.022

UTI Equity Fund	Nifty	0.773	0.118	0.433	6.527	0.000
	NSE MID CAP	0.034	0.005	0.171	7.508	0.000
	NSE 200	0.084	0.017	0.398	5.041	0.000
UTI Opportunities Fund	Nifty	1.298	0.203	0.6	6.399	0.000
	NSE MID CAP	0.028	0.008	0.113	3.515	0.000
	NSE 200	0.062	0.029	0.241	2.158	0.031

The above table depicts that, For every 1% increases in the NIFTY value, 92.1% increases in SBI blue chip fund followed by UTI equity fund (77.3%) HDFC Capital builder fund (30.2%), DSP MIP fund (17.5%), UTI opportunities fund (13%), Franklin income opportunities fund (2.2%), DSP block rock fund (1.6%) and Franklin savings scheme (0.7%). It is also been observed that for every 1% increases in the nifty, Kotak equity arbitrage fund will fall by 5.4%.

Accordingly, 1% increase in NSE MID CAP, it is found that, there is 50.2% increase in ICICI Midcap followed by HDFC Capital builder fund (18.2%), DSP MIP Fund (6.6%), UTI equity fund (3.4%), Kotak equity arbitrage fund (3%), UTI opportunities fund (2.8%) and IDFC Monthly return (1.2%).

Similarly, for every 1% increase in NSE 200, it is been observed that, there is an increase of 28.8% in the HDFC Capital builder fund followed by UTI equity fund (8.4%) and UTI opportunities fund (6.2%).

With respect to for every 1% increase in NSE JUNIOR, there is an increase of 3.6% in DSP MIP fund followed by Birla sun life dynamic bond (0.7%)

Accordingly, for every 1% increase in BSE SMALL CAP, there is 31% increase in ICICI Midcap followed by Kotak equity

arbitrage fund (2%), Franklin savings scheme (0.5%) and SBI Corporate bond (0.02%).

Similarly, for every 1% increase in BSE S&P, it is been observed that there is decline of about 27.8% in ICICI Mid cap fund. Hence, the p value shows less than 0.05 for all the schemes. Therefore, there is significantly impact of selected schemes on selected market indices.

### Findings

The ICICI Prudential Mid cap fund-growth has yielded the highest average returns (0.07%) for the past five years when compared with all other funds. All the selected funds show beta value of less than 1 which means that the funds will be less volatile than the market. Franklin India savings plus fund (0.01%), IDFC Money manager fund (0.05%) had the lowest standard deviation when compare with all other funds. The ICICI Prudential Mid cap fund (0.032%) HDFC Capital builder fund (0.028%), UTI Opportunities fund (0.023%), UTI Equity fund growth (0.021%) gives the highest sharpe ratio which means these funds are outperformed well as per sharpe ratio. Out of 20 schemes, 5 have outperformed well against the market namely Birla sun life income plus fund (5.962%), HDFC Capital builder fund (0.212%), UTI Opportunities

fund (0.157%), ICICI Prudential Mid cap fund (0.042%) and UIT Equity fund (0.136%). The remaining 14 schemes have underperformed as per the Treynor measure. All the schemes indicate that, the Jensen alpha gives positive value in case of all the select mutual fund schemes. Out of 20 schemes, 19 have gives the highest Jensen ratio.

### Suggestions

Every investor before they go for investment decision, they should analyze the mutual funds in terms of fund performance. The fund manager or portfolio manager should select the schemes in mutual fund according to the investors profiling. The fund manager should carefully select the scheme based on the market timing. The portfolio manager should disclose all the information to the investors which is related to mutual fund as well as the company performance so that the investors can easily understand the company performance. The people who are interested to invest in mutual fund schemes they may invest in ICICI Prudential Mid cap scheme.

### Conclusion

This study has carried out to evaluate the performance of 20 equity diversified open ended mutual fund schemes between the Jan 2010 to Dec 2014. The performance of these schemes analyzed in terms of risk and return. Various risk adjusted performance is done in this analysis. All the schemes have given positive return over the study period. ICICI Prudential Mid cap fund growth has given the highest return. In terms of standard deviation all the funds analyzed in the study

have lower risk compared to the market in general. The value of beta of all the schemes used in the analysis and found lower than one indicating that all the mutual funds are less risky and less volatile. In terms of risk adjusted performance, sharpe measure indicated that out of 20 schemes, 5 schemes such as Prudential Mid cap fund , HDFC Capital builder fund, UTI Opportunities fund ,UTI Equity fund growth and SBI Blue chip fund have recorded positive values. Treynor ratio indicated that 5 schemes such as birla sun life income plus growth, UTI opportunities fund growth, UTI equity fund growth, HDFC capital builders fund and ICICI prudential mid cap fund have outperformed against the market index. Jensen alpha is positive in case of all the mutual fund schemes.

Overall ICICI Prudential Mid cap fund, HDFC Capital builder fund, UTI opportunities fund, UTI equity fund growth and SBI blue chip fund are best performing funds in the sampled schemes. Franklin India savings plus fund, Kotak equity arbitrage fund and IDFC money manager fund have not performed well during the study period.

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