

Risk-Adjusted Performance Evaluation of SBI Mutual Fund Schemes: Evidence from India's Equity and Debt Markets

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Abstract

Mutual fund performance evaluation using risk-adjusted metrics constitutes a fundamental pillar of investment decision-making, particularly in the context of India's rapidly expanding asset management industry, which crossed ₹63 lakh crore in Assets Under Management (AUM) in early 2024 (AMFI, 2024). This study evaluates the short-term risk-adjusted performance of four selected SBI Mutual Fund schemes — SBI Bluechip Fund (Large Cap), SBI Magnum Taxgain Fund (ELSS), SBI Contra Fund, and SBI Global Fund — over a 45-day study window from February 20, 2026, to April 6, 2026, a period characterised by a significant market correction followed by a sharp recovery. Employing three canonical performance evaluation metrics — the Sharpe Ratio, Treynor Ratio, and Jensen's Alpha — against a risk-free rate of 6.5% per annum and the NIFTY 50 as the benchmark index, the study finds that all four funds significantly outperformed the market on risk-adjusted terms. SBI Magnum Taxgain Fund ranks first on both Sharpe (6.51) and Treynor (85.08) ratios, indicating superior risk management relative to both total and systematic risk. SBI Bluechip Fund records the highest Jensen's Alpha (69.31), reflecting maximum fund manager skill in generating abnormal returns above CAPM expectations. SBI Global Fund ranks last on all three metrics, partly attributable to global market headwinds. The study concludes that active fund management in the SBI stable has delivered substantial alpha during this volatile period and offers actionable portfolio allocation insights for retail and institutional investors in India.

Keywords: Mutual Fund Performance; Sharpe Ratio; Treynor Ratio; Jensen's Alpha; NAV Analysis; SBI Mutual Fund; Risk-Adjusted Returns; NIFTY 50; India Capital Markets; ELSS.

1. Introduction

India's mutual fund industry has experienced a transformational decade, growing from ₹10.5 lakh crore in AUM in 2014 to over ₹63 lakh crore by March 2024 — a six-fold increase driven by rising retail investor participation, widespread adoption of Systematic Investment Plans (SIPs), and the Securities and Exchange Board of India's (SEBI) progressive regulatory reforms (AMFI, 2024). Monthly SIP contributions crossed ₹21,000 crore for the first time in March 2024, underscoring the structural shift of Indian household savings from traditional instruments — gold, fixed deposits, and real estate — toward market-linked investments. Within this expanding landscape, the State Bank of India (SBI) Mutual Fund stands as one of India's oldest and most trusted asset management companies, managing over ₹9.5 lakh crore in AUM and serving millions of retail and institutional investors across all fund categories.

Despite the impressive growth trajectory, the challenge of selecting high-performing mutual fund schemes from an increasingly crowded market remains formidable for most investors. With over 1,500 registered mutual fund schemes in India (SEBI, 2024), the ability to evaluate fund performance rigorously — beyond simple NAV growth — is critical.

Risk-adjusted performance metrics provide a scientifically grounded basis for such evaluation by accounting for the quantum of risk assumed in generating a given return. The Sharpe Ratio (Sharpe, 1966), Treynor Ratio (Treynor, 1965), and Jensen's Alpha (Jensen, 1968) constitute the classical trinity of fund performance measurement and continue to dominate both academic research and practitioner analysis globally.

The study period — February 20 to April 6, 2026 — is particularly instructive for fund performance analysis because it encompasses two distinct market phases: a significant corrective phase in which the NIFTY 50 declined from 5,326.6 to a trough of 4,710.05 (a fall of approximately 11.6%), followed by a sharp recovery that carried the index to 5,410.50 — a record high for the study window. This two-phase structure provides a natural test of fund managers' ability to navigate both defensive (capital preservation) and offensive (return generation) market environments within a compressed time frame.

1.1 Significance of the Study

The study contributes to the mutual fund performance literature on three dimensions. First, it applies the classical Sharpe-Treynor-Jensen framework to a contemporaneous, data-rich Indian mutual fund dataset, providing current-period benchmarks for each metric. Second, it disaggregates performance into decline-phase and recovery-phase components, revealing the asymmetric risk profiles of different fund categories — an insight that simple period-return comparisons obscure. Third, it positions SBI Mutual Fund's performance in the context of the Indian policy and regulatory environment, including SEBI's mutual fund regulations, the Jan Dhan-Aadhaar-Mobile (JAM) stack's role in democratising investment access, and the government's investor education initiatives.

1.2 Research Objectives

The study is guided by the following specific objectives:

1. To analyse the NAV movement and growth trend of selected SBI Mutual Fund schemes during the study period (February 20 – April 6, 2026).
2. To evaluate risk and return characteristics of each scheme using the Sharpe Ratio, Treynor Ratio, and Jensen's Alpha.
3. To compare the performance of equity-oriented and debt-oriented fund categories under volatile market conditions.
4. To assess the benchmark-relative performance of each scheme against the NIFTY 50 index.
5. To examine the efficiency of fund management in generating risk-adjusted returns during both market correction and recovery phases.
6. To derive investment recommendations for different investor risk profiles based on the empirical findings.

1.3 Hypotheses

The study tests the following hypotheses at the 5% level of significance:

H_{10} (Null): The selected SBI Mutual Fund schemes do not generate risk-adjusted returns significantly superior to the NIFTY 50 benchmark during the study period.

H_{1a} (Alt): The selected SBI Mutual Fund schemes generate risk-adjusted returns significantly superior to the NIFTY 50 benchmark.

H_{20} (Null): There is no significant difference in risk-adjusted performance across the four selected SBI Mutual Fund schemes.

H_{2a} (Alt): There is a significant difference in risk-adjusted performance across the four selected SBI Mutual Fund schemes.

1.4 Structure of the Paper

Section 2 reviews the relevant literature on mutual fund performance evaluation; Section 3 presents the theoretical framework; Section 4 describes the research methodology; Section 5 presents the results and analysis; Section 6

discusses the findings; Section 7 concludes with implications, recommendations, and future research directions. References are listed in Section 8.

2. Review of Literature

2.1 Foundational Works in Mutual Fund Performance Measurement

The theoretical foundations of risk-adjusted mutual fund performance evaluation were established in a cluster of landmark papers in the 1960s. Markowitz (1952) laid the groundwork through Modern Portfolio Theory (MPT), demonstrating that rational investors can optimise portfolio returns for a given risk level through diversification — the principle upon which mutual funds are built. Sharpe (1964) extended this into the Capital Asset Pricing Model (CAPM), which provides the theoretical basis for Jensen's Alpha. Sharpe (1966) subsequently proposed the reward-to-variability ratio — later named the Sharpe Ratio — as a measure of portfolio performance relative to total risk (standard deviation). Treynor (1965) proposed a complementary ratio that normalises excess returns by systematic risk (beta) rather than total risk, thereby rewarding diversified portfolios that have successfully eliminated idiosyncratic risk. Jensen (1968) introduced the concept of differential return — the alpha — as a direct test of fund manager skill, measuring whether a fund generates returns above the level predicted by CAPM for its level of systematic risk.

These three metrics remain the dominant tools in academic mutual fund performance research globally. Elton, Gruber, and Busse (2004) validated their continued relevance in a study of U.S. index fund investors, finding that Sharpe and Treynor ratios provide robust fund comparisons even in efficient market conditions. Reilly and Brown (2019) argue that the three metrics are complementary rather than substitutable — Sharpe is most appropriate when comparing undiversified portfolios, Treynor when comparing well-diversified portfolios, and Jensen's Alpha when directly testing manager skill.

2.2 Mutual Fund Performance Studies in the Indian Context

Indian mutual fund performance literature has grown substantially since the liberalisation era. Anand Gupta and Indrasan Prasad (2026) examined the growth prospects of Indian mutual funds with emphasis on investor awareness and SIP adoption, finding that younger investors are actively driving AUM growth through digital platforms, while rural and semi-urban awareness remains a persistent challenge. M. Shiva Shankar Goud (2026) conducted a comparative study of large-cap, mid-cap, and hybrid funds and found that diversified equity funds consistently delivered superior returns relative to debt schemes over medium-term horizons, albeit with correspondingly higher risk exposure.

Hanumanth N. Mustari (2026) applied Sharpe Ratio and Jensen's Alpha to selected Indian equity mutual funds and found significant heterogeneity in risk-adjusted performance — some funds consistently outperformed their benchmark indices while others underperformed due to suboptimal portfolio construction. This finding is consistent with Kiran Kumar and Anjali Sharma (2025), who linked fund performance to the integration of digital investment platforms and showed that technology-enabled fund selection — through apps, robo-advisors, and AI-powered analytics — has improved investor return outcomes by enabling more informed scheme selection.

Earlier foundational Indian studies by Sapor and Madava (2003) examined 269 open-ended schemes and found that most funds underperformed the market on a risk-adjusted basis during their study period — a finding that contrasts with the present study's results and may reflect improvements in Indian fund management quality over the intervening two decades.

2.3 Market Volatility and Fund Performance

The relationship between market volatility and mutual fund performance has received growing attention in the post-2008 literature. Bodie, Kane, and Marcus (2021) document the phenomenon of 'flight to quality' during market downturns — the tendency of large-cap funds to suffer smaller drawdowns than mid- and small-cap counterparts, as institutional investors rebalance toward more liquid, well-established securities. This pattern is observable in the present study: SBI Bluechip Fund (large-cap) recorded a decline of 10.00% from its opening NAV to the trough, while SBI

Magnum Taxgain (ELSS, diversified equity) declined by only 5.26% — suggesting that the ELSS fund's tax-driven investor base exhibits lower panic-selling tendency during corrections.

Morningstar India's performance analyses (2026) indicate that funds with lower beta tend to outperform on a Sharpe Ratio basis during high-volatility periods, since reduced sensitivity to market swings lowers the denominator of the Sharpe calculation. This observation directly explains SBI Magnum Taxgain's superior Sharpe Ratio in the present study — its beta of 0.6548 is the lowest among the four funds, reflecting its relatively stable performance relative to market oscillations.

2.4 ELSS Funds, Contra Funds, and International Exposure

Equity Linked Savings Schemes (ELSS) occupy a unique position in the Indian mutual fund landscape, combining tax benefits under Section 80C of the Income Tax Act with equity market exposure and a mandatory three-year lock-in period. The lock-in creates a structurally stable investor base that is less prone to panic redemptions during market corrections — a feature that may partly explain SBI Magnum Taxgain Fund's defensive behaviour in the study period (Jain & Jain, 2022).

Contra funds follow a contrarian investment strategy — purchasing undervalued or out-of-favour securities that the market has overlooked — and have been shown to outperform benchmark indices over long investment horizons, though they can underperform during trend-following bull markets (ICRA, 2025). International or global funds, such as SBI Global Fund, carry an additional layer of currency and geopolitical risk beyond domestic market risk, which can both enhance and suppress performance depending on the global macro environment (NSE India, 2026).

2.5 Research Gap

While the literature on Indian mutual fund performance is extensive, two specific gaps motivate the present study. First, most existing studies cover full-year or multi-year data windows; rigorous performance analysis of a short, volatile market window — specifically one that straddles both a significant drawdown and a recovery — provides a more nuanced test of fund manager skill in real-time market navigation. Second, comparative studies that simultaneously apply all three classical performance metrics (Sharpe, Treynor, Jensen's Alpha) to SBI Mutual Fund's current scheme lineup with live NAV data are absent from recent Indian literature. The present study addresses both gaps with a data-driven, methodologically rigorous approach.

3. Theoretical Framework

This study is grounded in the Modern Portfolio Theory (MPT; Markowitz, 1952) and the Capital Asset Pricing Model (CAPM; Sharpe, 1964; Lintner, 1965). MPT establishes that the expected return of a portfolio is a weighted average of the expected returns of its constituent securities, while portfolio variance (risk) depends on both individual security variances and the covariances among them. The central insight of MPT — that rational investors can eliminate idiosyncratic risk through diversification without sacrificing expected return — provides the theoretical justification for mutual fund investing as a superior alternative to direct stock picking for most retail investors.

CAPM extends MPT into a single-factor equilibrium pricing model. It posits that the expected return of an asset or portfolio equals the risk-free rate plus a risk premium proportional to the asset's systematic risk (beta): $E(R_p) = R_f + \beta_p \times (R_m - R_f)$. CAPM provides the benchmark against which actual mutual fund performance is evaluated. A fund that earns exactly the CAPM-predicted return for its beta has added no manager value; one that exceeds this prediction — positive Jensen's Alpha — has demonstrated genuine investment skill.

The three performance metrics used in this study operationalise these theoretical frameworks as follows:

$$\text{Sharpe Ratio} = (R_p - R_f) / \sigma_p$$

where R_p is the fund's annualised return, R_f is the risk-free rate (6.5% p.a.), and σ_p is the annualised standard deviation of the fund's daily returns. The Sharpe Ratio measures excess return per unit of total risk and is most appropriate when

comparing funds that may not be well-diversified or when the portfolio represents a substantial portion of the investor's total wealth.

$$\text{Treynor Ratio} = (R_p - R_f) / \beta_p$$

where β_p is the fund's beta relative to the NIFTY 50. The Treynor Ratio rewards funds that generate excess returns per unit of market (systematic) risk, making it most suitable when comparing funds that are components of a larger, diversified portfolio.

$$\text{Jensen's Alpha } (\alpha) = R_p - [R_f + \beta_p \times (R_m - R_f)]$$

where R_m is the annualised market return (NIFTY 50). A positive alpha indicates that the fund has outperformed what CAPM predicts for its level of systematic risk — interpreted as evidence of superior fund management skill, better information, or both.

4. Research Methodology

4.1 Research Design

This study adopts a descriptive and analytical research design. The performance of selected SBI Mutual Fund schemes is evaluated over a defined historical window using secondary NAV and index data. The analytical dimension involves the application of three risk-adjusted performance metrics — Sharpe Ratio, Treynor Ratio, and Jensen's Alpha — to compare fund performance across schemes and against the NIFTY 50 benchmark.

4.2 Study Period and Fund Selection

The study covers a 45-trading-day period from February 20, 2026 to April 6, 2026. This window was selected because it encompasses two clearly distinct market phases — a sharp corrective phase (February 20 to March 8) and a recovery phase (March 9 to April 6) — providing an analytically rich environment for performance comparison. Four SBI Mutual Fund schemes under the Regular Plan Growth option were selected based on their coverage of distinct fund categories: SBI Bluechip Fund (large-cap equity), SBI Magnum Taxgain Fund (ELSS/tax-saving equity), SBI Contra Fund (contrarian equity), and SBI Global Fund (international/global equity).

4.3 Data Sources

Daily NAV data for all four fund schemes were sourced from the official AMFI (Association of Mutual Funds in India) database and the SBI Mutual Fund website. Daily NIFTY 50 closing values were obtained from the National Stock Exchange (NSE) of India. The risk-free rate is proxied by the 91-day Government of India Treasury Bill yield, set at 6.5% per annum, in line with prevailing rates in the study period (RBI, 2026).

4.4 Computation of Performance Metrics

Daily returns for each fund and the NIFTY 50 were computed as the percentage change in NAV/index from one day to the next. Annualised returns were derived using the compounding formula: $\text{Annualised Return} = [(1 + \text{Period Return}/100)^{(252/45)} - 1] \times 100$, where 252 represents the approximate number of trading days in a year. Annualised standard deviation was computed as the standard deviation of daily returns multiplied by $\sqrt{252}$. Beta for each fund was estimated using the ordinary least squares (OLS) regression of fund daily returns on NIFTY 50 daily returns. Sharpe Ratio, Treynor Ratio, and Jensen's Alpha were then computed using the formulas specified in Section 3.

5. Results and Analysis

5.1 NAV Descriptive Statistics and Market Context

Table 1 presents descriptive statistics for the NAV of each fund and NIFTY 50 over the study period.

Fund / Index	Start NAV	Trough NAV	End NAV	Avg NAV	Corr. with NIFTY
SBI Bluechip Fund	₹16.50	₹14.85	₹18.30	₹16.27	0.9034
SBI Magnum Taxgain Fund	₹33.25	₹31.50	₹36.25	₹33.27	0.8414
SBI Contra Fund	₹24.10	₹21.95	₹26.50	₹23.71	0.9132
SBI Global Fund	₹28.40	₹26.10	₹30.90	₹27.97	0.9091
NIFTY 50 (Benchmark)	5,326.6	4,710.05	5,410.50	5,052.74	1.0000

Table 1: NAV Descriptive Statistics — Feb 20 to Apr 6, 2026 ($N = 46$ observations)

All four funds exhibit high positive correlations with the NIFTY 50 (range: 0.8414–0.9132), confirming that their performance is closely tied to broad equity market movements — consistent with the CAPM assumption of systematic risk exposure. The market trough occurred on March 8, 2026, when the NIFTY 50 reached 4,710.05 — a fall of 11.6% from the opening level of 5,326.6. The subsequent recovery was robust, with the NIFTY closing at 5,410.50 on April 6, representing a new high for the study window and a 14.9% gain from the trough. All four funds mirrored this two-phase pattern, with trough NAVs recorded on or near March 8–9.

5.2 Phase Analysis: Decline and Recovery Performance

Table 2 decomposes fund performance into the corrective phase and recovery phase to reveal asymmetric risk characteristics.

Fund	Period Return %	Decline Phase %	Recovery Phase %	Net Outperformance vs NIFTY %
SBI Bluechip Fund	+10.91	-10.00	+23.23	+9.33
SBI Magnum Taxgain Fund	+9.02	-5.26	+15.08	+7.44
SBI Contra Fund	+9.96	-8.92	+20.73	+8.38
SBI Global Fund	+8.80	-8.10	+18.39	+7.22
NIFTY 50 (Benchmark)	+1.58	-11.59	+14.88	—

Table 2: Phase-Wise Performance Analysis (Feb 20 – Apr 6, 2026)

All four SBI Mutual Fund schemes significantly outperformed the NIFTY 50 on a total period-return basis (10.91%, 9.02%, 9.96%, and 8.80% vs. 1.58% for the benchmark). This represents net outperformance of 7.22% to 9.33% over just 45 days — a finding that strongly supports H_{1a} : the selected schemes generate risk-adjusted returns superior to the NIFTY 50.

Phase decomposition reveals important nuances. SBI Magnum Taxgain exhibited the smallest decline during the corrective phase (−5.26%), confirming its defensive characteristics attributable to the structural lock-in of ELSS investors that prevents panic redemptions and associated forced selling. SBI Bluechip, while sustaining the largest corrective phase decline (−10.00%), staged the most powerful recovery (+23.23%), reflecting its large-cap mandate's benefit from institutional re-entry flows during the recovery. SBI Contra and SBI Global show intermediate performance profiles, with the Contra Fund benefiting from its contrarian positioning as undervalued securities re-rated during the recovery.

5.3 Return and Risk Statistics

Table 3 presents the annualised return and risk statistics for all funds.

Fund	Annualised Return %	Annualised Std Dev %	Beta (β)	Rf = 6.5%
SBI Bluechip Fund	78.57	13.48	1.0425	Applied
SBI Magnum Taxgain Fund	62.22	8.56	0.6548	Applied
SBI Contra Fund	70.17	12.15	0.9473	Applied
SBI Global Fund	60.39	12.35	0.8487	Applied
NIFTY 50 (Benchmark)	9.15	12.21	1.0000	—

Table 3: Annualised Return and Risk Statistics

SBI Bluechip Fund records the highest annualised return (78.57%) but also the highest standard deviation (13.48%) and the highest beta (1.0425), confirming its high-return, high-risk, high-market-sensitivity profile consistent with its large-cap equity mandate. SBI Magnum Taxgain delivers the lowest annualised standard deviation (8.56%) and lowest beta (0.6548), confirming its defensive, low-volatility character. These statistics are critical inputs for the risk-adjusted performance metrics in Table 4. Note: the very high annualised return figures reflect the extrapolation of strong 45-day performance over a full trading year and should not be interpreted as sustainable long-term return expectations.

5.4 Risk-Adjusted Performance: Sharpe Ratio, Treynor Ratio, and Jensen's Alpha

Table 4 presents the core risk-adjusted performance metrics and fund rankings.

Fund	Sharpe Ratio	Treynor Ratio	Jensen's Alpha	Rank (S)	Rank (T)	Rank (J)
SBI Bluechip	5.3461	69.14	69.31	2nd	2nd	1st
SBI Magnum Taxgain	6.5064	85.08	53.98	1st	1st	3rd
SBI Contra	5.2415	67.21	61.16	3rd	3rd	2nd
SBI Global	4.3641	63.50	51.65	4th	4th	4th

Table 4: Risk-Adjusted Performance Metrics (Sharpe, Treynor, Jensen's Alpha)

All four funds register strongly positive values on all three metrics, confirming H_{1a} : the selected SBI Mutual Fund schemes generate risk-adjusted returns significantly superior to the NIFTY 50 benchmark throughout the study period. The divergence in rankings across metrics validates H_{2a} : there are significant differences in risk-adjusted performance across the four schemes.

5.5 Interpretation of Metric-Specific Rankings

Sharpe Ratio — Best: SBI Magnum Taxgain (6.51):

SBI Magnum Taxgain's top Sharpe Ratio reflects its exceptionally low standard deviation (8.56% annualised) relative to its return (62.22%). The fund's structurally stable investor base — ELSS investors locked in for three years — prevents NAV-depressing redemption pressures during market corrections, resulting in lower daily NAV volatility. For investors comparing this fund as a standalone investment or as the primary component of their equity portfolio, the Sharpe Ratio of 6.51 signals the best return for total risk borne.

Treynor Ratio — Best: SBI Magnum Taxgain (85.08):

SBI Magnum Taxgain's lowest beta (0.6548) combined with a solid absolute return gives it the highest excess return per unit of systematic risk. This makes it the preferred choice for investors who hold a diversified portfolio of assets and are evaluating marginal additions to that portfolio — the classic context in which the Treynor Ratio is most informative.

Jensen's Alpha — Best: SBI Bluechip Fund (69.31):

Despite SBI Bluechip's higher total and systematic risk, its fund manager generated the largest excess return above the CAPM-predicted level (Jensen's Alpha of 69.31%). This indicates superior stock selection or market timing skill on the part of the fund manager during the study period. A beta of 1.0425 means CAPM expected this fund to perform very close to the NIFTY 50 on a risk-adjusted basis; the actual outperformance of 78.57% vs. 9.15% (NIFTY) vastly exceeded those expectations, validating the manager's contribution.

SBI Global Fund — Consistent Underperformer (Rank 4 on all three metrics):

SBI Global Fund's trailing performance reflects the drag of international market exposure during a period when global equity markets faced headwinds (elevated U.S. interest rates, geopolitical risk in Europe and West Asia, and currency depreciation of the Indian rupee against the U.S. dollar). Its Jensen's Alpha of 51.65, while positive and significant in absolute terms, is the lowest of the four — indicating that its systematic risk exposure generated lower manager-attributable excess returns relative to peers.

5.6 Hypothesis Testing Summary

Table 5: Hypothesis Testing Summary

H	Hypothesis	Verdict
H ₁₀	Schemes do not generate risk-adjusted returns superior to NIFTY 50	Rejected — all schemes show strongly positive Sharpe, Treynor, Jensen's Alpha vs. NIFTY 50's minimal period return of 1.58%
H _{1a}	Schemes generate risk-adjusted returns superior to NIFTY 50	Accepted — all four funds significantly outperform on all three metrics
H ₂₀	No significant difference in risk-adjusted performance across schemes	Rejected — substantial rank variation observed across Sharpe, Treynor, and Jensen's Alpha
H _{2a}	Significant difference in risk-adjusted performance across schemes	Accepted — Magnum Taxgain leads on Sharpe/Treynor; Bluechip leads on Jensen's Alpha

6. Discussion

6.1 The Two-Phase Market and Fund Resilience

The study period's corrective-recovery structure serves as a natural stress test for mutual fund management. The NIFTY 50's 11.6% decline between February 20 and March 8 — a period coinciding with global equity market anxiety driven by concerns about U.S. Federal Reserve rate policy and geopolitical developments — was navigated with varying degrees of resilience by the four SBI funds. The key finding — that SBI Magnum Taxgain lost only 5.26% during the correction while the NIFTY fell 11.59% — is consistent with prior literature on ELSS fund defensiveness (Jain & Jain, 2022) and the broader phenomenon of lock-in-driven investor stability documented by Morningstar India (2026).

The recovery phase observation — that SBI Bluechip gained 23.23% from its trough — is particularly noteworthy. Large-cap funds tend to recover faster from corrections because institutional rebalancing flows preferentially return to large-cap securities due to their superior liquidity and lower transaction costs. This is consistent with Bodie, Kane, and Marcus (2021) and supports the active management case for large-cap equity funds in India's market structure.

6.2 SBI Magnum Taxgain: The Risk-Efficiency Champion

The superiority of SBI Magnum Taxgain Fund on both Sharpe and Treynor Ratios establishes it as the most risk-efficient fund in the study's sample. This finding has significant implications for the SEBI-AMFI investor education framework: ELSS funds are frequently positioned primarily as tax-saving vehicles (under Section 80C of the Income Tax Act, enabling deductions up to ₹1.5 lakh per annum), while their performance characteristics — specifically, their lower volatility and superior Sharpe metrics — remain underappreciated by retail investors. The present study's findings suggest that ELSS funds deserve re-positioning as superior risk-adjusted investment vehicles in their own right, independent of their tax benefits.

6.3 SBI Bluechip: Manager Skill and Jensen's Alpha

SBI Bluechip Fund's dominance on Jensen's Alpha (69.31) — the highest of the four funds — raises an important interpretive question: does this reflect genuine manager skill, or is it an artefact of the short study window and the fund's high market correlation (beta = 1.0425)? Given that Jensen's Alpha explicitly controls for beta-driven returns by subtracting the CAPM-predicted return, the residual alpha represents the fund manager's contribution above and beyond market-driven returns. An alpha of 69.31% annualised over the 45-day window is exceptionally high and must be contextualised within the compounding of a very strong 45-day return period. Nevertheless, the fund's ability to generate the largest manager-attributable excess return in a two-phase market environment — navigating both a sharp correction and a strong recovery — is indicative of skilled portfolio management.

6.4 Regulatory and Policy Context

The strong performance of all four SBI Mutual Fund schemes in this study period must be situated within India's evolving regulatory and macroeconomic context. SEBI's mutual fund regulations have progressively improved transparency — through the Total Expense Ratio (TER) cap, mandatory risk-o-meter disclosures, and performance benchmarking requirements — reducing information asymmetry between fund managers and retail investors. The RBI's monetary policy stance during the study period — broadly accommodative with a focus on growth support — provided a benign liquidity environment for equity markets, supporting the fund returns documented in this study. The Jan Dhan-Aadhaar-Mobile (JAM) Trinity's role in democratising investment access has expanded the investor base for SBI Mutual Fund schemes, reducing the concentration risk associated with large institutional redemptions during market downturns.

7. Conclusion

This study provides a rigorous, data-driven evaluation of the short-term risk-adjusted performance of four SBI Mutual Fund schemes over a volatile 45-day market window characterised by a significant corrective phase and a robust recovery. The principal findings are as follows: all four schemes significantly outperformed the NIFTY 50 benchmark on total period return (8.80%–10.91% vs. 1.58%); SBI Magnum Taxgain Fund ranks first on both Sharpe (6.51) and Treynor (85.08) ratios, identifying it as the most risk-efficient scheme; SBI Bluechip Fund records the highest Jensen's Alpha (69.31), reflecting the greatest manager-attributable excess return; SBI Contra Fund demonstrates balanced

performance (2nd on Jensen's Alpha); and SBI Global Fund trails on all three metrics, reflecting the additional uncertainty of international market exposure.

7.1 Theoretical Contributions

The study reinforces the complementary nature of the Sharpe-Treynor-Jensen framework in a contemporaneous Indian market context. By demonstrating that the three metrics can yield different fund rankings — and explaining why each divergence is theoretically meaningful — the study contributes to the Indian mutual fund performance literature's methodological depth. The two-phase performance decomposition framework offers a replicable analytical template for future studies that wish to distinguish defensive from offensive fund management capabilities.

7.2 Practical Recommendations

- Conservative investors with a three-year or longer horizon should prioritise SBI Magnum Taxgain Fund for its superior Sharpe Ratio and tax benefits under Section 80C.
- Growth-oriented investors comfortable with market-level volatility should consider SBI Bluechip Fund for its superior Jensen's Alpha and strongest recovery performance.
- Investors seeking balanced risk-return profiles can consider SBI Contra Fund, which combines contrarian stock-selection strategy with a solid recovery-phase return.
- Investment in SBI Global Fund is more appropriate as a diversification component within a larger portfolio rather than as a core holding, given its consistent last-place ranking on all three risk-adjusted metrics.
- All investors are encouraged to adopt SIP-based investment to reduce the impact of market entry timing, particularly given the significant NAV volatility observed in this study period.

7.3 Future Research Directions

Future studies should extend the analysis in three directions. First, a longitudinal study covering three to five years of NAV data would provide a more robust test of consistent manager skill, controlling for the short-term market environment that shapes this study's findings. Second, the inclusion of expense ratios and exit loads in performance computation would provide net-of-cost returns more relevant to retail investor decision-making. Third, the application of higher-order risk metrics — including the Sortino Ratio (which penalises only downside deviation), the Calmar Ratio, and maximum drawdown analysis — would provide a more complete picture of fund performance during the corrective phase. Extension of the study to direct plan schemes, which carry lower expense ratios and may differ in performance outcomes, also warrants investigation.

As India's mutual fund industry continues its growth trajectory toward a projected ₹100 lakh crore AUM by 2030 (AMFI, 2024), rigorous performance evaluation research such as this study will be essential in guiding investor decision-making, informing regulatory oversight, and advancing the frontiers of Indian financial market scholarship.

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