Journal of Information Systems Engineering and Management
2026, 11(2s)
e-ISSN: 2468-4376
https://www.jisem-journal.com/

Research Article

The Performance Paradox of Indian Large, Mid and Small Cap Funds

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ARTICLE INFO

Received: 18 Dec 2024
Revised: 10 Feb 2025
Accepted: 28 Feb 2025

ABSTRACT

This paper evaluates managerial skill across Indian Large, Mid, and Small Cap mutual funds using risk-adjusted metrics and the Carhart Four-Factor model. Findings indicate that most outperformance is driven by systematic Size and Value premiums rather than idiosyncratic alpha. Motilal Oswal Midcap was the only fund to demonstrate statistically significant managerial skill, while others relied on market momentum. Results suggest the Momentum factor adds little explanatory power, making the Fama-French Three-Factor model sufficient for this period. The study concludes that Mid-Cap funds offer superior efficiency, though structural characteristics are better predictors of success than past returns.

Keywords: Jensen's Alpha, Carhart Model, Managerial Skill, Risk-Adjusted Returns.

1. INTRODUCTION

1.1 Overview of the Study

The Indian mutual fund industry has undergone a paradigm shift, evolving into a primary vehicle for retail wealth creation. By pooling resources into professionally managed portfolios, these funds offer a bridge between individual savings and the capital market. However, the central challenge for any investor remains the "performance paradox": determining whether high returns are a product of genuine managerial skill (Alpha) or simply the result of a "rising tide" in the broader market.

1.2. Statement of Problem

Standard performance metrics often fail to distinguish between returns generated by skill and those resulting from systematic biases like size, value, or momentum. This research addresses this gap by subjecting nine prominent funds to rigorous multi-factor econometric testing to isolate true stock-selection skill.

1.3. Objectives of the study

1. To evaluate and rank selected funds using traditional risk-adjusted measures (Sharpe and Treynor Ratios).

2. To calculate abnormal returns using Jensen's Alpha and Capture Ratios to assess market-timing and stock-selection skills.

3. To identify and quantify systematic investment styles using the Fama-French and Carhart models.

4. To identify the superior fund and segment based on synthesized results.

1.4. Methodology

Sample: Nine funds were selected—three each from Large-Cap, Mid-Cap, and Small-Cap categories—to ensure statistical balance.

Selected funds:

Large Cap : Nippon India Large Cap Fund, ICICI Prudential Large Cap Fund, Invesco India Large Cap Fund

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Mid Cap : Kotal Midcap Fund, Motilal Oswal Midcap Fund, Edelweiss Midcap Fund

Small Cap : Quant Small Cap Fund, HDFC Small Cap Fund, Bandhan Small Cap Fund

Data: Secondary data including daily NAVs and benchmark indices (Nifty 50, Nifty Midcap 150, Nifty Small Cap 250) were collected over a 4-year period, excluding the volatile year of 2020.

Risk-Free Rate: Calculated at 4.5% based on the 91-day Treasury Bill average.

LITERATURE REVIEW

The evolution of the Indian mutual fund industry is marked by a tension between systematic market exposure and active managerial skill. **Malhotra et al.** (2024) and **Mehta and Jaffer** (2024) argue that Indian funds demonstrate strong volatility management, yet their alphas often become statistically insignificant when controlled for factor tilts. This reflects the classic "performance paradox" first identified by **Jensen** (1968), who concluded that fund returns are primarily driven by market risk rather than unique forecasting ability.

Thirumala and Naidu (2024) and **Rehmani** (2017) found that Mid-Cap and private-sector funds generally offer superior risk-adjusted efficiency compared to Large-Cap and public-sector peers.

Paul (2024) highlighted a period of Small-Cap dominance (2018–2021), while **Tripathi and Bhandari** (2015) observed that ethical funds can significantly outperform conventional benchmarks.

Historical analyses by **Choudhary and Chawla** (2014) and **Bhagyasree and Kishori** (2015) showed that while many funds outperform benchmarks, high diversification and low beta often limit true abnormal returns.

Structural determinants often outweigh historical returns in predicting success. **Seal and Mukherjee** (2024), **Kaur** (2018), and **Guha Deb** (2024) established that AUM size, expense ratios, and managerial tenure are the primary drivers of long-term performance and persistence. Furthermore, **Panwar and Madhumathi** (2006) and **Chopra** (2024) suggest that risk-adjusted results and efficiency frontiers (DEA) offer more precise evaluation tools than traditional mean returns.

Pooja et al. (2022) and **Singh and Dipika** (2024) noted a strong positive flow-performance relationship, with **Vinoth et al**. (2024) adding that emotional factors and long-term objectives drive Bengaluru investors' decisions.

Arnavv Jain (2024) and **Narayan Rao and Ravindran** (2003) illustrated how macroeconomic shocks (COVID-19) and bear markets expose weaknesses in diversification.

Chrétien and Kammoun (2024) warned that traditional factor models might misrepresent performance for specific clienteles.

Finally, regarding specific managerial skillsets, **Kumar and Dagar** (2023) and **Pandow** (2017) concluded that Indian managers possess robust stock-selection skills but lack persistent market-timing ability. **Malhotra and Sinha** (2013) emphasized that nearly 40% of alpha is derived from persistent industry selection, while **Rajput and Chhabra** (2024) and **Pandow** (2024) identified that despite the sector's growth as an inflation-beating tool, low market penetration remains a primary challenge for the industry.

THEORETICAL FRAMEWORK

This study is grounded in MPT, which posits that investors can optimize their portfolios to achieve the highest return for a given level of risk.

3.1 Key Metrics

- **Sharpe Ratio:** Measures excess return per unit of total risk.

$$\text{Sharpe Ratio} = \frac{\text{Portfolio Average Return} - \text{Risk Free Rate of Return}}{\text{Standard Deviation of Portfolio Return}}$$

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e-ISSN: 2468-4376
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$$= \frac{(Rp - Rf)}{\sigma p}$$

- **Treynor Ratio:** Measures excess return per unit of systematic risk.

$$\text{Treynor's Index} = \frac{(Rp - Rf)}{\beta p}$$

- **Jensen's Alpha:** Represents the average return on a portfolio above or below that predicted by CAPM.

$$E(Ri) = Rf + \beta i\,[(Rm) - Rf]$$

- **Capture Ratios**
  - **Upside Capture Ratio:** This ratio measures a manager's performance in up-markets.

$$\text{Upside Capture Ratio} = \frac{\text{Fund Returns during Bull Market}}{\text{Benchmark Returns}} \times 100$$

  - **Downside Capture Ratio:** This ratio measures a manager's performance in down-markets.

$$\text{Downside Capture Ratio} = \frac{\text{Fund Return during Bear Market}}{\text{Benchmark Returns}} \times 100$$

- **Fama-French Three-Factor Model:** This model expands on the Capital Asset Pricing Model (CAPM) by adding size risk and value risk factors to the market risk factor.
  - **Market Risk (Rm-Rf):** The return of the whole stock market minus the risk-free rate.
  - **Size Risk (SMB - Small Minus Big):** The performance of small-cap companies relative to large-cap companies.
  - **Value Risk (HML - High Minus Low):** The performance of value stocks (high book-to-market ratio) relative to growth stocks (low book-to-market ratio).

$$R = Rf + \beta 1\,(Rm + Rf) + \beta 2SMB + \beta 3HML + \alpha$$

- **Carhart Four-Factor Model:** Expands on Fama-French by adding a momentum factor, allowing for a more granular decomposition of returns.

$$Ri = Rf + \beta 1.MKT + \beta 2.HML + \beta 3.SMB + \beta 4MOM + \alpha$$

DATA ANALYSIS

Traditional risk-adjusted measures (Sharpe and Treynor Ratios).

Fund Type	Fund	Sharpe Ratio	Treynor Ratio	Annual Return (R_p)	Beta (β)
Large Cap Fund	**ICICI**	**0.3409**	**0.3201**	22.90%	0.57494
	NIPPON	0.2807	0.2723	19.33%	0.54466
	INVESCO	0.2045	0.1917	16.40%	0.62057
Benchmark for Large Cap Funds	*NIFTY 50 (Benchmark)*	*0.1412*	*0.083*	*12.80%*	*1*

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Midcap Fund	**MOTILAL**	**0.3744**	**1.4773**	31.06%	0.17981
	EDELWEISS	0.2893	0.7356	23.78%	0.26207
	KOTAK	0.2561	0.5967	20.04%	0.2605
Benchmark for MidCap Funds	*NIFTY MIDCAP 150 (Benchmark)*	*0.2293*	*0.1697*	*21.47%*	*1*
Small Cap Fund	**BANDHAN**	**0.2815**	**0.4409**	26.41%	0.497
	QUANT	0.27	0.4007	27.02%	0.56204
	HDFC	0.2562	0.3956	22.55%	0.45642
Benchmark for Small Cap Funds	*NIFTY SMALLCAP 250 (Benchmark)*	*0.1765*	*0.1606*	*20.56%*	*1*

Table 4.1. Sharpe Ratio, Treynor Ratio, Annual Return, and Beta

The Motilal Midcap fund achieves the highest Sharpe Ratio and Treynor's Ratio, making it the most efficient fund and exceptionally high return giver. All three selected funds of large cap outperformed the NIFTY 50 benchmark across all risk-adjusted metrics, The ranking is consistent for both measures: ICICI > NIPPON > INVESCO. All Mid-Cap funds significantly outperform their benchmark's Treynor Ratio. The ranking is consistent for both measures: MOTILAL > EDELWEISS >KOTAK. All Small-Cap funds demonstrate significantly higher risk-adjusted returns than the NIFTY Small Cap 250 benchmark. The ranking is consistent for both measures: BANDHAN> QUANT >HDFC.

Jensen's Alpha and Capture Ratios to assess market-timing and stock-selection skills.

Fund Type	**Fund**	**Jensen's Alpha (%)**	**Upside Ratio (%)**	**Downside Ratio (%)**	**Risk Profile (Based on Ratios)**
Large Cap Funds	ICICI	20.99	138.99	77.5	Highest Alpha & Best Asymmetry
	NIPPON	17.28	120.85	81.86	Strong Upside Capture
	INVESCO	14.69	121.01	99.33	Good Upside, Weak Downside Protection
Category Average		***17.65***	***126.95***	***86.23***	***Strongly Asymmetric***
Midcap Fund	MOTILAL	27.37	129.28	85.17	Exceptional Alpha & High Upside
	EDELWEISS	20.46	100.67	90.51	Neutral Upside, Good Protection
	KOTAK	16.72	77.45	81.13	Low Alpha, Highly Defensive Upside
Category Average		***21.52***	***102.47***	***85.6***	***High Alpha, Balanced Defence***
	QUANT	25.05	107.87	86.05	High Alpha, Good Upside Capture

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Small Cap Fund	BANDHAN	24.15	102.19	83.65	High Alpha, Balanced Capture
	HDFC	20.11	78.93	75.91	Best Downside Protection (in sample), Defensive Upside
Category Average		***23.1***	***96.33***	***81.87***	***Very High Alpha, Strong Defence***

Table 4.2. Jensen's Alpha and Capture Ratios

All sampled funds show a positive Alpha, confirming that for the period analysed, every fund manager, on average, added value above the passive market-implied return. This is a powerful indication of successful active management.

Active management across the sampled funds significantly outperforms passive benchmarks through superior stock selection and risk mitigation. **Motilal Oswal Midcap** leads the study with a dominant 27.37% alpha and 129.28% upside capture. In the Large-Cap segment, **ICICI Prudential** demonstrates the best risk asymmetry, capturing 138.99% of gains while limiting downside to 77.50%. Conversely, **HDFC Small Cap** provides maximum capital preservation with the lowest downside participation (75.91%). Overall, high positive alphas and favourable capture ratios (Upside >100%, Downside <100%) confirm that these managers possess genuine skill in navigating market cycles and generating abnormal returns.

FAMA-FRENCH AND CARHART MODEL

FAMA FRENCH MODEL

Regression Quality Assessment

Fund	Category	Adjusted R Square	Significance F (Model p-value)	Assessment
BANDHAN	Small Cap	**0.5362**	6.40E-08	Good fit; factors explain over 53% of variance.
QUANT	Small Cap	**0.5794**	8.08E-09	Very Good fit; factors explain nearly 58% of variance.
HDFC	Small Cap	**0.5819**	7.14E-09	Very Good fit; highest R-squared for Small Cap.
INVESCO	Large Cap	**0.477**	7.71E-07	Moderate fit; factors explain less than half of variance.
NIPPON	Large Cap	**0.4764**	8.29E-07	Moderate fit.
ICICI	Large Cap	**0.4346**	4.16E-06	Lowest fit among all funds.
MOTILAL	Mid Cap	**0.3668**	4.45E-05	Lowest overall fit; manager's returns are least explained by common factors.
EDELWEISS	Mid Cap	**0.5165**	1.55E-07	Good fit.
KOTAK	Mid Cap	**0.4919**	4.44E-07	Moderate fit.

Table 4.3. Regression Quality Assessment for Funds

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Factor models demonstrate the highest explanatory power (Adjusted R-Square) for Small-Cap funds, yet the near-zero Significance F across all categories confirms that these regressions are universally statistically significant and superior to simple average return predictors.

Factor-Adjusted Alpha (Intercept) Analysis

Fund	Category	Intercept (Alpha)	P-value	Significance (α>0?)
MOTILAL	**Mid Cap**	**0.01203**	**0.01989**	**Statistically Significant**
ICICI	Large Cap	0.00467	0.26399	Not Significant
NIPPON	Large Cap	0.00333	0.39625	Not Significant
KOTAK	Mid Cap	0.00399	0.77399	Not Significant
EDELWEISS	Mid Cap	0.00514	0.28081	Not Significant
BANDHAN	Small Cap	0.00441	0.41603	Not Significant
QUANT	Small Cap	0.00155	0.77993	Not Significant
HDFC	Small Cap	0.00195	0.67639	Not Significant
INVESCO	Large Cap	0.00068	0.87462	Not Significant

Table 4.4. Factor Adjusted Alpha Analysis

Motilal Oswal Midcap Fund is the only sample member with a statistically significant factor-adjusted alpha, confirming that its returns derive from genuine stock-selection skill rather than systematic risk exposure. While other funds posted positive intercepts, their lack of statistical significance prevents attributing their performance to skill over random chance.

Systematic Style Exposure

A. Size Factor (SMB) Loadings

Fund	Category	SMB Coefficient (Bsmb)	P-value	Style Bias (Bsmb Sign)
BANDHAN	Small Cap	**0.3619**	**0.00408**	**Small-Cap Bias (Highest)**
QUANT	Small Cap	**0.3345**	**0.00892**	Small-Cap Bias
HDFC	Small Cap	**0.3762**	**0.00068**	Small-Cap Bias
MOTILAL	Mid Cap	**0.2277**	0.0807	**Small-Cap Bias (Marginal)**
EDELWEISS	Mid Cap	**0.2359**	0.02885	**Small-Cap Bias**
KOTAK	Mid Cap	**0.2277**	0.02243	**Small-Cap Bias**
INVESCO	Large Cap	0.01462	0.87813	None (Neutral/Unrelated)
NIPPON	Large Cap	-0.0164	0.84985	None (Neutral/Unrelated)
ICICI	Large Cap	-0.0195	0.82367	None (Neutral/Unrelated)

Table 4.5. Size Factor Loading (SMB)

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e-ISSN: 2468-4376
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Small and Mid-Cap funds exhibit positive, significant βSMB values, confirming systematic exposure to the small-cap risk premium, while Large-Cap funds show near-zero or negative values, indicating independence from small-cap factor influence.

B. Value Factor (HML) Loadings

Fund	Category	HML Coefficient (βHML)	P-value	Style Bias (βHML Sign)
QUANT	Small Cap	**0.5249**	**$3.79\text{E}-04$**	**Strong Value Bias**
BANDHAN	Small Cap	**0.2886**	**0.03867**	**Value Bias**
HDFC	Small Cap	**0.3049**	**0.01223**	**Value Bias**
KOTAK	Mid Cap	0.13768	0.21972	Not Significant
EDELWEISS	Mid Cap	0.15878	0.18677	Not Significant
INVESCO	Large Cap	0.19325	0.07924	Not Significant (Marginal)
ICICI	Large Cap	**0.3262**	**0.00307**	**Value Bias**
NIPPON	Large Cap	**0.1968**	**0.05048**	**Value Bias (Marginal)**
MOTILAL	**Mid Cap**	0.0616	0.67181	**No Value/Growth Bias (Blend)**

Table 4.6. Value Factor Loadings (HML)

Small-Cap funds and ICICI Large-Cap are significantly driven by the Value factor βHML, whereas Motilal Oswal Midcap's insignificant exposure suggests a unique Growth or Blend strategy.

CARHART FOUR FACTOR MODEL

Momentum Factor (β_{MOM})

Fund	Category	βMOM	P-value	Style Bias
KOTAK	**Mid Cap**	**-5.77E-05**	**0.96558**	**None**
QUANT	**Small Cap**	**1.20E-04**	**0.72816**	**None**
BANDHAN	**Small Cap**	**4.04E-04**	**0.80592**	**None**
HDFC	**Small Cap**	**8.36E-05**	**0.9527**	**None**
NIPPON	**Large Cap**	**-2.91E-04**	**0.80575**	**None**
ICICI	**Large Cap**	**-4.54E-04**	**0.71776**	**None**
INVESCO	**Large Cap**	**1.11E-04**	**0.93172**	**None**
EDELWEISS	**Mid Cap**	**1.13E-04**	**0.93659**	**None**
MOTILAL	**Mid Cap**	**3.13E-04**	**0.85784**	**None**

Table 4.7. Momentum Factor

The Momentum factor (βMOM) remains statistically insignificant across all funds, indicating the Fama-French Three-Factor Model provides sufficient explanatory power without the Carhart extension. While most funds exhibit

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systematic exposure to Size and Value premiums—particularly Small-Cap funds—Motilal Oswal Midcap remains the sole provider of idiosyncratic, factor-adjusted alpha, reinforcing its superior managerial skill.

To identify the superior fund and segment based on synthesized results.

Category	Average Sharpe Ratio (Efficiency)	Average Jensen's Alpha (Skill)	Best Fund in Segment	Key Differentiator
Mid-Cap	0.3066	21.52%	MOTILAL (Alpha:27.37%, Sharpe: 0.3744)	Highest efficiency and highest proven skill (Factor α)
Small-Cap	0.2692	23.10%	QUANT (Alpha: 25.05%)	Highest average raw skill (Alpha) but lower efficiency.
Large-Cap	0.2754	17.65%	ICICI (Alpha: 20.99%, Capture Ratios)	Good efficiency, but lowest average skill.

Table 4.8. Superiority among segments

The Motilal Oswal Midcap Fund is the study's top performer, leading in Sharpe (0.3744), Treynor, and Alpha (27.37%) metrics, while serving as the only fund with statistically validated managerial skill independent of systematic factors. Consequently, the Mid-Cap segment emerges as the superior category, offering the highest average risk-adjusted efficiency and a unique blend of growth-oriented strategy and robust market capture.

FINDINGS

The primary goal of this investigation was to evaluate the performance, skill, and systematic investment styles of a selected sample of Large-Cap, Mid-Cap, and Small-Cap mutual funds. The analysis is structured around three core objectives, employing both traditional and advanced econometric models and these are the findings:

Objective 1: Evaluating investment efficiency using Sharpe Ratio and Treynor Ratio

The Motilal (Mid-Cap) Fund achieved the highest Sharpe Ratio (0.3744), making it the most efficient fund at generating excess return per unit of total risk taken. The Mid-Cap segment as a whole showed the highest average efficiency. The Invesco (Large-Cap) Fund exhibited the lowest Sharpe Ratio (0.2045) in the sample. Motilal overwhelmingly led the sample with the highest Treynor Ratio (1.4773), confirming its superior ability to generate excess return per unit of market risk (Beta). The Large-Cap funds had the lowest Treynor Ratios, reflecting their lower Beta values and lower systematic risk efficiency compared to the Mid-Cap and Small-Cap funds.

Objective 2: Evaluating abnormal return and Selection skill using Jensen's Alpha and Capture Ratios.

The Motilal Fund generated the highest raw abnormal return (27.37%), demonstrating the highest degree of stock selection skill prior to factor adjustment. The Small-Cap segment exhibited the highest average Jensen's Alpha (23.10%), reflecting greater opportunities for skilled managers in less efficient markets.

ICICI (Large-Cap) demonstrated the best asymmetric profile: the highest Upside Ratio (138.99%) and excellent Downside Ratio (77.50%). HDFC (Small-Cap) showed the best capital preservation skill with the lowest Downside Ratio (75.91%), meaning it best mitigated losses during market downturns. Motilal maintained a strong asymmetric profile, capturing 129.28% of market gains while limiting losses to 85.17%.

Objective 3: Systematic Investment Style or factor analysis using Fama French and Carhart Model

3.1 Factor Adjusted Alpha (True Skill)

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e-ISSN: 2468-4376
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The Motilal Fund was the only fund whose high Alpha was statistically supported by the factor models, confirming that its returns are generated by genuine skill and are not simply due to systematic factor exposures.

3.2 Systematic Investment Style Loadings (β)

• Size Factor (βSMB): All Small-Cap and Mid-Cap funds showed a positive and significant βSMB, confirming their returns are systematically driven by the Small-Cap risk premium. Large-Cap funds were neutral (near-zero βSMB).

• Value Factor (βHML): The Small-Cap funds (QUANT, BANDHAN, HDFC) and the ICICI (Large-Cap) fund showed a strong and significant Value bias (βHML> 0).

• MOTILAL's Unique Style: MOTILAL exhibited a significant Small-Cap bias but an insignificant Value bias (βHML≅ 0), confirming a distinct Small-Cap/Growth (Blend) style.

• Momentum Factor (βMOM): The Momentum factor was not statistically significant for any fund, indicating this style did not systematically explain returns during the analysis period.

Objective 4: Identification of best fund and segment

Based on the composite performance across all three objectives, the best fund and best segment were identified.

4.1. The Best Fund

The Motilal (Mid-Cap) Fund is the best fund in the sample: It leads in the most critical efficiency metrics: Sharpe Ratio and Treynor Ratio. It demonstrates the highest level of proven skill: Highest Jensen's Alpha and the only fund with a statistically supported Factor-Adjusted Alpha.

4.2. The Best Segment

The Mid-Cap Segment is the best performing segment: It holds the fund with the best overall efficiency and skill (Motilal). It achieved the highest average Sharpe Ratio, indicating the best average efficiency at managing total risk.

SUGGESTIONS

For Fund Managers: Fund managers must strive to generate returns that are statistically significant *above* those explained by the standard risk factors (Market, Size, Value, and Momentum). Since the Momentum factor β_{MOM} was insignificant for all funds, managers should avoid strategies that incur trading costs solely to capture this factor, as it offered no systematic premium during the analysis period. Mid-Cap managers, in particular, should consider the Growth/Blend style (low β_{HML}) to differentiate from the prevalent Small-Cap/Value strategy of their peers.

For Investors: Look beyond absolute returns and evaluate funds based on Sharpe and Treynor ratios. Diversify across complementary styles, such as pairing a Small-Cap/Value strategy with a Mid-Cap/Growth strategy.

For Researchers: Future studies should adopt the **Fama-French Five-Factor Model**, adding "Profitability" and "Investment" factors to further deconstruct the sources of Alpha. Additionally, integrating ESG metrics could provide insights into how sustainability mandates affect risk-return profiles.

CONCLUSION

The Indian mutual fund industry demonstrates a "performance paradox" where high returns frequently stem from systematic factor tilts rather than pure managerial skill. While mid-cap and small-cap segments consistently offer superior risk-adjusted efficiency, factor models reveal that most alphas lack statistical significance. **Motilal Oswal Midcap** stands out as the unique exception, proving that genuine stock-selection skill can drive idiosyncratic outperformance. Ultimately, long-term success is more reliably predicted by structural parameters—like AUM and expense ratios—than trailing returns. Investors should prioritize funds with validated alpha and robust downside protection to navigate evolving market regimes effectively.

For investors, the findings underscore that active management in India is most effective when targeting the Mid-Cap segment, where idiosyncratic stock-picking can still bridge the gap between market momentum and true alpha. For the industry, the challenge lies in overcoming low market penetration and enhancing investor awareness. Ultimately,

the transition from "rising tide" returns to skill-based outperformance will require a continued focus on structural efficiency and sophisticated factor-based strategies.

REFRENCES

[1] Malhotra, D., Singh, R., & Ramani, L. (2024). Navigating market volatility: risk and return insights from Indian mutual funds. *Cogent Economics & Finance*, *12*(1). https://doi.org/10.1080/23322039.2024.2431535

[2] Mehta, R., & Jaffer, A. (2024). *Alpha In Indian Mutual Fund Returns*. Morgan Stanley India Pvt. Ltd. / Bridgewater Associates / Yale School of Management.

[3] Jensen, M. C. & Harvard Business School. (1967). The performance of mutual funds in the period 1945-1964. In *Journal of Finance* (Vols. 2–2, pp. 389–416) [Journal-article]. M. C. Jensen. https://www.efalken.com/LowVolClassics/Jensen1967.pdf

[4] Thirumala, M., & Lakshmipathi Naidu, M. (2024). Evaluating the Performance of Mutual Funds in India: A Comparative Analysis of Return and Risk Metrics. *IJIRMPS*, *12*(5), 1-11. Retrieved from www.ijirmps.org

[5] Rehmani, A. (2017). Performance evaluation of select mutual funds: A public - private comparison. *Indian Journal of Finance*, *September 2018*, 41-55.

[6] Paul, R. (2024). *Performance Evaluation of Mutual Funds: A Comparative Study on Selected MidCap and SmallCap Equity Fund Schemes*. SKBU Business Review, *2*(1), 71-91. 177001672760947.pdf

[7] Tripathi, V., & Bhandari, V. (2015). *Performance Evaluation of Ethical and Conventional Funds – A Study of Taurus Mutual Fund in India*. Retrieved from https://ssrn.com/abstract=2601297

[8] Choudhary, V., & Chawla, P. S. (2014). Performance Evaluation of Mutual Funds: A Study of Selected Diversified Equity Mutual Funds in India. *International Conference on Business, Law and Corporate Social Responsibility (ICBLCSR'14)*. http://dx.doi.org/10.15242/ICEHM.ED1014025

[9] Bhagyasree, N., & Kishori, B. (2016). A Study on Performance Evaluation of Mutual Funds Schemes in India. *IJIRST – International Journal for Innovative Research in Science & Technology*, *2*(11), 812-816. A Study on Performance Evaluation of Mutual Funds Schemes in India

[10] Seal, N., & Mukherjee, S. (2024). A Study on the Performance of Mutual Funds of Indian AMCs. *Management Journal for Advanced Research*, *2*(6), 16-23. https://doi.org/10.54741/mjar.2.6.4

[11] Kaur, I. (2018). Effect of mutual funds characteristics on their performance and trading strategy: A dynamic panel approach. *Cogent Economics & Finance*, *6*(1), 1493019. https://doi.org/10.1080/23322039.2018.1493019

[12] Deb, S. G. (2024). Persistence in performance of actively managed equity mutual funds: New Indian evidence. *IIMB Management Review*, *31*(2), 145–156. https://doi.org/10.1016/j.iimb.2019.03.014

[13] Panwar, Sharad & Madhumathi, R.. (2006). Characteristics and Performance Evaluation of Selected Mutual Funds in India. SSRN Electronic Journal. 10.2139/ssrn.876402.

[14] Chopra, A. (2024). *A Data Envelopment Analysis Approach to Benchmark the Performance of Mutual Funds in India*. Shaheed Sukhdev College of Business Studies, University of Delhi.

[15] Pooja, N., Nikita, N., & Purnima, P. (2022). Fund Flow-Performance Connection of Regular Mutual Funds: Evidence from Indian Mutual Funds Industry. *NeuroQuantology*, *20*(11), 4078-4087. https://doi.org/10.14704/NQ.2022.20.11.NQ66410

[16] Singh, S., & Dipika. (2021). Is Mutual Fund Flow Related with Fund Performance? An Empirical Study of Regular Plan Mutual Funds in India. *Indian Journal of Research in Capital Markets*, *8*(4), 23-37. https://doi.org/10.17010/ijrcm/2021/v8i4/168584

[17] Vinoth, S., Gopalakrishnan Chinnasamy, Araby Madbouly, Syeeda Shafiya Mohammadi, & Nahla Hassan Ali. (2024). *Investors Behavior Analysis with reference to Performance of Indian Mutual Fund Market*. Retrieved from https://ssrn.com/abstract=5066771

[18] Jain, A. (2024). Analysis of mutual funds in India. *Iosr Journal of Economics and Finance*, 33–38. https://www.iosrjournals.org

[19] Rao, S. N., & Ravindran, M. (2002). *Performance Evaluation of Indian Mutual Funds*. Shailesh J. Mehta School of Management, Indian Institute of Technology Bombay.

Journal of Information Systems Engineering and Management
2026, 11(2s)
e-ISSN: 2468-4376
https://www.jisem-journal.com/

Research Article

[20] Chrétien, S., & Kammoun, M. (2024). Representative investors versus best clienteles: Performance evaluation disagreement in mutual funds. *International Review of Financial Analysis*, *95*, 103498. https://doi.org/10.1016/j.irfa.2024.103498

[21] Kumar, P., & Dagar, P. D. (2023). Mutual funds performance in India- an analytical Review of literature [Journal-article]. *Journal of Emerging Technologies and Innovative Research*, *10*(6). https://www.jetir.org

[22] Pandow, B. A. (2017). *Persistent Performance of Fund Managers: An Analysis of Selection and Timing Skills*. International Journal of Commerce and Finance, 3(2), 11-24. Retrieved from https://ssrn.com/abstract=3080181

[23] Malhotra, P., & Sinha, P. (2022). Top-bottom investing skill and the fund alpha in Indian mutual fund industry: an empirical investigation. *IIM Ranchi Journal of Management Studies*, *1*(1), 4-20. https://doi.org/10.1108/IRJMS-06-2021-0015

[24] Pandow, B. A. (2024). *Performance of Mutual Funds in India*. Retrieved from https://ssrn.com/abstract=2925049