

A Study on Equity-Based Mutual Fund Scheme Performance in the Indian Environment

By

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Abstract

The struggle to survive and maintain investor confidence has been a top area of worry for fund managers against the backdrop of liberalization and private entry into the Indian mutual fund business. For modest investors who lack the time or knowledge to make direct investments choosing to invest in stocks Investing in mutual funds is a viable substitute. When return and risk metrics are taken into account alongside investing objectives, the performance of mutual fund products becomes more complex. In this essay, an effort has been made to examine the performance of a few mutual fund schemes using models and metrics for the risk-return relationship. Over a 13-year period, from April 1996 to March 2009, a total of 23 plans offered by six private-sector mutual funds and three public-sector mutual funds were examined. The mean return, beta risk, coefficient of determination, Sharpe ratio, Treynor ratio, and Jensen Alpha were used as the foundation for the analysis. According to the overall research, Franklin Templeton and UTI are the best-performing mutual funds, whereas Birla SunLife, HDFC, and LIC mutual funds perform poorly or below average when compared to risk-return relationship models.

Keywords: Mutual fund, beta, Treynor ratio, India, risk, investor, Sharpe ratio

Introduction

One of the most popular investing options for small investors is a mutual fund since it provides a low-cost way to invest in a professionally managed, diversified portfolio. A mutual fund is a type of trust that unites the savings of several participants who have similar financial objectives. Mutual funds have grown in popularity as a long-term investment tool during the past ten years. Over 20 million investors have contributed more than Rs 700 billion to the business of mutual funds in India. The Unit Trust of India (UTI) mutual fund category is the largest, followed by mutual funds offered by nationalised banks (such State Bank of India), and the third-largest category of mutual funds are those issued by overseas asset management firms (such as Prudential ICICI and Birla SunLife) and the private sector.

The rapid rise of foreign-owned mutual fund firms and the fall of those established by nationalised banks and smaller private sector competitors are the latest trends in the mutual fund business. One of the most catalytic tools in producing monumental investment growth in the capital market has proven to be the expansion and development of numerous mutual funds products in the Indian capital market. It has become crucial in this situation to closely monitor and assess mutual funds. The importance of increasing domestic savings and improving the way investments are deployed through markets has greatly enhanced the need for and potential

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of operating mutual funds. Therefore, given that mutual funds are playing a vital role in promoting equity culture, it is important to regard their services not only as a financial intermediary but also as a pacesetter given their engagement in the change of the Indian economy.

Studying the performance of the Indian mutual fund business is important in this perspective. The performance of a mutual fund scheme is determined by the relationship between risk and return.

Since risk and return are inversely proportional, offering the highest return possible on an investment while maintaining an acceptable degree of related risk aids in separating the leaders from the followers.

Objectives Of The Study

Numerous mutual fund schemes with diverse portfolio mixes, investment goals, and professional fund management capabilities make up the Indian mutual fund business. Choosing a suitable one is consequently a difficult choice for the little investment. The purpose of the current study is to gather the pertinent data on the performance of a few open-ended, growth-oriented investment schemes that will be useful to fund managers and investors.

The study's particular goals are as follows:

1. to evaluate the return generated by the sample mutual fund schemes and contrast with market portfolio returns in order to separate out the leaders from the followers.
2. to identify the mutual fund plans that give enough systematic risk relative to market beta risk and the benefits of diversification.
3. to compare and contrast the extra return per unit of risk displayed by mutual fund schemes from the public and private sectors.

Review Of Literature

In this paper, an effort has been made to examine the performance of a few mutual fund schemes in light of the risk-return relationship. In addition to common metrics like mean return, beta, and coefficient of determination, the tried-and-true models of mutual fund performance assessment provided by Sharpe, Treynor, and Jensen have also been used for this purpose.

Early research on mutual funds was conducted by Jensen (1968), Sharpe (1966), and Treynor (1965), who utilised the capital asset pricing model to compare the risk-adjusted returns of funds to those of a benchmark market portfolio. According to Sharpe and Jensen's research, mutual funds underperform market indices, and the returns were insufficient to make up for the various mutual fund fees for investors. In a thorough analysis of 152 mutual funds with data spanning the years 1953 to 1958, Friend, Brown, Herman, and Vickers (1962) developed an index based on the Standard and Poor's indexes of five securities, with the constituents weighted according to their representation in the mutual fund sample. According to Friends and Vickers (1965), mutual funds haven't generally outperformed a random portfolio. In their investigation of mutual funds, Friend, Marshal, and Crocket (1970) discovered a negative relationship between fund performance and management expense ratio.

According to John and Donald's (1974) analysis of the correlation between the objectives of the funds and their risk-return characteristics, the managers of the funds seemed

to manage their portfolios on average to stay within the boundaries of the declared risk. Ippolito (1989) draws the conclusion that, overall, mutual funds provide greater returns, but that these profits are outweighed by costs and load fees. Using Sharpe, Jensen, and Treynor metrics, Barua, Raghunathan, and Varma (1991) assessed Master Share's performance from 1987 to 1991 and found that it outperformed the market but underperformed the Capital Market Line. According to Sethu (1999), who examined 18 open-ended growth schemes between 1985 and 1999, the majority of the funds had negative returns, and none of the funds had any indication of being able to time the market. Using weekly NAV data, Gupta (2000) looked at the investment performance of Indian mutual funds and discovered that the schemes had variable performance between 1994 and 1999.

Lower partial moment was used by Mishra and Mahmud (2002) to gauge mutual fund performance. This study develops metrics for assessing portfolio performance based on lower partial moments. Only those conditions, such as those where return is less than a predetermined "target rate" like the risk-free rate, are taken into consideration when calculating the risk from the lower partial instant.

Fernandes (2003) assessed the use of index funds in India. This study measures the tracking inaccuracy of index funds in India. It is conceivable to achieve low levels of tracking error in Indian conditions, according to the consistency and amount of tracking mistakes attained by several well-run index funds. Nevertheless, there appear to be times when some index funds stray from the indexation discipline. In their 2005 study, Pendaraki, Zopounidis, and Doumpous explored how mutual fund portfolios are built, created a multi-criteria technique, and used it to analyse the Greek equity mutual fund market. The approach for selecting and composing mutual funds is based on the integration of discrete and continuous multi-criteria decision aid systems.

The multi-criteria decision aid approach UTADIS is used to create the performance models for mutual funds. The percentage of chosen mutual funds in the final portfolios is decided using a goal programming paradigm. Zakri (2005) compared a sample of conventional stock mutual funds with similar net assets to a sample of socially responsible stock mutual funds to compare differences in asset holding characteristics, portfolio diversification levels, and the variable effects of diversification on investment performance.

According to the study, none of these characteristics significantly distinguish conventional funds from socially conscious investments. Furthermore, there is no difference between the two groups in the impact of diversity on investment performance. During the study period, neither group outperformed the Domini 400 Social Index or the S & P 500.

Even while emerging markets like India have drawn the interest of investors from all over the world, little systematic study has been done on them, particularly in the field of mutual funds. A research by Gupta and Aggarwal (2007) attempted to close this gap by evaluating the effectiveness of mutual fund operations in India. In this context, the performance of the equity-diversified mutual funds' quarterly returns was evaluated from January 2002 to December 2006. Fama-French Model and the Capital Asset Pricing Model (CAPM) were used to conduct the analysis. The study asks for more investigation and insights into the interaction between the performance determinant factor portfolios and their impact on mutual fund returns in light of the divergent results from the application of the two models.

Since the liberalisation of the economy and growth of the Indian Capital Market in 1992, the country has come a long way with many ups and downs. Since a stock market scandal

in 1992, both primary and secondary markets have undergone structural adjustments. Mutual funds are one of the main sources of capital flows to emerging nations and a major contributor to the globalisation of financial markets. The distribution of their investments and their investment methods are little understood, despite their significance in emerging economies.

Data And Sources Of Study

The research period spans 13 years, from 1996–1997 to 2008–2009. There were 12 public sector mutual fund firms and 19 private sector mutual fund companies functioning in India as of March 31, 2009. The purpose of the study was to evaluate the performance of open-ended, predominantly equity-based mutual fund schemes. However, the majority of them were created after 2001. The mutual funds with a minimum operating history of 10 years were chosen for this study's analysis of mutual funds over a longer period of time. 10 private sector mutual fund businesses that operate in the private sector and 7 in the public sector were shortlisted based on this. Out of these, those with growth-oriented open-ended schemes and ongoing NAV data availability were chosen. Thus, a total of 23 Open-ended Growth-Oriented (equity-based) Mutual Fund Schemes were represented by six Private Sector Mutual Funds and three Public Sector Mutual Funds (see Table 1 in Appendix). An open-end fund is one that accepts subscriptions all year round. There is no set maturity for them. Investors can easily purchase and sell units at prices that are proportional to Net Asset Value (NAV). These programmes were introduced between April 1996 and March 2009 and were chosen based on regularly available data.

Secondary data were employed in the study. This is because the historical examination of published financial data is the focus of our investigation. The daily closing prices for the benchmark market index (NSE Nifty) and daily Net Asset Values (NAV) data for the Schemes were both utilised. The Economic Times Investment Bureau and the National Stock Exchange's official website (www.nse-india.com) have been the primary sources of data.

Research Methodology

The following list includes the different return/risk and portfolio performance metrics utilised in the study:

Return

The returns are calculated using the NAV of the various schemes, and the returns in the market index are determined using the NSE Nifty on the relevant date.

Equation 1 states the return from a mutual fund scheme (R_{st}) at time t as follows:

$$R_{st} = \frac{NAV_t - NAV_{t-1}}{NAV_{t-1}}$$

where NAV_t and NAV_{t-1} are the corresponding net asset values for the time periods t and $t-1$.

Equation 2 states that the mutual fund scheme's mean return (R_{mt}) over time is as follows:

$$R_x = \sum_{t=1}^n \frac{R_{xt}}{n}$$

where n is the total number of time periods examined and R_{st} is the return from a mutual fund scheme at time t.

Equation 3 states the return on the market (represented by a stock index) at time t as follows:

$$R_{mt} = \frac{I_t - I_{t-1}}{I_{t-1}}$$

where I_t and I_{t-1} represent, respectively, the value of a benchmark stock market index at periods t and t-1.

In this instance, the benchmark stock index used to reflect the overall market is the NSE Nifty.

Equation 4's description of the mean Return of the Market Portfolio (R_{mt}) over time is as follows:

$$R_m = \sum_{t=1}^n \frac{R_{mt}}{n}$$

where n is the total number of time periods examined and R_{mt} is the return from a stock market index (in our instance, NSE Nifty) at time t.

Rate of Return without Risk (R_f)

The weekly rates on 91-day Treasury notes were employed in this study as the risk-free rate.

Risk

On the basis of weekend NAV, the risk is computed. For the study, the following indicators of mutual fund risk were used:

- i. Beta (β): This statistic measures how closely a fund moves with its benchmark index by taking its volatility into account.
- ii. Standard Deviation (σ): This measure measures how much a fund fluctuates or varies from the average expected return over a certain time period.
- iii. Co-efficient of Determination (R²) measures how well a benchmark index (in this case, NSE Nifty) can account for a fund's movement.

The risk-return relation models presented by Sharpe (1966), Treynor (1965), and Jensen (1968) have been used to further assess the performance of mutual funds.

The Sharpe Ratio.

The reward to volatility trade-off is presented via the Sharpe measure. Equation 5 provides the value, which is equal to the average excess return divided by the standard deviation of returns for the fund portfolio.

$$\text{Sharpe measure} = \frac{AR_p - AR_f}{\sigma_p}$$

where AR_p denotes the portfolio's average return on mutual funds throughout the sample period, AR_f denotes the average risk-free return during the sample period, and p denotes the sample period's standard deviation of excess returns.

The Sharpe ratio (provided by Equation 5) calculates the risk premium generated per unit of risk exposure by dividing the average return of the portfolio over the risk-free return by the portfolio's standard deviation. In other words, this ratio calculates the change in return relative to a change in risk of one unit in the portfolio. The analysed portfolio is more appealing the higher the "Reward-to-Variability-Ratio" since the investor gets compensated more for the same rise in risk.

Treynor Ratio:

Similar to the Sharpe ratio, the Treynor measure also defines reward (average excess return) as a ratio of the CAPM beta risk. The risk premium gained per unit of risk taken is the performance metric used by Treynor. The average return of the portfolio over the risk-free return is therefore divided by the portfolio's beta to get the Treynor ratio. Equation 6 yields Treynor's ratio, as seen below.

$$\text{Treynor measure} = \frac{AR_p - AR_f}{\text{Beta}_p}$$

where Beta_p is the portfolio's beta risk value for mutual funds.

Alpha Jensen:

The intercept of the Sharpe-Litner CAPM regression of portfolio excess returns on market excess returns throughout the sample period is the Jensen alpha measure. The mathematical difference between the portfolio's return and the return of a portfolio on the securities market line with the same beta is known as Jensen's alpha. Jensen defines his metric for measuring portfolio performance as the difference between the actual returns on an investment portfolio during any given holding period and the expected returns on that investment portfolio given the risk-free rate, the degree of "systematic risk" it carries, and the actual returns on the market portfolio. Equation 7 provides Jensen's Alpha measure, as seen below.

$$R_{Pt} - R_{ft} = R_{ft} + \text{Beta}_P (R_{Mt} - R_{ft}) + e$$

where R_{Pt} is the return on the market portfolio in time period t , R_{Mt} is the return on the mutual fund portfolio in time period t , R_{ft} is the risk-free return in time period t , and e is the error term or residual value.

and the market portfolio's real results. Equation 7 provides Jensen's Alpha measure, as seen below.

Analysis Of Empirical Data And Discussion:

Return Obtained By The Schemes

The second and third columns of Table 2 (see appendix) compare the return earned by the mutual fund schemes to the return on the stock market index for the period from the mutual fund scheme's debut date to March 2009. The returns for the individual mutual fund scheme and the market were calculated using equations 1 and 3 and the daily index value (such as NSE Nifty) and NAV, respectively.

As compared to corresponding market returns, which ranged from 0.33 percent to 0.47 percent and 0.17 percent to 0.29 percent respectively, it was noted that all three Franklin Templeton schemes—Balanced, Blue Chip, and Prima Plus among the private sector and Dynamic Equity, India Advantage Equity, and Money Market among the public sector—earned the highest returns.

Three schemes—Birla-Gilt-plus Liquid, LIC - Equity, and LIC - Index Sensex—saw negative returns and were the lowest performers since they did not outperform the market. 15 of the 23 schemes (or 65 percent) outperformed their comparable market returns on a mean basis, which is a reasonable measure of mutual fund performance. Only LIC plans performed poorly; the others had average returns.

Systematic Risk (Beta):

The systematic risk of the 23 mutual fund schemes is shown in the fourth column of Table 2.

The term "beta" describes how sensitive a mutual fund scheme's return is to changes in the stock market index. Systematic risk is measured by beta. When a stock market index (in our example, NSE Nifty) changes by 1%, the beta value of a mutual fund scheme is determined as the percentage change in NAV of the scheme.

Higher than unity beta values indicate greater portfolio risk for the schemes than for the market portfolio, and vice versa. Out of the 23 mutual fund schemes that were chosen, five were determined to be more hazardous (beta > 1.0) than the market. These five schemes are Birla-Gilt-plus Liquid (1.0323), Birla-Asset Allocation Aggressive (1.0915), LIC-Equity (1.0143), LIC-Index Sensex (1.0215), and UTI-Money Market (1.0023). The remaining 28 schemes, which were the least hazardous of the group, had betas in the range of 0.800 to 0.995, with the exception of the holding portfolios for HDFC-Capital Builder (0.7314), HDFC-Gilt Short Term (0.7419), and Prudential ICICI-Gilt Treasury (0.79470).

DSP Merrill and Franklin Templeton's and DSP Merrill's schemes in the private sector had suitably risky portfolios that were considerably below market risk, but the three SBI plans in the public sector showed the same trend.

Co-efficient of Determination (R²):

Co-efficient of determination (R²) is a statistic used to measure the goodness of fit of a model. It is given in terms of explained variance and compares the explained variance to the total variance of the data. R² is a statistic used to measure the agreement between observed and modeled values, and is given in terms of explained variance.

The highest R² value was found in SBI-Magnum Index (0.786), followed by DSP Merrill-Top 100 Equity (0.754) and Franklin Templeton-Prima Plus (0.729). Lower values were observed in Birla Sunlife (0.50) and Detusche (0.50) among private sector and LIC in public sector, suggesting that these schemes are inadequately diversified and have low mean returns.

This suggests that inadequate diversification of mutual fund schemes correlated with below-market returns.

Sharpe, Tryenor and Jensen models are used to analyze the risk-return relationship of mutual fund schemes, highlighting the combined effect of portfolio risk and returns.

Results of Sharpe Ratio Measure:

The Sharpe ratio is an excess returns earned over risk-free return (Rf) per unit of risk. Higher positive values are found in private sector schemes such as Detusche-Alpha Equity, Deutsche-Dynamic Equity Reg., DSP Merrill-Top 100 Equity, SBI-Magnum Index, SBI-Magnum Balanced, SBI-Magnum Gilt, UTI-Dynamic Equity, UTI-India Advantage Equity, and UTI Money Market. This indicates adequate returns against the level of risk involved. As a result, the investors in these programmes have received good returns.

As a result, the investors in these schemes have received good returns on their initial investments. These schemes have also outperformed the market index, which supports the previous conclusion even more.

Treynor Ratio Measure Results

The Treynor ratio calculates the additional return over the risk-free return for each unit of systematic risk, or beta. The Treynor ratio values for the market portfolio and individual mutual fund schemes are shown in Table 3's fourth and fifth columns, respectively. Equation 6 was used to determine the Treynor ratio. The key findings here confirm the Sharpe ratio's same conclusion. The two Prudential ICICI schemes, Balanced (-0.031) and Gilt Treasury (-0.027), were the sole exceptions, outperforming the market portfolio but underperforming the market according to the Sharpe ratio. This is mostly caused by the lower beta values for these schemes, which are displayed in Table 2's fourth column.

Jensen Measure (Alpha) results

Table 3's last column lists the Jensen's alpha values for the 23 open-ended growth-oriented mutual fund schemes that were chosen. Equation 7 is used to compute Jensen's alpha values. The excess return of the scheme (the dependent variable) is being regressed against the market's excess return (the independent variable). Better performance is indicated by higher alpha values.

Higher alpha measures were found in the three DSP Merill Lynch schemes: Top 100 Equity (.018), India TIGER Fund (.014), and Balanced (.009) in the private sector and UTI-Dynamic Equity (.021), SBI-Magnum Balanced (.017), and UTI-Money Market (.014) in the public sector. Gilt-plus showed positive but t insignificant (0.004) alpha values in Birla Sunlife.

Conclusion

The performance of the mutual funds classed as private is shown in Table 4 (see appendix). Summarising the private and governmental sectors and displaying different performance metrics. Franklin Templeton and UTI mutual fund schemes have fared well in terms of returns. quite well in both the public and private sectors. This is mostly because these schemes have equity portfolios with significant risk (high beta risk). However, despite taking on greater risk, LIC, Birla SunLife, and HDFC plans have not been able to provide their clients with satisfactory returns.

On the basis of Sharpe ratio, Deutsche, Franklin Templeton, Prudential ICICI and SBI and UTI mutual funds out-performed the market portfolio with positive values. Treynor and Jensen alpha measures had mixed responses in private sector funds, while UTI and SBI managed higher alpha values in public sector.

Franklin Templeton and UTI are the best performing mutual funds, while Birla SunLife, HDFC and LIC mutual funds show poor performance. Future research may investigate close-ended schemes with open-ended and debt schemes with equity based growth oriented schemes. Jensen alpha measure had mixed responses in private sector funds, while UTI and SBI managed higher alpha values in public sector.

Suggestions

The findings suggest that equity-based open-ended mutual fund schemes of Franklin Templeton and UTI provide superior returns to investors. Small investors should analyze the return and risk parameters of mutual funds before making investment decisions. Mutual funds are the best source of investments in times of high stock market volatility.

The investors receive considerably better returns from the equity-based open-ended mutual fund schemes offered by Franklin Templeton and UTI. Analysis of the return and risk factors for mutual funds is advocated for small investors before they made their financial selections, over a longer period of time.

Even if mutual funds are tools for diversified investing, making a wise pick from among the various offered mutual fund schemes can help investors build wealth. Additionally, although assuming greater risk, mutual funds are the greatest source of investing during periods of severe stock market volatility.

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Appendix

Table 1 List Of Selected Mutual Funds

Private Mutual Funds	Public Mutual Funds
Birla Sunlife (2 schemes) Deutsche (2 Schemes)	LIC (3 Schemes) SBI (3 Schemes)
DSP Merrill Lynch (3 Schemes) Franklin Templeton (3 Schemes) HDFC (2 Schemes)	UTI (3 Schemes)
Prudential ICICI (2 Schemes)	
6 MFs (14 Schemes)	3 MFs (9 Schemes)

Table 2 Mean Return, Beta And Co-Efficient Of Determination

Name of Scheme	Scheme Return	Market Return	Beta	R ²
Birla Sunlife - Gilt-plus Liquid	-.0021	-.0017	1.0323	0.325
Birla Sunlife - Asset Allocation Aggressive	.0014	.0015	1.0915	0.492
Detusche - Alpha Equity	.0007	.0009	0.8142	0.431
Deutsche - Dynamic Equity Reg.	.014	.0011	0.7911	0.493
DSP Merrill - Balanced	.0010	.0007	0.9827	0.662
DSP Merrill – India TIGER Fund	.0037	.0021	0.8814	0.678
DSP Merrill – Top 100 Equity	.0019	.0013	0.8927	0.754
Franklin Templeton – Balanced	.0033	.0017	0.9913	0.692
Franklin Templeton – Bluechip	.0047	.0016	0.9421	0.714
Franklin Templeton – Prima Plus	.0041	.0011	0.8132	0.729
HDFC – Capital Builder	.0010	.0014	0.7314	0.481
HDFC – Gilt Short Term	.0019	.0027	0.7419	0.581

LIC – Equity	-.0008	.0029	1.0143	0.232
LIC – Index Sensex	-.0051	.0031	1.0215	0.249
LIC – Short Term Plan	.0005	.0016	0.9192	0.330
Prudential ICICI – Balanced	.0004	.0001	0.8929	0.417
Prudential ICICI – Gilt Treasury	.0005	.0003	0.7947	0.465
SBI – Magnum Index	.0009	.0008	0.9245	0.786
SBI – Magnum Balanced	.0031	.0020	0.8133	0.610
SBI - Magnum Gilt	.0021	.0014	0.8428	0.625
UTI – Dynamic Equity	.0017	.0011	0.9122	0.703
UTI- India Advantage Equity	.0029	.0015	0.8945	0.714
UTI – Money Market	.0024	.0013	1.0023	0.697

Table 3 Sharpe Ratio, Treynor Ratio And Jensen's Alpha Of The Mutual Fund Schemes

Name of Scheme	Sharpe Ratio		Treynor Ratio		Jensen Alpha
	Scheme	Market	Scheme	Market	
Birla Sunlife - Gilt-plus Liquid	0.894	1.273	.033	.047	.001
Birla Sunlife - Asset Allocation Aggressive	0.799	1.118	.045	.079	.003
Detusche - Alpha Equity	1.840	1.325	.049	.033	-.012
Deutsche - Dynamic Equity Reg.	1.781	1.259	.037	.024	-.014
DSP Merrill - Balanced	-0.673	-0.433	-.093	-.058	.009
DSP Merrill – India TIGER Fund	-0.844	-0.723	-.072	-.067	.014
DSP Merrill – Top 100 Equity	1.771	1.826	.084	.092	.018
Franklin Templeton – Balanced	-1.347	-1.449	-.017	-.022	.007
Franklin Templeton – Bluechip	-1.507	-1.818	-.031	-.053	.005
Franklin Templeton – Prima Plus	-1.602	-1.934	-.043	-.061	.002
HDFC – Capital Builder	0.934	0.993	-.077	.089	-.011
HDFC – Gilt Short Term	0.847	1.243	.076	.098	-.004
LIC – Equity	-0.733	-0.507	-.084	-.057	-.004
LIC – Index Sensex	-0.841	-0.615	-.092	-.062	-.001
LIC – Short Term Plan	-0.433	-0.317	-.042	-.035	-.005
Prudential ICICI – Balanced	-0.217	-0.143	-.031	-.037	.004
Prudential ICICI – Gilt Treasury	-0.119	-0.107	-.027	-.022	.002
SBI – Magnum Index	1.694	1.443	.084	.073	.011
SBI – Magnum Balanced	1.923	1.334	.097	.081	.017
SBI - Magnum Gilt	2.189	1.430	.154	.094	.006
UTI – Dynamic Equity	1.552	1.211	.073	.055	.021
UTI- India Advantage Equity	1.300	1.128	.056	.053	.008
UTI – Money Market	1.341	1.098	.058	.041	.014

Table 4 Overall Performance Of The Selected Mutual Funds

Mutual Fund Scheme	Return	Beta (Risk)	Sharpe Ratio	Treyor Ratio	Jensen Alpha	R ²	
Private Sector	Birla Sunlife	Poor	High	+ ve Under-performer	+ ve Under-performer	+ ve Very Low	Very Low
	Deutsche	Moderate	Low	+ve Over-Performer	+ ve Over-Performer	- ve Moderate	Low
	DSP Merrill Lynch	Good	High	- ve Under-performer	- ve Under-performer	+ ve Relatively High	High
	Franklin Templeton	Excellent	High	- ve Over-Performer	- ve Over-Performer	+ ve Low	High
	HDFC	Poor	Low	+ ve Under-performer	+ ve Over-Performer	- ve Mixed	Low
	Prudential ICICI	Moderate	Low	- ve Over-Performer	- ve Over-Performer	+ ve Very Low	Low
Public Sector	LIC	Poor	High	- ve Under-performer	- ve Under-performer	- ve Low	Very Low
	SBI	Good	Low	+ ve Over-Performer	+ ve Over-Performer	+ ve Relatively High	High
	UTI	Excellent	High	+ ve Over-Performer	+ ve Over-Performer	+ ve Relatively High	High

To be clear, under-performer refers to situations when the scheme's specific performance is LESS THAN that of the market, while over-performer refers to situations where it is MORE THAN the market. plans will significantly increase the investors' wealth. Additionally, although assuming greater risk, mutual funds are the greatest source of investing during periods of severe stock market volatility.