International Journal for Multidisciplinary Research (IJFMR)
E-ISSN: 2582-2160 • Website: www.ijfmr.com • Email: editor@ijfmr.com

A Study on Performance Evaluation of Selected Mutual Fund Schemes in India

Shefali Chaudhari[1], Dr. Mahammadrafique Meman[2]

[1]Assistant Professor, TMESIBM&CS, Mandvi
[2]Professor, TMESIBM&CS, Mandvi

Abstract
This study evaluates the performance of open-ended Debt Growth Funds and Equity Savings Funds in India from April 2022 to March 2025 using daily NAV data from AMFI. The BSE Sensex was used as the market benchmark, and fund performance was assessed using Sharpe Ratio, Treynor Ratio, and Jensen's Alpha. Results show that all schemes showed positive Sharpe and Jensen values, indicating that returns exceeded the risk-free rate. However, only 4 out of 10 debt mutual funds and 6 out of 10 equity Mutual funds showed positive Treynor Ratios, suggesting only some schemes adequately rewarded market risk.

Keywords: Mutual funds, NAV, Sharpe Ratio, Treynor Ratio, and Jensen's Alpha

Introduction

India's stock market plays a crucial role in the country's financial system by offering a structured environment where individuals and institutions can trade shares of publicly listed companies. The two major exchanges operating in India are the "**Bombay Stock Exchange (BSE)"**, which began in 1875, and the "**National Stock Exchange (NSE)"**, established in 1992. Both platforms are overseen by the **Securities and Exchange Board of India (SEBI)**, which ensures fair trading, transparency, and investor safety.
According to BSE (2024), "The Bombay Stock Exchange lists over 5,000 companies and is known for its benchmark index, the SENSEX, which tracks the performance of the top 30 companies across various sectors." "The NSE, which introduced electronic trading, is renowned for its NIFTY 50 index. It is currently the largest exchange in India in terms of trading volume and activity (NSE India, 2024)".
The NSE, on the other hand, was founded in 1992 and brought modern, electronic, screen-based trading to India.

Mutual Funds

Mutual funds pool money from investors to invest in diversified assets, helping even small investors access quality investments. They offer benefits like diversification, liquidity, and professional management. Types include equity, debt, and hybrid funds. Structurally, they can be open-ended or close-ended. Regulated by SEBI and promoted by AMFI, mutual funds are widely used for long-term goals like wealth creation, retirement planning, and tax saving under Section 80C.

Statement of the problem

With a growing number of mutual fund schemes in India, investors often face difficulty in selecting the right fund that balances risk and return effectively. Despite the availability of various schemes such as equity, debt, hybrid, and gilt funds, there is a lack of clear comparative analysis based on consistent performance indicators. This study addresses the need to evaluate and compare the performance of **open-ended Debt Growth Funds and Equity Savings Funds** from selected mutual fund houses, based on their **returns and risk factors during 2022 to 2025**. The objective is to help investors understand which category offers better performance and risk-adjusted returns over time, aiding in rational investment decisions.

Objective of the study

- To study on performance evaluation of Mutual Fund schemes.
- To evaluate the performance of selected Mutual Fund schemes by using portfolio performance evaluation models namely Sharpe, Treynor and Jensen.

Scope of the study

The study evaluates and compares selected equity and debt mutual fund schemes in India using return, beta, and risk-adjusted performance tools. Funds are ranked based on returns and beta to identify top-performing schemes with optimal risk-return balance. It focuses on helping investors choose between equity and debt schemes through data-driven performance insights.

Limitations

1. The study is limited to selected equity and debt mutual fund schemes and does not include any sectoral, or international funds.
2. It is based solely on secondary data and past performance, which may not predict future returns.
3. The analysis is confined to 3 years of market data, and external market factors are not fully considered.

Literature Review

Present study is conducted by reviewing below literature reviews.

Paramita et al. (2025) evaluated mutual fund performance using the Information Ratio, STJ Ratio, and Value at Risk (VaR). The study highlights the need for risk-adjusted metrics to assess fund efficiency more accurately. Their analysis revealed that combining traditional and advanced indicators provides deeper insights into fund performance. This approach helps investors make better-informed decisions.

According to Farooq (2024), "the use of financial metrics such as beta, Sharpe ratio, and Treynor ratio enhances the evaluation of risk-adjusted performance". The study finds that the Treynor ratio is a particularly strong predictor of returns across various fund categories. These fintech-driven methods enhance the accuracy of portfolio analysis, allowing investors to make more informed decisions. Overall, fintech improves transparency, efficiency, and the effectiveness of mutual fund investment strategies.

Maheswari and Reddy (2023) evaluated the performance of selected tax-saving mutual funds in India using Sharpe ratio, Treynor ratio, beta, and standard deviation. Their study revealed that ICICI's tax-saving scheme had the highest average return (17.85%) and superior risk-adjusted performance compared to SBI, Birla Sun Life, BOI, and Axis Bank. The research highlights that corporate sector mutual funds outperform public sector ones in terms of returns and stability.

Safiuddin and Hasan (2022) present a comprehensive review of 30 empirical studies analyzing the performance of equity-based mutual funds in India between 2015 and 2020. use of key risk-return metrics such as Sharpe Ratio, Treynor Ratio, Jensen's Alpha, and Beta across mutual fund categories including large-cap, mid-cap, ELSS, FMCG, and IT sector funds. Key findings of their research are mixed performance across schemes.
Sharma and Joshi (2021) analyzed 15 mutual fund schemes in India from 2016 to 2020 using Sharpe, Treynor, Jensen's alpha, beta, and standard deviation. Their study found that debt funds offered better risk-adjusted returns and higher CRISIL ratings than equity and hybrid funds. They concluded that debt funds suit risk-averse investors, while equity and hybrid funds are better for long-term, high-risk investors.
Rathore and Singh (2017) evaluated the performance of public, private, and foreign mutual funds in India over 11 financial years (2003–2014), dividing the period into pre-, inter-, and post-SENSEX movement phases. Using Sharpe, Treynor, and Jensen measures, they found that private sector funds consistently outperformed others across all periods. Equity schemes also showed stronger performance compared to tax-saving and balanced schemes.
Bhagyasree and Kishory (2016) evaluated 30 equity mutual fund schemes from 2011 to 2015 using Sharpe, Treynor, and Jensen's measures. Their study found that 14 schemes outperformed the benchmark, and all had positive Sharpe ratios.19 schemes showed positive Jensen's Alpha, indicating good fund management. Some funds underperformed due to poor diversification.

Research Methodology

This study uses secondary data from AMFI, BSE, and NSE. The research focuses exclusively on open-ended Debt Growth Banking & PSU Funds and Equity Savings Funds, selected from the top 10 mutual fund houses in India, identified on the basis of their Assets Under Management (AUM). Out of a total population of 44 mutual fund houses, 10 were chosen, and from them, 2 schemes—one from each category—were randomly selected using the convenience sampling method. The sample includes 10 debt and 10 equity growth mutual fund schemes based on their highest annual average returns during 2022 to 2025. The study does not include all schemes, nor does it cover balanced, gilt, or other types of mutual fund schemes. Risk free rate is 91-day T-bills daily rate which is 0.0002115 is considered for study.

Methods of sampling:

In this project we have used a convenience sample method for sampling. We have taken the sample of "10 Debt Growth-Regular Mutual Fund Schemes and Equity Growth-Regular Mutual Fund Schemes" on the basis of their Highest Annual Average Return in the year 2022 to 2025.

NO	Company
1.	SBI Fund Management Company Ltd.
2.	HDFC Asset Management Company Ltd.
3.	Kotak Mahindra Asset Management Company Ltd.
4.	Nippon India Mutual Fund Company Ltd.
5.	Aditya Birla Sun Life Asset Management Company Ltd.
6.	Axis Asset Management Company Ltd.
7.	DSP Investment Managers Pvt. Ltd.
8.	Baroda BNP Paribas Asset Management India Pvt. Ltd.

.9.	Bandhan Asset Management Company Ltd.
10.	UTI Asset Management Company Ltd.

Statistical Tools Used

The performance evaluation of mutual fund schemes in this study has been carried out using the following statistical tools:

Sharpe Ratio: Sharpe Ratio = (Average Return – Risk-Free Rate) ÷Standard Deviation

Treynor Ratio: Treynor Ratio = (Average Return – Risk-Free Rate) ÷ Beta

Jensen Ratio: Jensen's Alpha = (Rx - Rf) – β × (Rm - Rf)

Beta: Beta represents the degree of a fund's sensitivity to market movements, indicating systematic risk. Beta = Covariance (Rx, Rm) ÷ Variance (Rm)

Standard Deviation: This metric indicates the historical volatility of a fund's returns. It reflects how much the fund's returns deviate from the average return.

$$\sigma x = \frac{\sqrt{\Sigma(Rx-\bar{Rx})^2}}{N}$$

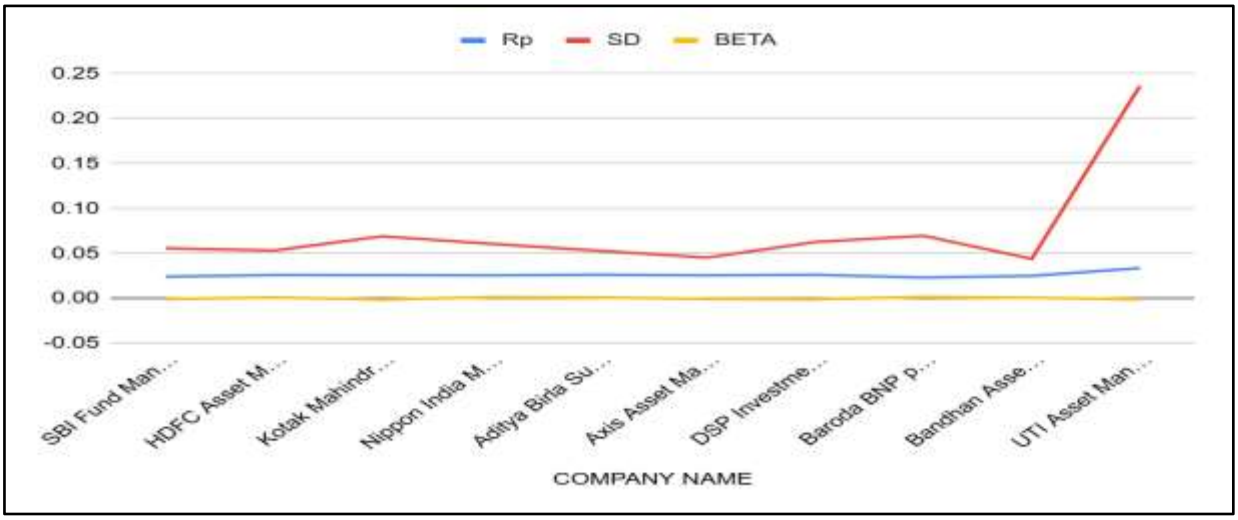
Data Analysis

(Table :1) Performance Index (Debt Growth)
Banking & PSU fund

NO	COMPANY NAME	Rp	Rm	SD	BETA
1	SBI Fund Management Company Ltd.	0.024093	0.039334	0.055788	-0.000926
2	HDFC Asset Management Company Ltd.	0.025989	0.039334	0.05314	0.001156
3	Kotak Mahindra Asset Management Company Ltd.	0.025728	0.039334	0.069028	-0.001497
4	Nippon India Mutual Fund Company Ltd.	0.02568	0.039334	0.060752	0.001528
5	Aditya Birla Sun Life Asset Management Company Ltd.	0.02627	0.039334	0.05286	0.001175
6	Axis Asset Management Company Ltd.	0.025579	0.039334	0.045374	-0.000793
7	DSP Investment Managers Pvt. Ltd.	0.026096	0.039334	0.062675	-0.001199
8	Baroda BNP Paribas Asset Management India Pvt. Ltd.	0.023203	0.039334	0.069627	0.00175
9	Bandhan Asset Management Company Ltd.	0.024962	0.039334	0.043959	0.000754
10	UTI Asset Management Company Ltd.	0.033588	0.039334	0.236266	-0.001272

International Journal for Multidisciplinary Research (IJFMR)

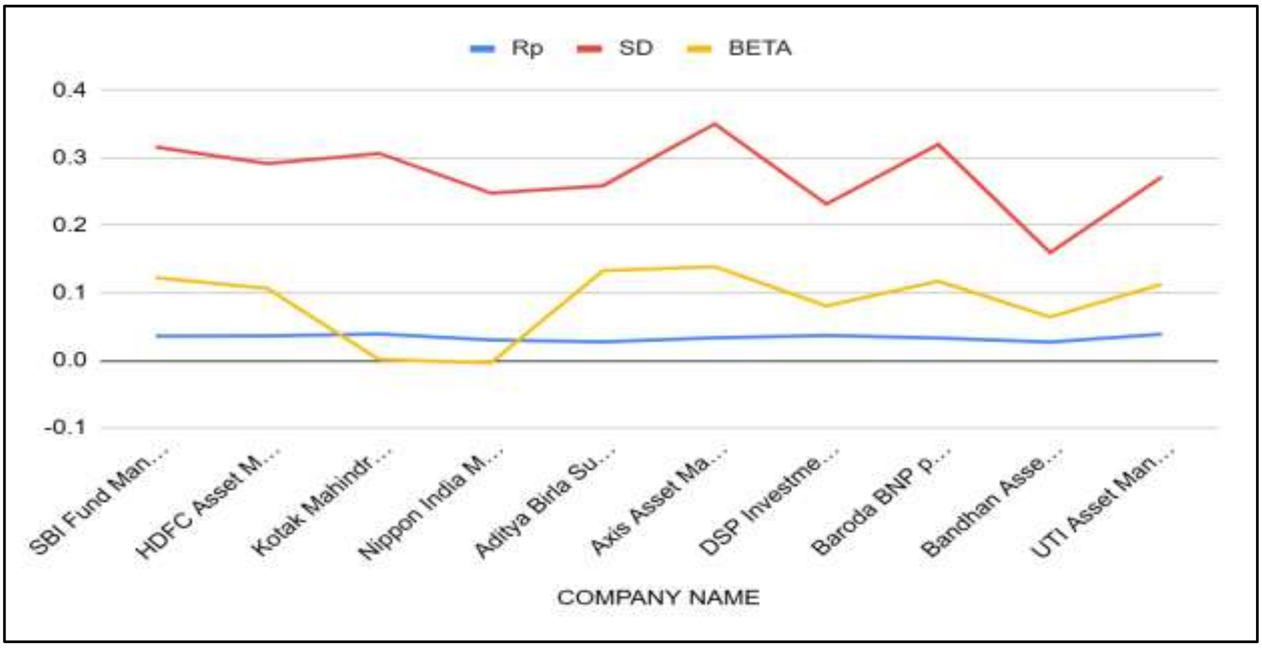
E-ISSN: 2582-2160 ● Website: www.ijfmr.com ● Email: editor@ijfmr.com



Inference: Table 1 and Chart 1 represent the performance and risk profiles of mutual funds from 10 Indian Asset Management Companies using return (Rp), market return (Rm), standard deviation (SD), and Beta of Debt growth Mutual funds. UTI Asset Management Company Ltd. recorded the highest return at (Rp = 0.033588) but also the highest risk with a standard deviation of 0.236266, and a negative Beta of –0.001272, indicating high volatility and inverse movement to the market. On the other end, Baroda BNP Paribas Asset Management India Pvt. Ltd. posted the lowest return (Rp = 0.023203) with the highest positive Beta of 0.001750, showing greater sensitivity to market trends. In terms of stability, Bandhan Asset Management Company Ltd. had the lowest volatility (SD = 0.043959) and a moderate return making it ideal for risk-averse investors. Kotak Mahindra Asset Management Company Ltd. had the most negative Beta (–0.001497), suggesting strong inverse market movement potential.

(Table. 2) Performance Index (Equity Growth)

NO	COMPANY NAME	Rp	Rm	SD	BETA
1	SBI Fund Management Company Ltd.	0.036064	0.039334	0.316220	0.122918
2	HDFC Asset Management Company Ltd.	0.036314	0.039334	0.291792	0.106661
3	Kotak Mahindra Asset Management Company Ltd.	0.039298	0.039334	0.306884	0.001240
4	Nippon India Mutual Fund Company Ltd.	0.030333	0.039334	0.247964	-0.003219
5	Aditya Birla Sun Life Asset Management Company Ltd	0.027638	0.039334	0.258846	0.133098
6	Axis Asset Management Company Ltd.	0.033582	0.039334	0.350543	0.139042
7	DSP Investment Managers Pvt. Ltd.	0.037086	0.039334	0.232024	0.080972
8	Baroda BNP Paribas Asset Management India Pvt. Ltd.	0.033354	0.039334	0.320269	0.117692
9	Bandhan Asset Management Company Ltd.	0.027260	0.039334	0.159711	0.064581
10	UTI Asset Management Company Ltd.	0.038998	0.039334	0.272000	0.113234



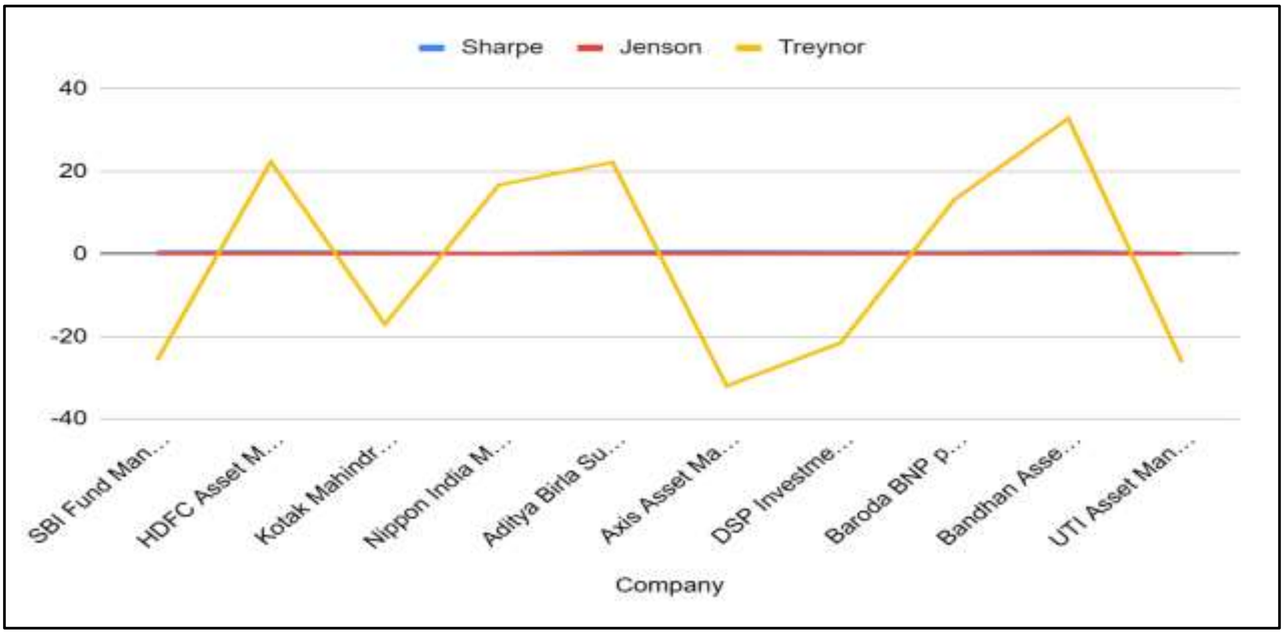
Inference: Table 2 and Chart 2 represent the performance and risk profiles of mutual funds from 10 Indian Asset Management Companies using return (Rp), market return (Rm), standard deviation (SD), and Beta of Equity growth Mutual funds. Kotak Mahindra Asset Management Company Ltd. delivered the highest return (Rp = 0.039298), closely followed by UTI Asset Management Company Ltd., DSP Investment Managers Pvt. Ltd. indicating strong performance near or slightly below the market return. Bandhan Asset Management Company Ltd. reported the lowest return along with the lowest volatility (SD = 0.159711), making it the most stable and least risky option, suitable for conservative investors. In contrast, Axis Asset Management Company Ltd. had the highest risk (SD = 0.350543) and a moderate return of 0.033582, reflecting high volatility. Overall, Kotak Mahindra Asset Management Company Ltd. stands out for high return with low Beta (0.001240).

Performance Evaluation of Selected Schemes

Table 3. (April 2022 to March 2025) Debt- Growth Mutual Funds ranking

Company	Sharpe	Rank	Jenson	Rank	Treynor	Rank
SBI Fund Management Company Ltd.	0.428076	5	0.023918	9	-25.78996	8
HDFC Asset Management Company Ltd.	0.485087	4	0.025732	4	22.29887	2
Kotak Mahindra Asset Management Company Ltd.	0.369654	7	0.025575	5	-17.04509	6
Nippon India Mutual Fund Company Ltd.	0.149221	9	0.025409	6	16.667866	4
Aditya Birla Sun Life Asset Management Company Ltd.	0.492972	3	0.026012	2	22.17744	2
Axis Asset Management Company Ltd.	0.559076	2	0.025398	7	-31.98928	10

DSP Investment Managers Pvt. Ltd.	0.412996	6	0.025931	3	-21.58841	7
Baroda BNP Paribas Asset Management India Pvt. Ltd.	0.330209	8	0.022923	10	13.138	5
Bandhan Asset Management Company Ltd.	0.563036	1	0.024721	8	32.82559	1
UTI Asset Management Company Ltd.	0.141267	10	0.033426	1	-26.23939	9

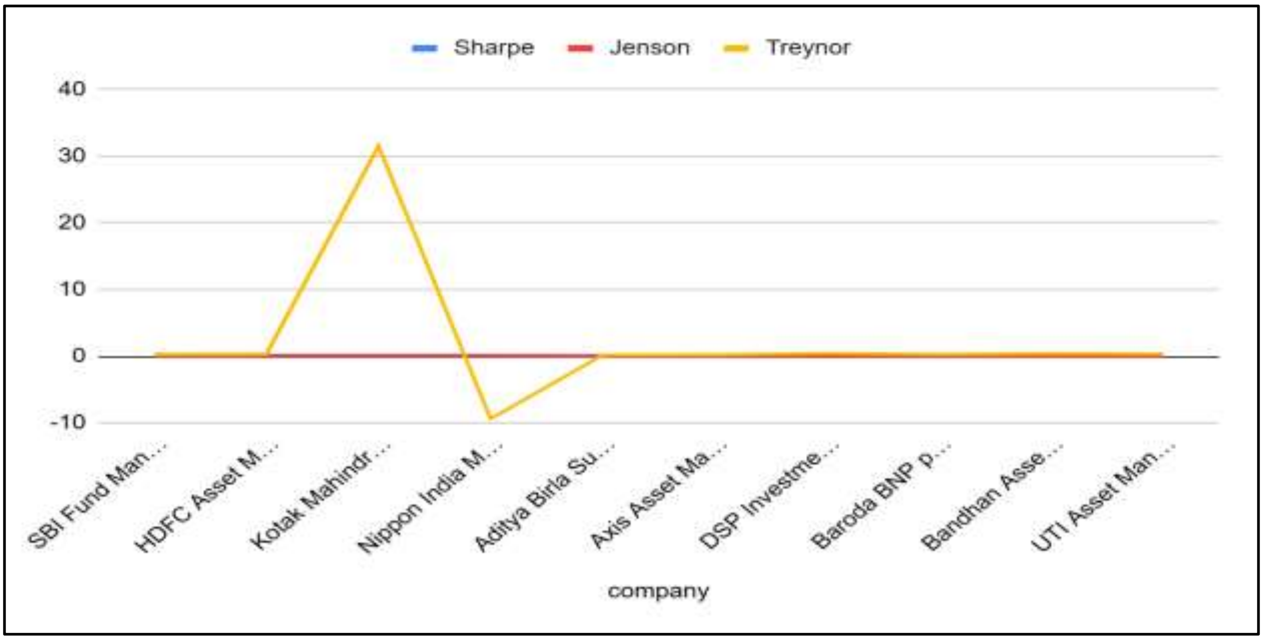


Inference: Table 3 and Chart 3 present that Bandhan Asset Management Company Ltd. ranks 1st in Sharpe (**0.5630**) and Treynor (**32.83**), showcasing the best overall risk-adjusted performance and highest return per unit of market risk, making it ideal for both total and systematic risk-return efficiency. Meanwhile, UTI Asset Management Company Ltd., despite ranking 1st in Jensen's Alpha (**0.0334**)—indicating strong outperformance relative to expected returns—holds the lowest Sharpe (10th, **0.1413**) and Treynor (9th, **–26.24**) ranks, suggesting high volatility and poor compensation for both total and market risk. Axis Asset Management Company Ltd., though ranked 2nd in Sharpe, performs worst in Treynor (-**- 31.99**), implying that while it manages total risk well, it struggles with market-based risk. Overall, Bandhan Asset Management Company Ltd. is the most balanced and consistent performer, while UTI Asset Management Company Ltd. and Baroda BNP Paribas Asset Management India Pvt. Ltd. lag due to volatility or weak market-risk efficiency.

Table 4. (April 2022 to March 2025) Equity- Growth Mutual Funds Ranking

Company	**Sharpe**	**Rank**	**Jenson**	**Rank**	**Treynor**	**Rank**
SBI Fund Management Company Ltd.	0.113378	7	0.031044	5	0.291678	6

HDFC Asset Management Company Ltd.	0.123727	5	0.031929	4	0.338479	5
Kotak Mahindra Asset Management Company Ltd.	0.127366	4	0.039037	1	31.52137	1
Nippon India Mutual Fund Company Ltd.	0.121475	6	0.030247	6	-9.357409	10
Aditya Birla Sun Life Asset Management Company Ltd.	0.105957	8	0.022219	10	0.206062	9
Axis Asset Management Company Ltd.	0.095196	10	0.027931	8	0.240003	8
DSP Investment Managers Pvt. Ltd.	0.158925	2	0.033707	3	0.4553982	2
Baroda BNP Paribas Asset Management India Pvt. Ltd.	0.103483	9	0.028538	7	0.281604	7
Bandhan Asset Management Company Ltd.	0.169359	1	0.024522	9	0.4188306	3
UTI Asset Management Company Ltd.	0.142597	3	0.034356	2	0.342534	4



Inference: Table 4 and Chart 4 present that Bandhan Asset Management Company Ltd. as the top performer in terms of Sharpe Ratio (0.1694, Rank 1), indicating the best risk-adjusted return, while Kotak Mahindra Asset Management Company Ltd. leads in both Jensen's Alpha (0.0390, Rank 1) and Treynor Ratio (31.52, Rank 1), reflecting exceptional performance relative to both total and market risk. DSP Investment Managers Pvt. Ltd. and UTI Asset Management Company Ltd. also score well, consistently ranking within the top 3 across all metrics, suggesting well-balanced performance. In contrast, Axis Asset Management Company Ltd. ranks last in Sharpe (0.0952, Rank 10) and near the bottom in Jensen and Treynor, indicating weak performance per unit of risk. Aditya Birla Sun Life Asset Management Company

International Journal for Multidisciplinary Research (IJFMR)
E-ISSN: 2582-2160 ● Website: www.ijfmr.com ● Email: editor@ijfmr.com

Ltd. also underperforms, ranking 10th in Jensen (0.0222) and 9th in Treynor (0.2061), reflecting low excess returns and poor compensation for market risk.

Conclusion:

This research analyzed the performance of selected open-ended Debt Growth and Equity Savings schemes from India's leading ten mutual fund houses. Using risk-adjusted evaluation tools such as the Sharpe Ratio, Treynor Ratio, and Jensen's Alpha, the findings revealed that although many funds generated returns exceeding the risk-free rate, only a few demonstrated consistent performance in both return and risk aspects. The study underscores the need to assess mutual fund schemes not solely on returns but also on the risks involved. It suggests that investors should rely on multiple performance metrics when evaluating fund options.

Reference

1. Paramita, et al. (2025). "Mutual fund performance analysis using information ratio, STJ ratio and value at risk". International Journal of Applied Mathematics and Computing, 2(1), 15–34.
2. Farooq, M. S. (2024). Risk management with fintech: An assessment of mutual funds. Rabindra Bharati University Journal of Economics, 28(40).
3. Maheswari, et al. (2022). "Performance evaluation of select mutual funds in India". SSRN. https://ssrn.com/abstract=4252578
4. Safiuddin, et al. (2022). "Performance analysis of equity-based mutual funds in India: A review of selected literature". Empirical Economics Letters, 21, 1–12.
5. Sharma, et al. (2021). "A comparative study on performance evaluation of selected debt, equity and hybrid mutual fund schemes in India". Gap Gyan: A Global Journal of Social Sciences, 4(2), 34–40.
6. Rathore, et al. (2017). "Managing performance of mutual funds during different phases of a business cycle in India". Indian Journal of Finance, 11(1), 59–70.
7. Bhagyasree, et al. (2016). "A study on performance evaluation of mutual fund schemes in India". International Journal of Research in Finance and Marketing, 6(5), 118–130.

Website

1. WWW.AMFI.COM
2. WWW.BSESENSEX.COM