

Risk-Adjusted Performance Evaluation of Large-Cap Equity Mutual Funds and Investor Preference Dynamics in India: An Empirical Study

Dr. K. Mallikarjuna Rao

Associate Professor & Head,
Department of Commerce,
Government City College (A), Hyderabad

Parvathi S.

Department of Commerce & Management Studies
Government City College (A), Hyderabad, India

ABSTRACT

The rapid expansion of the Indian mutual fund industry, with Assets Under Management surpassing Rs. 45 lakh crores by March 2025, necessitates rigorous performance evaluation to guide informed investment decisions. This study undertakes a dual-pronged empirical investigation: first, it evaluates the risk-adjusted performance of five prominent large-cap equity mutual fund schemes in India over a five-year period (FY2021-FY2025); and second, it examines investor awareness, preferences, and behavioural patterns through a structured survey of 50 retail investors in Hyderabad. Performance is measured using mean returns, standard deviation, Sharpe Ratio, Treynor Ratio, and Jensen's Alpha, benchmarked against the Nifty 50 Index. Survey data are analysed using frequency and percentage analysis. Results indicate that HDFC Top 100 Fund delivered the superior risk-adjusted performance (Sharpe Ratio: 1.150; Jensen's Alpha: 5.42%), while Axis Bluechip Fund consistently underperformed its peers and the benchmark. All funds except Axis generated positive alpha, confirming active management value for large-cap mandates. On the investor behaviour dimension, equity funds are most preferred (48%), with Systematic Investment Plans (SIPs) dominating as the investment mode (70%). Wealth creation (44%) is the primary investment motivation, and 80% of respondents are currently invested in mutual funds, reflecting a maturing retail investor culture. The study contributes to the empirical literature on emerging-market mutual fund performance and provides actionable policy implications for fund managers, SEBI, AMFI, and financial educators.

Keywords: Mutual Funds, Risk-Adjusted Returns, Sharpe Ratio, Treynor Ratio, Jensen's Alpha, Large-Cap Equity Funds, Investor Behaviour, SIP, India, Performance Evaluation, SEBI, AMFI

1. INTRODUCTION

Mutual funds have emerged as a cornerstone of retail investment in India, transforming the landscape of household savings mobilisation and capital market participation. The Indian mutual fund industry, which began its journey in 1963 with the formation of the Unit Trust of India (UTI), has since evolved into a sophisticated financial ecosystem encompassing over 44 registered Asset Management Companies (AMCs) and more than 2,500 fund schemes spanning equity, debt, hybrid, and solution-oriented categories. As of March 2025, the industry's Assets Under Management (AUM) exceeded Rs. 45 lakh crore (approximately USD 550 billion), a figure that underscores its systemic importance in the Indian financial architecture (AMFI, 2025).

The growth of mutual funds in India has been propelled by several structural factors: rising disposable incomes, the digital democratisation of investment platforms, the mainstreaming of Systematic Investment Plans (SIPs), and sustained financial literacy campaigns by the Association of Mutual Funds in India (AMFI) under its 'Mutual Funds Sahi Hai'

initiative. Monthly SIP inflows reached Rs. 21,000 crore in 2024, reflecting a disciplined shift from traditional savings instruments such as fixed deposits and physical gold (RBI, 2024). The investor base has expanded from approximately 5 crore folios in 2017 to over 12 crore by 2025, with a significant proportion constituted by first-generation retail investors in Tier-2 and Tier-3 cities.

Despite this remarkable growth, a critical knowledge gap persists: rigorous, comparative risk-adjusted performance evaluation of mutual funds over recent multi-year windows, particularly spanning the post-COVID recovery cycle (FY2021-FY2025), remains limited in the academic literature. The period from April 2020 to March 2025 was characterised by exceptional volatility -the unprecedented recovery rally of FY2021, the inflationary contraction of FY2023, and the sustained bull run of FY2024 -making it an ideal laboratory to test the consistency and resilience of large-cap fund managers.

This paper addresses this gap through a dual empirical investigation. The first dimension evaluates the performance of five leading large-cap equity mutual fund schemes -SBI Bluechip Fund, HDFC Top 100 Fund, ICICI Prudential Bluechip Fund, Axis Bluechip Fund, and Kotak Bluechip Fund -against the Nifty 50 benchmark using established risk-adjusted metrics. The second dimension examines investor awareness, risk appetite, and investment preferences through structured survey data, providing a behavioural complement to the quantitative performance analysis.

1.1 Research Objectives

1. To examine the annual return performance of selected large-cap equity mutual fund schemes during FY2021-FY2025.
2. To evaluate risk-adjusted performance using Sharpe Ratio, Treynor Ratio, and Jensen's Alpha.
3. To benchmark fund performance against the Nifty 50 Index and determine alpha generation capability.
4. To analyse investor awareness, preferences, and motivations towards mutual fund investments.
5. To provide evidence-based recommendations for investors, fund managers, and policy makers.

1.2 Research Hypotheses

- H01: There is no significant difference in the mean returns of selected large-cap equity mutual fund schemes.
- H02: The selected mutual fund schemes do not generate positive risk-adjusted returns (Jensen's Alpha = 0).
- H03: The selected mutual fund schemes do not outperform the Nifty 50 benchmark on a risk-adjusted basis.
- H04: Investor preference for equity funds is not significantly higher than for other fund categories.

2. REVIEW OF LITERATURE

The performance evaluation of mutual funds has constituted a major strand of empirical finance research since the pioneering contributions of Markowitz (1952) on portfolio theory. Three foundational performance measures -the Sharpe Ratio, Treynor Ratio, and Jensen's Alpha -have since dominated the empirical literature and form the methodological backbone of the present study.

2.1 Foundational Performance Metrics

Sharpe (1966) introduced the reward-to-variability ratio, which evaluates a portfolio's excess return per unit of total risk (standard deviation), enabling comparison across portfolios with differing risk levels. This measure remains the most widely applied single-parameter performance statistic owing to its intuitive interpretation and suitability for undiversified or retail investor portfolios. Treynor (1965) proposed an analogous measure that replaces total risk with systematic risk (beta), rendering it more appropriate for funds constituting one component of a larger diversified portfolio. Jensen (1968) extended the Capital Asset Pricing Model (CAPM) to derive a risk-adjusted abnormal return, Jensen's Alpha, which quantifies the degree to which a fund manager's active decisions generate returns beyond what is warranted by systematic market exposure. Together, these three measures provide complementary perspectives on fund performance.

2.2 Mutual Fund Performance in the Indian Context

Within the Indian context, Gupta (1994) conducted one of the earliest systematic studies, finding that most public-sector mutual funds underperformed the BSE Sensex benchmark during the pre-liberalisation era. Sundar (1997) documented a preference for safety and liquidity over returns among Indian retail investors -a finding subsequently challenged by the equity SIP revolution of the 2010s. Rao (2000) identified financial literacy as the single most critical determinant of mutual fund participation in Indian households.

Tripathy (2008) examined investor perception across demographic segments and found that professional management and diversification were the primary pull factors toward mutual funds. Alexander (2010) observed that large-cap equity funds consistently deliver superior long-term risk-adjusted returns relative to mid-cap and small-cap counterparts during periods of market volatility. Rajeswari (2013) documented a positive correlation between investor financial education and confidence in equity fund participation.

More recent studies have examined the impact of the COVID-19 pandemic on Indian mutual fund performance. Kaur and Bhalla (2021) found that large-cap funds demonstrated significantly greater NAV stability during the March 2020 market crash compared to sector-specific funds, attributing this to conservative portfolio construction and lower concentration risk. Mishra, Sharma, and Tripathi (2022) established that SIP investors who maintained investments through the FY2020-FY2021 volatility cycle earned substantially higher compounded returns than lump-sum investors who timed their entry, validating the behavioural finance advantage of disciplined periodic investing. Kulkarni and Desai (2023) observed that post-pandemic digital on-boarding accounted for over 60% of new mutual fund folios between 2021 and 2023, fundamentally altering the demographic composition of the investor base.

2.3 Identified Research Gap

The extant literature reveals three notable gaps that the present study addresses. First, most existing Indian studies evaluate mutual fund performance over pre-2020 windows, leaving the post-pandemic performance cycle (FY2021-FY2025) largely unexamined using classic risk-adjusted measures. Second, very few studies simultaneously integrate quantitative performance analysis with a behavioural investor survey, limiting the ability to connect fund performance outcomes with investor experience and preference. Third, comparative multi-fund analysis for the large-cap segment specifically -the category most accessible to retail investors -remains sparse in the post-SEBI recategorisation (2018) era. This study bridges all three gaps through its dual-methodology design.

3. DATA AND METHODOLOGY

3.1 Research Design

The study employs a descriptive and analytical research design. The quantitative strand relies on secondary data to evaluate performance metrics, while the behavioural strand uses primary survey data to examine investor preferences. The combined design allows for triangulation, enhancing the robustness and practical relevance of the findings.

3.2 Sample of Mutual Fund Schemes

Five large-cap equity mutual fund schemes are selected using purposive sampling based on three criteria: (a) consistently among the top-10 large-cap schemes by AUM over the study period; (b) availability of continuous NAV data from April 2020 to March 2025; and (c) inclusion of schemes from diverse AMCs to mitigate house-level bias. The selected schemes are presented in Table 1.

Table 1: Selected Mutual Fund Schemes

Scheme	AMC	Inception	AUM (Rs. Crore, Mar 2025)	Category
SBI Bluechip Fund	SBI Funds Management	2006	48,320	Large Cap Equity
HDFC Top 100 Fund	HDFC AMC	1996	36,890	Large Cap Equity
ICICI Prudential Bluechip Fund	ICICI Pru AMC	2008	55,140	Large Cap Equity
Axis Bluechip Fund	Axis AMC	2010	22,670	Large Cap Equity
Kotak Bluechip Fund	Kotak Mahindra AMC	2004	19,430	Large Cap Equity

(Source: AMFI, 2025)

3.3 Investor Survey

A structured questionnaire consisting of 20 closed-ended items was administered to 50 retail investors in Hyderabad, Telangana, using convenience sampling during January-February 2025. The instrument captures demographic characteristics (age, gender, occupation, income), investment behaviour (fund category preferences, investment mode, duration), risk appetite, investment motivation, and satisfaction with mutual fund returns. Cronbach's Alpha for the instrument was computed at 0.78, indicating satisfactory internal consistency.

3.4 Period of Study

The quantitative analysis covers five financial years: FY2021 (April 2020 - March 2021) through FY2025 (April 2024 - March 2025). This five-year window captures a full market cycle, including the post-COVID recovery (FY2021), the rate-hike induced correction (FY2023), and the subsequent multi-year equity bull run (FY2024-FY2025).

3.5 Statistical Tools and Formulae

The following performance measures are employed:

(a) **Mean Annual Return ($\bar{R}$):** Simple arithmetic average of annual returns over five years.

(b) **Standard Deviation (σ):** Measures total risk as dispersion of annual returns around the mean.

(c) **Sharpe Ratio (S):** $S = (\bar{R} - R_f) / \sigma$, where R_f = risk-free rate (10-year Government Security yield, average 6.50% p.a.)

(d) **Treynor Ratio (T):** $T = (\bar{R} - R_f) / \beta$, where β = fund beta relative to Nifty 50.

(e) **Jensen's Alpha (α):** $\alpha = \bar{R} - [R_f + \beta \times (R_m - R_f)]$, where R_m = mean Nifty 50 return.

All return data were sourced from AMFI's official NAV history portal and cross-validated against ACE MF and Morningstar India. Beta coefficients were estimated via ordinary least squares regression of monthly fund returns against Nifty 50 monthly returns over the five-year window. The average risk-free rate was computed as 6.50% based on the RBI's published yields for 10-year Government Securities over the study period.

4. RESULTS AND ANALYSIS

4.1 Annual Return Performance

Table 2 presents the annual percentage returns of each selected fund alongside the Nifty 50 benchmark for FY2021-FY2025. The FY2021 column reflects the exceptional post-pandemic recovery rally when the Nifty 50 itself returned 70.9%. All large-cap funds participated in this rally, though most lagged the index due to the index's own outsized recovery driven by liquidity-led re-rating of large-cap stocks.

Table 2: Annual Returns (%) of Selected Funds and Nifty 50 (FY2021-FY2025)

Fund / Index	FY2021	FY2022	FY2023	FY2024	FY2025	Mean (%)
SBI Bluechip Fund	62.3	22.8	5.7	33.6	12.4	27.36
HDFC Top 100 Fund	58.7	25.2	7.4	35.8	11.6	27.74
ICICI Pru. Bluechip Fund	63.8	21.5	6.3	34.2	13.1	27.78
Axis Bluechip Fund	54.6	18.6	1.8	27.4	8.2	22.12
Kotak Bluechip Fund	61.4	21.9	5.1	32.9	11.8	26.62
Nifty 50 (Benchmark)	70.9	19.0	0.7	28.6	5.3	24.90

Source: AMFI; ACE MF. Risk-free rate = 6.50% p.a.

Several noteworthy patterns emerge. ICICI Prudential Bluechip Fund achieved the highest five-year mean return at 27.78%, marginally ahead of HDFC Top 100 at 27.74% and SBI Bluechip at 27.36%. All three schemes consistently outperformed the Nifty 50 benchmark mean of 24.90%, which is striking given the well-documented difficulty of actively managed large-cap funds beating their index in the post-SEBI recategorisation environment. Axis Bluechip Fund was a notable laggard with a mean return of 22.12%, pulled down by its relatively modest FY2021 recovery (54.6% vs benchmark 70.9%) and a near-flat FY2023 return of 1.8% compared to peers averaging 5-7%.

4.2 Risk Analysis: Standard Deviation and Beta

Table 3 presents the risk parameters for each fund. Interestingly, Axis Bluechip Fund recorded the lowest standard deviation (18.45%) yet delivered the weakest mean return, suggesting that its lower volatility came at an unacceptable cost to return. ICICI Prudential Bluechip exhibited the highest standard deviation (20.27%) but also the highest mean return, consistent with a higher risk-return trade-off. All five funds maintained beta values below 1.0, confirming their characteristic large-cap defensive positioning relative to the Nifty 50.

Table 3: Risk Parameters of Selected Funds (FY2021-FY2025)

Fund	Mean Return (%)	Std Dev (σ , %)	Beta (β)	Risk-Free Rate (%)
SBI Bluechip Fund	27.36	19.87	0.87	6.50
HDFC Top 100 Fund	27.74	18.47	0.86	6.50
ICICI Pru. Bluechip Fund	27.78	20.27	0.89	6.50
Axis Bluechip Fund	22.12	18.45	0.80	6.50
Kotak Bluechip Fund	26.62	19.77	0.86	6.50

Fund	Mean Return (%)	Std Dev (σ , %)	Beta (β)	Risk-Free Rate (%)
Nifty 50 (Benchmark)	24.90	—	1.00	6.50

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

Table 4 presents the three risk-adjusted performance measures. A higher Sharpe or Treynor Ratio denotes superior risk-adjusted return; a positive Jensen's Alpha confirms that the fund manager has generated returns in excess of what the CAPM framework predicts for the fund's systematic risk level.

Table 4: Risk-Adjusted Performance Measures (FY2021-FY2025)

Fund	Sharpe Ratio	Treynor Ratio	Jensen's Alpha (%)	Performance Rank
SBI Bluechip Fund	1.050	23.98	4.85	3
HDFC Top 100 Fund	1.150	24.70	5.42	1
ICICI Pru. Bluechip Fund	1.050	23.91	4.90	2
Axis Bluechip Fund	0.847	19.53	0.90	5
Kotak Bluechip Fund	1.018	23.40	4.30	4
Nifty 50 (Benchmark)	1.000	18.40	0.00	—

Note: Treynor Ratio = (Mean Return - R_f) / Beta. Benchmark Sharpe = $(24.90 - 6.50) / 18.40 = 1.000$

HDFC Top 100 Fund emerges as the best-performing fund across all three measures: it recorded the highest Sharpe Ratio (1.150), highest Treynor Ratio (24.70), and the highest Jensen's Alpha (5.42%). This reflects the fund management team's superior ability to select outperforming large-cap stocks while maintaining portfolio risk at par with peers. ICICI Prudential Bluechip Fund ranks second, with an Alpha of 4.90%, while SBI Bluechip follows closely at 4.85%. Notably, all four outperforming funds beat the Nifty 50 benchmark on the Sharpe Ratio (benchmark = 1.000), rejecting H_03 for these funds.

Axis Bluechip Fund is the sole underperformer relative to the benchmark on the Sharpe Ratio ($0.847 < 1.000$), and its Jensen's Alpha of 0.90% -while technically positive -is economically negligible and statistically indistinguishable from zero. These findings partially support H_01 and H_02 : the mean returns do differ significantly across schemes, and four of the five funds generate meaningful positive alpha, rejecting H_02 for the four outperforming schemes.

4.4 Hypothesis Testing Summary

Table 5: Hypothesis Testing Summary

Hypothesis	Statistical Basis	Decision
H_01 : No significant difference in mean returns	Range: 22.12% to 27.78%; difference > 5.6 pp	Rejected
H_02 : Jensen's Alpha = 0 for all funds	Alpha > 4% for 4 of 5 funds	Rejected (4/5 funds)
H_03 : No outperformance vs Nifty 50	Sharpe > 1.00 for 4 of 5 funds	Rejected (4/5 funds)

Hypothesis	Statistical Basis	Decision
H04: No preference for equity funds	48% prefer equity; chi-square significant	Rejected

4.5 Investor Survey Findings

The survey of 50 retail investors in Hyderabad reveals a demographic profile dominated by young, educated, middle-income individuals with a clear preference for equity investment through SIP. Table 6 presents the key findings.

Survey Dimension	Key Finding	Frequency (%)
Age Profile	21-30 years (Youth-dominant)	90%
Gender	Male / Female	60% / 40%
Occupation	Students / Salaried / Business	40% / 30% / 20%
Annual Income	Rs. 2-5 lakhs (Middle-income majority)	40%
Currently Invested in MFs	Yes	80%
Preferred Fund Category	Equity Funds	48%
Preferred Investment Mode	SIP (Systematic Investment Plan)	70%
Primary Investment Motive	Wealth Creation	44%
Satisfaction with Returns	Satisfied / Highly Satisfied	74%
Risk Preference	Moderate Risk	60%
Intent to Continue Investing	Yes	86%
Believe MFs better than FD/Gold	Yes	70%

Table 6: Key Investor Survey Findings ($n = 50$)

The dominance of SIP as the preferred investment mode (70%) is consistent with the national trend of monthly SIP inflows crossing Rs. 21,000 crore in 2024. Equity fund preference (48%) validates H04's rejection: investors demonstrably favour equity over debt (16%), hybrid (24%), and ELSS (12%). The finding that 60% of respondents prefer moderate risk is behaviorally coherent -retail investors who invest predominantly through SIP self-select into a risk-mitigation framework without resorting to purely defensive instruments.

5. DISCUSSION

The empirical evidence from this study carries significant implications across multiple dimensions of theory, practice, and policy.

5.1 Active Management Value in Large-Cap Funds

A persistent debate in mutual fund literature concerns whether active management in large-cap funds -where information efficiency is highest -can consistently deliver alpha over passive index alternatives. The results of this study provide qualified but meaningful support for active management in the post-pandemic Indian context: four of five funds

generated Sharpe Ratios exceeding 1.000 (the benchmark) and Jensen's Alpha exceeding 4%, suggesting that skilled stock selection within large-cap mandates can compensate investors for active management fees. This is consistent with the observations of Alexander (2010) and Kaur and Bhalla (2021) but contrasts with the broader international evidence from Fama and French (2010), who found that active funds as a category fail to beat passive benchmarks on a net-of-fee basis.

The exception -Axis Bluechip Fund -is instructive. Axis's concentrated, quality-growth portfolio strategy, which worked well during the 2016-2021 period, was structurally ill-positioned for the value and PSU rotation that dominated Indian equities in FY2022-FY2024. Its Sharpe Ratio of 0.847 and near-zero Alpha of 0.90% illustrate the performance risk of concentrated factor tilts in a diversified large-cap mandate.

5.2 Market Cycle Effects on Performance Ranking

The five-year return analysis reveals that the FY2021 post-COVID rally disproportionately drove cumulative five-year return rankings. Funds that participated more fully in the FY2021 recovery -specifically ICICI Prudential (63.8%) and SBI Bluechip (62.3%) -enjoyed a durable compounding advantage. Axis Bluechip's relatively muted FY2021 recovery (54.6%) and a near-flat FY2023 (1.8%) compounded its underperformance. This highlights a key insight for retail investors: fund selection at the beginning of a market recovery cycle, when portfolio composition is most consequential, carries outsized impact on long-term wealth creation.

5.3 Investor Behaviour: Alignment with Performance Evidence

A striking alignment emerges between investor preferences and fund performance outcomes. Retail investors surveyed in this study demonstrate a rational preference for equity funds over conservative alternatives and a clear intent to sustain investment (86% intending to continue). This suggests a degree of financial maturation among the surveyed cohort, who appear to have internalised the long-term wealth creation narrative that underpins the post-2014 SIP growth story. The finding that 70% believe mutual funds outperform traditional instruments such as fixed deposits and gold aligns with the empirical data: all five funds generated mean returns of 22-28%, far in excess of the 7-8% average offered by bank fixed deposits over the same period.

However, the 36% of respondents who recommend enhanced investor education programs, and the 24% who seek reduced investment risk, point to an important tension: even among young, already-invested respondents, anxiety about market volatility and complexity remains high. This suggests that while product awareness has improved, financial confidence -defined as the ability to maintain investment discipline through market downturns -continues to lag. The FY2023 near-flat returns (-0.7% for the Nifty 50) represent exactly the kind of environment that tests investor commitment to SIP continuity.

5.4 Gender Gap in Mutual Fund Participation

The gender imbalance in the survey (60% male, 40% female) mirrors the broader national participation pattern documented in SEBI's Household Investment Survey (2022), which found that female mutual fund investors account for approximately 27% of unique PANs associated with mutual fund folios. While the surveyed sample shows a somewhat better 40% female participation -possibly reflecting the higher female educational attainment among urban young adults -there remains meaningful opportunity to deepen female financial inclusion through targeted communication strategies by AMCs and AMFI.

6. CONCLUSION

This study provides a comprehensive empirical assessment of large-cap equity mutual fund performance in India during the highly distinctive FY2021-FY2025 period, combining quantitative risk-adjusted analysis with investor behavioural survey evidence.

The principal findings are threefold. First, four of the five selected large-cap funds -HDFC Top 100, ICICI Prudential Bluechip, SBI Bluechip, and Kotak Bluechip -generated meaningful positive alpha (4.30%-5.42%) and Sharpe Ratios exceeding the Nifty 50 benchmark, demonstrating that skilled active management retains value in the Indian large-cap segment. HDFC Top 100 Fund emerged as the consistent outperformer across all three risk-adjusted measures. Axis

Bluechip Fund's underperformance underscores the performance risk of concentrated factor tilts over a full market cycle. Second, all four outperforming funds supported the rejection of the null hypothesis of zero alpha and zero benchmark outperformance, providing robust evidence against passive management superiority in this segment and context. Third, the investor survey reveals a maturing but still evolving retail investor landscape: SIP-led investment discipline is strong, equity fund preference is dominant, and long-term wealth creation is the primary motivator -yet financial confidence gaps persist, particularly among female and first-generation investors.

6.1 Policy Implications

For fund managers, the evidence suggests that portfolio construction quality -particularly the breadth of sector coverage and the ability to adapt to regime shifts between growth and value cycles -is more consequential than raw stock-picking alpha. Fund managers with concentrated, high-conviction styles must incorporate regime-change stress tests into their portfolio review processes.

For regulators (SEBI) and industry bodies (AMFI), the persistent financial confidence gap among retail investors despite satisfactory fund performance outcomes suggests that investor education must move beyond awareness (what mutual funds are) to resilience training (how to remain invested through downturns). Mandatory investor suitability assessments, analogous to the NISM certification framework for distributors, may warrant consideration for direct plan investors.

For retail investors, the most actionable implication is clear: consistent SIP investment in well-diversified, top-tier large-cap funds from reputable AMCs has historically delivered superior risk-adjusted returns relative to the benchmark and to traditional savings instruments, across the diverse market conditions of FY2021-FY2025.

6.2 Limitations and Future Research

This study is subject to several limitations. The performance analysis is based on annual returns rather than monthly returns, which may understate intra-year volatility. The survey sample, while representative of urban Hyderabad young investors, is not nationally representative and cannot be generalised to rural or older investor cohorts. Beta estimates derived from five annual observations carry wide confidence intervals. Future research should extend this analysis using monthly return data and multi-factor models (Fama-French three-factor or Carhart four-factor models) to isolate size, value, and momentum effects on alpha. Additionally, a longitudinal panel survey across multiple cities would provide richer insights into the evolution of investor financial confidence post-pandemic.

REFERENCES

- Alexander, G. J. (2010). From Markowitz to modern risk management. *European Financial Management*, 15(5), 1, 33-54.
- AMFI (2025). Monthly data reports: AUM and folios. Association of Mutual Funds in India. Retrieved from <https://www.amfiindia.com>
- Carhart, M. M. (1997). On persistence in mutual fund performance. *Journal of Finance*, 52(1), 57-82.
- Fama, E. F., & French, K. R. (2010). Luck versus skill in the cross-section of mutual fund returns. *Journal of Finance*, 65(5), 1915-1947.
- Fama, E. F., & French, K. R. (1993). Common risk factors in the returns on stocks and bonds. *Journal of Financial Economics*, 33(1), 3-56.
- Gupta, L. C. (1994). Mutual funds and asset preference: Household investor survey (SCMRD). Society for Capital Market Research and Development, New Delhi.
- Jensen, M. C. (1968). The performance of mutual funds in the period 1945-1964. *Journal of Finance*, 23(2), 389-416.
- Kaur, R., & Bhalla, V. K. (2021). COVID-19 and mutual fund performance: Evidence from India. *Finance Research Letters*, 39, 101720.
- Kothari, C. R. (2004). *Research methodology: Methods and techniques* (2nd ed.). New Age International.

- Kulkarni, A., & Desai, P. (2023). Digital onboarding and retail mutual fund participation in post-pandemic India. *Asian Journal of Finance & Accounting*, 15(1), 88-107.
- Markowitz, H. (1952). Portfolio selection. *Journal of Finance*, 7(1), 77-91.
- Mishra, P., Sharma, R., & Tripathi, M. (2022). SIP versus lump-sum in volatile markets: Lessons from COVID-19. *SEBI Journal*, 3(2), 45-63.
- Nifty 50 Historical Data (2021-2025). NSE India. Retrieved from <https://www.nseindia.com>
- NITI Aayog (2024). India Economic Survey 2023-24. Government of India.
- Rajeswari, T. R. (2013). Investor awareness and satisfaction in mutual fund investments: An empirical study. *Indian Journal of Finance*, 7(4), 12-21.
- Rao, D. N. (2000). Financial literacy and mutual fund participation: Evidence from Indian households. *Journal of Financial Markets and Institutions*, 4(1), 1-18.
- RBI (2024). Annual Report 2023-24. Reserve Bank of India. Retrieved from <https://www.rbi.org.in>
- SEBI (2018). Categorisation and rationalisation of mutual fund schemes. Circular No. SEBI/HO/IMD/DF3/CIR/P/2017/114.
- SEBI Household Investment Survey (2022). Study on investor behaviour and awareness. Securities and Exchange Board of India.
- Sharpe, W. F. (1966). Mutual fund performance. *Journal of Business*, 39(S1), 119-138.
- Sundar, C. (1997). Household savings in financial assets: Understanding investor preferences. National Council of Applied Economic Research (NCAER), New Delhi.
- Treynor, J. L. (1965). How to rate management of investment funds. *Harvard Business Review*, 43(1), 63-75.
- Tripathy, N. P. (2008). Mutual fund in India: Emerging issues and challenges. ICFAI University Press.
- UTI AMC (2023). Five decades of Indian mutual funds: A retrospective. UTI Asset Management Company.