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“Assessing The Risk And Return Dynamics Of India’s Top-Performing Mutual Funds”

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Abstract: Investment means using money with the goal of increasing wealth over time. People can choose to invest directly by buying and managing securities themselves or indirectly through financial intermediaries like mutual funds. When investing directly, the person has full responsibility for all decisions, which requires good knowledge of the market and strong skills in managing a portfolio. On the other hand, when investing indirectly, the person relies on professional fund managers to make investment decisions, which lessens the personal responsibility and effort involved. This paper looks at the risk and return levels of some of the best-rated equity mutual funds in India. It uses statistical tools such as standard deviation, Sharpe ratio, beta, Jensen’s alpha, and Treynor’s ratio to compare how different fund categories perform. These categories include ELSS, large-cap, mid-cap, and flexi-cap funds. The study aims to find out which investment schemes offer good returns relative to the risk taken and provides guidance for investors.

Index Terms - Mutual Funds, ELSS, Large-Cap, Mid-Cap, Flexi-Cap, Risk-Return, Sharpe Ratio, Jensen’s Alpha

1. Introduction

Mutual funds play a vital role in mobilizing savings from small investors and channeling them into capital markets more efficiently than individual investors might manage. As professionally managed pooled investment vehicles, mutual funds offer broad diversification, economies of scale in trading costs, and access to research and portfolio expertise. By purchasing units in a mutual fund, investors gain exposure to a diversified basket of stocks, bonds, or a mix, rather than bearing the idiosyncratic risk of a few securities. This makes mutual funds particularly suitable for retail or less sophisticated investors, who may not have the time, resources, or expertise to manage a large portfolio themselves. However, not all mutual funds are equal. Differences in management ability, expense structure, risk tolerance, market conditions, and fund mandate can lead to wide dispersion in performance. Therefore, evaluating mutual funds using quantitative risk-adjusted metrics is essential for selecting schemes with favorable trade-offs between return and volatility.

1.1 Types of Mutual Funds

Mutual funds may be classified in various ways. Below are some key categories, especially in the Indian context:

Equity funds: Invest primarily in stocks. Sub-types include large-cap, mid-cap, small-cap, flexi-cap, focused, thematic, and ELSS.

Debt funds: Invest in fixed income securities (bonds, government securities, corporate debt). They tend to have lower volatility but typically lower potential returns.

Hybrid / Balanced funds: Mix equity and debt in a predefined or flexible ratio, aiming to balance growth and stability.

Solution-oriented / Goal-based funds: Funds with objectives (e.g., retirement, children's education) and often a lock-in period.

Other types: Include index funds, fund-of-funds, sectoral/thematic funds, etc.

1.2 Risk-Return Metrics for Mutual Funds

To assess mutual fund performance, the following measures are commonly used:

Standard Deviation: Measures total volatility of fund returns. Higher standard deviation indicates greater variability (risk).

Beta: Measures systematic risk relative to the benchmark (e.g. market index). $\hat{\rho}^2 > 1$ means the fund is more volatile than the market; $\hat{\rho}^2 < 1$ means less.

Sharpe Ratio: (Fund return A's risk-free rate) $\hat{\rho}$ standard deviation. It estimates the excess return per unit of total risk $\hat{\rho}$ higher values are better.

Jensen's Alpha: Measures the fund's return above (or below) that predicted by the capital asset pricing model (CAPM), given its beta. Positive alpha indicates outperformance on risk-adjusted basis.

Treynor's Ratio: (Fund return as risk-free rate) $\hat{\rho}$ beta. It captures return per unit of systematic risk.

These metrics help investors compare funds not just on raw return, but on how much risk was undertaken to achieve that return.

1.3. Review of Literature:

Many previous studies have been done and various suggestions have been made to understand the risk and returns of mutual funds. **Dr. Sandeep Bansal, Deepak Garg and Sanjeev K Saini (2012)** looked into the impact of Sharpe Ratio and Treynor's Ratio on selected mutual fund schemes. Their study examined the performance of these funds and suggested that using a simple market index can accurately compare the risk profile of the entire mutual fund universe. This approach allows for a comparison of monthly liquidity, returns, systematic and unsystematic risk, and complete fund analysis through the use of Sharpe ratio and Treynor's ratio. **Dr. K. Veeraiah and Dr. A. Kishore Kumar (Jan 2014)** conducted research on the comparative performance analysis of selected Indian mutual fund schemes. Their study analyzed the performance of Indian mutual funds and compared them. They used five-year NAVs and portfolio allocation to evaluate the performance. The findings showed that mutual funds outperformed naive investments. Mutual funds are considered a good medium-to-long term investment option for investors. **Dr. Yogesh Kumar Mehta (Feb 2014)** studied the emerging scenario of mutual funds in India with a focus on tax funds. The study looked at selected equity funds from both public and private sector mutual funds. Despite the fact that only 1.16% of the total investor accounts in the mutual fund sector are from corporate and institutional investors, they contribute 56.55% of the total net assets. It was also found that mutual funds do not favor the debt segment. **Dr. Surender Kumar Gupta and Dr. Sandeep Bansal (Jul 2012)** did a comparative study on the debt schemes of mutual funds from Reliance and Birla Sunlife. They analyzed the performance of these schemes using the Sharpe Index after calculating Net Asset Values and Standard Deviation. Their study found that returns on debt schemes are close to the benchmark return (Crisil Composite Debt Fund Index: 4.34%) and risk-free return (6%) adjusted for the last five years. Prof. V. Vanaja and Dr. R. Karrupasamy (2013) studied the performance of selected private sector balanced category mutual fund schemes in India. The study aimed to help investors choose the best schemes and improve portfolio construction, while also addressing issues with underperforming schemes. The objective was to evaluate the performance of these private sector balanced schemes based on returns and compare them with their benchmarks, using risk-adjusted measures such as those proposed by Sharpe, Treynor, and Jensen. **E. Priyadarshini and Dr. A. Chandra Babu (2011)** predicted the net asset values of Indian mutual funds using the Auto-Regressive Integrated Moving Average (ARIMA) method. Some mutual funds in India were modelled using the Box-Jenkins ARIMA methodology. The validity of these models was tested using standard statistical techniques, and future NAV values were forecasted. **Prof. Kalpesh P Prajapati and Prof. Mahesh K Patel (Jul 2012)** did a comparative study on the performance evaluation of mutual fund schemes of Indian companies. The performance of Indian mutual funds was evaluated using techniques such as relative performance index, risk-return analysis, Treynor's ratio, Sharpe's ratio, Jensen's measure, and Fama's measure. The data used was daily closing NAVs, sourced from the website of the Association of Mutual Funds in India (AMFI). The study period was from 1st January 2007 to 31st December 2011. The results showed that most mutual funds provided positive returns during this period. **C. Srinivas Yadav and Hemanth N C (Feb 2014)** studied the performance of selected equity growth

mutual funds in India from June 1, 2010, to May 31, 2013. The study evaluated the performance of selected growth equity funds using techniques such as Sharpe and Treynor measures. S&P CNX NIFTY was used as the benchmark. The study included 15 equity growth schemes chosen from the top 10 Asset Management Companies for the period from June 1, 2010, to May 31, 2013 (three years). **Rashmi Sharma and N. K. Pandya (2013)** provided an overview of investing in mutual funds. The paper discussed the structure of mutual funds, compared investments in mutual funds with other investment options. **Rahu Singal, Anuradha Garg and Dr. Sanjay Singla (May 2013)** examined the performance of 25 growth mutual fund schemes over the period from January 2004 to December 2008. They used three techniques: Beta, Sharpe Ratio, and Treynor Ratio. The schemes were ranked based on the results, and comparisons were made between the results of different schemes, where the differences were generally insignificant. **Choi et al. (2017)** used the on-security holdings of 10,771 institutional investors from 72 countries to test whether concentrated investment strategies result in excess risk-adjusted returns. Their results showed that, contrary to traditional asset pricing theory, concentrated investment strategies in international markets can be optimal, supporting the theory of information advantage. **Soni (2017)** analysed the returns of various asset classes and correlated them with their risk characteristics to determine if there is always a positive relationship between risk and return across all asset classes, and to find the best portfolio mix for achieving the desired return and risk.

1.4 Need & Objectives of the Study

Need:

Past performance alone can mislead it says nothing about the risk undertaken to achieve those returns. An investor must understand risk-adjusted returns to make prudent decisions. This study attempts to bridge that gap by quantifying risk and return for top-rated equity funds in India.

Objectives:

1. To review the concept and structure of mutual funds in India
2. To examine patterns of returns in top-rated mutual funds
3. To analyse risk and return (via quantitative measures) of selected schemes
4. To suggest better-performing schemes for investors based on risk-adjusted criteria

1.5 Scope & Methodology

Scope: The study is focused on equity-oriented "top-rated" mutual funds across various categories like ELSS, large-cap, mid-cap, flexi-cap, focused funds, sectoral or thematic funds, and others. **Data Source & Period:** The data used is secondary, collected from sources such as AMFI, Money control, fund fact sheets, and other relevant databases.

Analysis Period: The analysis covers up to 2023, but it has been updated to include more recent periods from 2022 to 2025 wherever the data is available. **Analysis Techniques:** For each fund, standard deviation, Sharpe ratio, beta, Jensen's alpha, and Treynor's ratio are calculated. The performance of different schemes is then compared.

2. Recent Trends & Context (2023–2025)

Before diving into fund-level results, it helps to understand the broader mutual fund industry trends recently to situate the findings.

2.1 Growth in Industry AUM

The Assets Under Management (AUM) of India's mutual fund industry rose from ~₹53.40 lakh crore in March 2024 to ~₹65.74 lakh crore in March 2025 — a 23.11% annual growth. Equity mutual funds, which drive growth momentum, witnessed record net inflows in FY25 of approximately ₹4.17 lakh crore — more than double the previous year's inflows.

Equity AUM as of December 2024 was ~₹30.57 lakh crore, up from ~₹21.79 lakh crore in the previous year — a ~40.3% YoY jump. In July 2024, total AUM of the industry reached ~₹64.97 lakh crore, with equity funds contributing ~45% and debt funds ~15.44 lakh crore. This rapid expansion underscores strong retail participation, rising market valuations, and favorable investor sentiment.

Table No: 01
Growth of Industry

Scheme / Category	Metric	Latest Value / Observations	Source / Notes
ITI ELSS Tax Saver Fund – Direct Plan (ELSS)	Standard Deviation	13.55%	From Moneycontrol's ELSS risk ratios list (Moneycontrol)
	Beta	1.09	Same source (Moneycontrol)
	Sharpe Ratio	1.19	Same source (Moneycontrol)
	Jensen's Alpha	4.86	Same source (Moneycontrol)
	Treynor's Ratio	0.15	Same source (Moneycontrol)
Large & Mid Cap category (various funds)	Beta, Sharpe, Alpha, etc.	E.g., For Motilal Oswal Large & Midcap Fund – Direct Plan, $\beta \sim 1.09$, Sharpe ~ 1.44 , Alpha ~ 8.25 , Treynor ~ 0.20	From Moneycontrol's risk ratios on large & mid cap funds (Moneycontrol)
Equity / Industry-wide trend	Equity AUM (April 2025)	₹30.58 lakh crore	From AMFI Monthly Note (AMFI India)

The most recent data from Money control and AMFI India (as of April 2025) give us a good idea of how risky and how much return top mutual funds in India are offering. Starting with the ITI ELSS Tax Saver Fund – Direct Plan, this fund has a standard deviation of 13.55%, which means its returns are a bit up and down. In mutual fund terms, higher standard deviation means more ups and downs in the fund's value, meaning more risk. But this level of risk is well managed, and the fund has grown steadily, showing that it handles risk well without losing too much value. The fund has a beta of 1.09, which tells us it moves in line with the market but a little more.

A beta more than one means if the market goes up, the fund goes up more, and if it goes down, it goes down more. This makes it a good choice for investors who want to take some market risk for the chance of higher returns, but not too much. The Sharpe Ratio of 1.19 shows the fund is doing well in terms of balancing risk and return. This ratio shows how much extra return the fund makes per unit of risk. A value above one is good, and here the fund is doing very well. The fund also has a Jensen's Alpha of 4.86, which means it has beaten what the market would normally expect by almost 4.86%. This is because the fund manager has made smart choices in picking stocks and timing the market, giving investors more returns than just market movement alone. The Treynor's Ratio of 0.15 shows how well the fund is doing for each unit of market risk it takes. This complements the Sharpe Ratio by focusing on the part of risk that is connected to the market, showing the fund is well run and pays investors for the risk they take. Looking at other funds, the Motilal Oswal Large & Midcap Fund – Direct Plan has also done well. It has a beta of 1.09, similar to the ITI ELSS, but with a higher Sharpe Ratio of about 1.44 and an Alpha of 8.25. These numbers show that the Motilal Oswal fund has better risk-adjusted returns. The fund manager has done a great job of beating the market average. The Treynor's Ratio of 0.20 shows that the fund is handling the market risk very efficiently. The combination of higher Sharpe and Alpha values shows that investors are being rewarded for taking on more risk, and for picking strong stocks in large and mid-cap sectors.

From the AMFI data, as of April 2025, the total equity Assets Under Management (AUM) in the mutual fund industry reached about 30.58 lakh crore. This is a big number, showing a lot of trust from both retail and institutional investors in equity funds. The steady rise in AUM shows not just good market returns, but also more people getting interested in investing, showing they are becoming financially aware. This also shows that mutual funds are a preferred way for people to build long-term wealth in India, thanks to their professional management and the diversification they offer.

In the end, the analysis shows that funds like ITI ELSS and Motilal Oswal Large & Midcap Fund are doing well in terms of risk and return. High Sharpe ratios and positive Alpha values show that fund managers are beating market expectations, while lower betas mean they are managing risk well. The growing AUM in the industry shows more trust in mutual funds, cementing their place in India's financial landscape.

2.2 Changing Composition & Risk Appetite

The share of individual / retail investors in total AUM rose from 57.80% to ~60.10% in FY25, marking increasing reliance on mutual funds by retail savers. The industry is showing signs of moving toward global diversification, thematic funds, and flexible mandates — investors are seeking returns beyond domestic cyclicity. Several equity mutual funds have delivered 35%+ annual returns since Diwali 2024, despite market fluctuations, highlighting the performance dispersion among schemes. Thus, the backdrop is one of growth, rising retail penetration, and increased demand for high-performing equity schemes — but also greater performance divergence.

Table No : 2

Sl. No	Fund (plan)	Category	Std Dev (%)	Beta	Sharpe	Jensen's α (%)	Treynor
1	SBI Contra Fund — Direct Plan — Growth	Contra Fund	10.38	0.86	1.27	4.54	0.15.
2	HDFC Tax Saver Fund — Direct Plan — Growth (HDFC ELSS)	ELSS	9.93	0.81	1.49	NA	NA
3	Parag Parikh Tax Saver Fund — Direct Plan — Growth	ELSS	8.94	0.70	1.27 (regular) — 1.40 (direct shown)	4.16	0.16.
4	HDFC Flexi Cap Fund — Direct Plan — Growth	Flexi Cap	9.63	0.79	1.65	7.78	0.20.
5	JM Flexi Cap Fund — Direct Plan — Growth	Flexi Cap	13.06	1.06	1.21	5.12	0.15.
6	Franklin India Focused Equity Fund — Direct Plan — Growth	Focused Fund	10.56	0.86	0.96	NA	NA
7	HDFC Focused 30 Fund — Direct Plan — Growth (HDFC Focused Fund)	Focused Fund	9.04	0.73	1.65	7.48	0.21.
8	ICICI Prudential Large & Mid Cap Fund — Direct Plan — Growth	Large & Mid Cap	10.10	0.80	1.51	5.55	0.19.

Source: Compiled the table based on the calculation made using the data retrieved from, <https://www.moneycontrol.com/mutual-funds/findfund/riskratios?&amc=BIRMUTE,AXMF,BAXMF,BOBMUF,CANMUTE,DSPMLMF,EDELWMF,TEMMUFT,HDFCMUTE,HSBCMUTE,P>

Treynor's Ratio, which looks at returns in relation to systematic or market risk, further supports these trends. HDFC Focused 30 Fund (0.21) and HDFC Flexi Cap Fund (0.20) had the highest Treynor ratios, showing they effectively used market risk to benefit investors. Other top funds include ICICI Prudential Large & Mid Cap Fund (0.19) and SBI Contra Fund (0.15), demonstrating smart risk management in relation to their market exposure.

In summary, the 2023–2025 period shows that HDFC's funds, especially the HDFC Focused 30 and HDFC Flexi Cap Funds, performed best in terms of balancing risk and returns.

Funds like Parag Parikh Tax Saver, ICICI Prudential Large & Mid Cap, and SBI Contra Fund also stood out for being stable, having lower Beta, and consistently generating Alpha. Meanwhile, JM Flexi Cap Fund, although it offered higher returns, had more risk and is better suited for investors who are more aggressive. From an investment standpoint, the findings suggest that funds with moderate volatility, lower Beta, and high Sharpe and Treynor ratios offered the best balance between return and risk in this period. The results show how advanced Indian fund management is and confirm that long-term success in mutual funds comes from risk-adjusted consistency, not just short-term performance. success.

3.1 Observed / Expected Shifts

AUM growth / rank changes

Many funds that performed well between 2022 and 2025 might have seen changes in their assets under management and rankings compared to 2023. This could lead to confusion and frustration, as the order of performance might have shifted. For instance, funds with very strong returns over 3 to 5 years, especially those focused on mid-cap, sectoral, or thematic investments, might now have a bigger share of assets due to their performance. When we look at how the industry has grown, for example, equity AUM has increased by about 25%. This suggests that top equity funds likely experienced solid growth.

Volatility & Standard Deviation

The equity markets in India have been quite volatile in recent years, thanks to global events, interest rate changes, and economic cycles. This means we could expect higher standard deviations compared to previous times. Sectoral and thematic funds, such as those focused on energy or infrastructure, might show even more volatility, with some cases going over 25% in extreme situations.

Beta

Funds with a high beta—meaning they react strongly to market changes—tend to perform better when the market is up and worse when it's down. Some fund managers may have adjusted their portfolios to make them less sensitive to market movements, which could lower their beta, depending on their strategy.

Sharpe Ratio / Jensen's Alpha / Treynor's

In a market that has generally been rising, many funds would show positive alpha, but the key difference lies in how consistently they manage risk. The funds that performed best between 2022 and 2025 may have higher Sharpe ratios if their returns were steady despite some volatility. Treynor's ratio becomes particularly useful when comparing funds with very different betas. A fund with a lower beta but strong excess returns could end up ranking higher under this measure than a fund with a higher beta but lower returns.

3.2 Hypothetical Interpretation

Imagine the Quant Small Cap Fund continues to be highly volatile, with a standard deviation of around 25%, but still delivers strong returns. This could result in a moderate Sharpe ratio, while Jensen's alpha would be quite positive. A large-cap or value fund, on the other hand, might show lower volatility but slightly lower returns. However, if its volatility is well controlled, it could end up with a better Sharpe ratio. A balanced Flexi Cap or Contra fund with a moderate beta (around 1) and good timing could offer a good balance—decent returns without too much volatility.

- DSP Natural Resources & New Energy Fund with a standard deviation of 25.25%—likely one of the most volatile schemes.

- Parag Parikh Tax Saver Fund with a standard deviation of 16.74%—relatively low volatility.

- Quant Tax Plan with a Treynor's ratio of 0.33—among the better performers.

With the latest data, the rankings could change, but the way we interpret these metrics should remain similar.

4. Findings, Implications & Recommendations

4.1 Key Takeaways

Past performance doesn't always predict future results, but using risk-adjusted metrics can help determine if the performance was worth the risk. Volatility differs a lot among different types of funds; sectoral and thematic funds usually offer high potential gains but also come with greater ups and downs. Mid-cap and small-cap funds may do well during strong market periods but can drop sharply when the market turns down. Funds that show steady risk-adjusted returns throughout different market phases, like having a moderate beta, positive alpha, and stable Sharpe ratio, are more trustworthy.

As the amount of money managed in equities grows and competition becomes tougher, factors like expense ratios, portfolio turnover, and style drift become key factors in distinguishing one fund from another.

4.2 Suggestions for Investors

Look for funds with a good Sharpe ratio and positive Jensen's alpha, not just those with high returns. Pair large-cap or core funds, which are more stable, with mid-cap or small-cap and thematic funds for growth opportunities, but don't put too much money into volatile areas. In uncertain or volatile markets, choose funds with lower beta or more conservative equity investments. Consider ELSS or tax-saving funds as part of your long-term plan, but think about how the tax lock-in might impact performance during market downturns. Check fund performance regularly, at least once a year — consider exiting or reducing your investment in funds that consistently underperform, especially those with negative alpha or low Sharpe ratios. Keep an eye on changes in fund managers, shifts in investment strategies, and how much it costs to manage the fund.

5. Conclusion

Analyzing a security or fund involves looking at both returns and the level of risk involved in achieving them. The Indian mutual fund industry has grown quickly, especially in the equity area, between 2023 and 2025. However, the increase in assets under management and inflows doesn't mean all funds perform well — performance varies greatly.

Based on risk-return analysis:

Investors should focus on risk-adjusted metrics, not just the top-line returns.

Funds that show more consistent performance and better reward-to-risk ratios tend to perform more reliably over time.

A balanced approach — mixing stable large-cap funds with targeted exposure to high-growth or thematic funds — is still a wise strategy.

External factors like the global economy, interest rates, and investor mood continue to have a major impact on fund performance.

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