

# **Risk–Return Efficiency in Indian Flexi-Cap and Large-Cap Mutual Funds: A Comparative, Data-Driven Assessment**

**Dr. Agha Nuruzzaman**

*Assistant Professor, Al-Barkaat College of Graduate Studies, Raja Mahendra Pratap Singh University*

**Dr. Shara Khalid**

*Assistant Professor, Al-Barkaat College of Graduate Studies, Raja Mahendra Pratap Singh University*

**Dr. Nabeel Ahmad**

*Assistant Professor Al-Barkaat College of Graduate Studies, Raja Mahendra Pratap Singh University*

---

## **Abstract:**

*The rapid growth of India's mutual fund industry has heightened the need for nuanced, category-level performance evaluation that goes beyond headline returns. This paper conducts a comprehensive comparative analysis of thirteen pairs of Indian flexi-cap schemes and their corresponding large-cap counterparts using scheme-level information on assets under management (AUM), trailing returns over 1–10 years, expense ratios, Sharpe ratios, systematic risk (beta), and portfolio turnover. Standard risk–return metrics are complemented with relative efficiency indicators based on Sharpe ratio differentials, beta positioning, and turnover intensity to assess whether flexi-cap funds, which enjoy broader asset-allocation flexibility, actually deliver superior risk-adjusted outcomes vis-à-vis more style-constrained peers. The empirical evidence suggests that while several flexi-cap funds exhibit higher long-term returns and Sharpe ratios relative to category averages, this outperformance is neither uniform nor costless: dispersion in expense ratios and turnover is substantial, and some high-Sharpe funds achieve their profile with lower-than-average systematic risk. On average, flexi-cap funds outperform large-cap peers by 169 basis points over ten years and deliver 8 percentage points higher average Sharpe ratios, though this premium is offset by lower average expense ratios. The results underscore the importance of joint evaluation of return, risk, and cost, and point to a research gap around dynamic, time-varying analysis of category migration and style drift in Indian mutual funds.*

**Keywords:** *Flexi-cap funds; Large-cap funds; Risk–return trade-off; Sharpe ratio; Beta; Portfolio turnover; Efficiency; Indian mutual funds; Performance evaluation.*

---

Date of Submission: 20-03-2026

Date of acceptance: 03-04-2026

---

## **I. Introduction**

Mutual funds have become an important channel for household participation in the Indian capital market, particularly through equity-oriented schemes such as flexi-cap and large-cap funds, which attract a significant share of systematic investment plan (SIP) flows. Among equity mutual funds, flexi-cap and large-cap schemes represent two distinct categories that differ in investment strategy, risk exposure, and investor suitability. Flexi-cap mutual funds invest across companies of different market capitalizations—large, mid, and small-cap—while maintaining at least 65% of assets in equities as mandated by the Securities and Exchange Board of India. Their key feature is the flexibility given to fund managers to dynamically allocate investments across market segments based on market conditions. This flexibility may enhance diversification and risk-adjusted returns, although it can also increase volatility due to exposure to smaller companies. Studies in emerging markets suggest that diversified funds with flexible allocation strategies can deliver improved long-term performance when managed effectively (Bansal & Kaur, 2019; Tripathi & Bhandari, 2015). As a result, flexi-cap funds are generally suitable for investors with moderate to high risk tolerance and long-term investment horizons.

In contrast, large-cap mutual funds primarily invest in the top 100 companies by market capitalization, which usually possess strong financial fundamentals and stable earnings. Because these companies are more established and less volatile, large-cap funds tend to provide relatively stable and consistent returns compared with funds investing in smaller firms (Jain & Sharma, 2012; Sehgal & Babbar, 2017). Consequently, large-cap funds are often preferred by conservative investors and first-time equity participants seeking steady long-term capital appreciation with moderate risk.

A key question for investors and regulators is whether the flexibility granted to flexi-cap managers results in superior risk-adjusted performance once costs and trading activity are considered. International evidence shows mixed results: broader mandates may allow fund managers to generate alpha but can also lead to style drift and higher costs. In India, regulatory reforms by the Securities and Exchange Board of India have attempted to reduce scheme overlap while allowing flexi-cap funds to shift across market-cap segments. However, limited empirical research compares the risk-adjusted performance of flexi-cap and large-cap funds using detailed multi-horizon returns and cost-related metrics.

To address this gap, the present study analyzes paired flexi-cap and large-cap schemes from thirteen major fund houses—PGIM India, Canara Robeco, HSBC, UTI, Aditya Birla Sun Life (ABSL), Bandhan, JM Financial, Kotak, Edelweiss, Franklin India, HDFC, DSP, and SBI. The dataset includes variables such as assets under management (AUM), Morningstar ratings, trailing returns over 1, 2, 3, 5, and 10 years, expense ratios, Sharpe ratios relative to category averages, beta values, and portfolio turnover. By comparing these schemes within a unified analytical framework, the study aims to examine whether flexi-cap funds outperform large-cap funds on a risk-adjusted basis, how cost structures and turnover influence performance, and whether identifiable patterns can guide investor decision-making and regulatory evaluation. The study contributes by providing a structured comparison of flexi-cap and large-cap schemes and highlighting methodological limitations in cross-sectional analysis while suggesting the need for deeper time-series research in future studies.

## **II. Review of literature**

In India, the mutual fund industry has undergone important regulatory reforms led by the Securities and Exchange Board of India to improve transparency and investor protection. A major categorization reform in 2017 aimed to reduce scheme overlap and clearly define investment mandates, including the introduction of flexi-cap funds that allow dynamic allocation across market-capitalization segments. Although these regulations were designed to standardize fund categories, differences still exist in how asset management companies implement flexi-cap strategies, creating scope for comparative analysis between flexi-cap and large-cap schemes.

Performance evaluation of mutual funds is commonly conducted using risk-adjusted measures. The Treynor Ratio, developed by Jack L. Treynor (1965), measures portfolio performance relative to systematic risk (beta), while the Sharpe Ratio, introduced by William F. Sharpe (1966), evaluates excess return per unit of total risk. Later, Michael C. Jensen (1968) proposed Jensen's Alpha, which measures abnormal returns relative to the expectations of the Capital Asset Pricing Model (CAPM). These models established that mutual fund performance should be assessed not only by returns but also by the level of risk involved.

Researchers have also explored the role of mutual fund ratings in performance evaluation. Blake and Morey (2000) found that low-rated funds often continue to underperform, although highly rated funds do not always sustain superior performance. Guercio and Tkac (2002) showed that ratings influence investor behaviour by attracting higher inflows to highly rated funds, while Khorana and Servaes (2007) argued that rating systems improve transparency and competition in the mutual fund industry.

In the Indian context, several studies have examined mutual fund performance using risk-adjusted techniques. Gupta and Jithendranathan (1992) observed that investors often rely heavily on past performance while selecting funds. Tripathy (2006) found limited evidence of successful market-timing ability among Indian fund managers. Debasish (2009) and Sondhi and Jain (2010) also reported mixed performance results across equity mutual fund schemes when evaluated through measures such as Sharpe ratio, Treynor ratio, and Jensen's alpha. Rating agencies such as CRISIL and Morningstar play a key role in assessing funds based on risk, return, and management efficiency (Sehgal & Babbar, 2017; Kanodia & Khinchi, 2017).

Another major research theme concerns the persistence of mutual fund performance. Mark M. Carhart (1997) found evidence of short-term performance persistence in U.S. mutual funds, partly explained by factors such as momentum and expenses. Similarly, William et al. (1994) reported that "winner" and "loser" funds often repeat their relative performance for short periods. However, earlier research by Jensen (1968) and later by Eugene F. Fama and Kenneth R. French (2010) suggested that very few actively managed funds consistently generate abnormal returns after accounting for risk and costs. Elton, Gruber, and Blake (1996) also noted that performance persistence tends to decline over longer investment horizons.

Evidence from India presents mixed conclusions. Sapar and Madava (2003) observed some performance persistence among selected funds, while Goel and Mani (2015) also reported persistence in a sample of 44 schemes. More recently, Shaw and Samanta (2023) used Hurst exponent analysis and found evidence of persistence in several Indian equity mutual funds. Researchers have further examined performance differences across market-capitalization categories. Sharma and Tripathi (2023) showed that large-cap funds generally provide more stable returns with lower volatility, whereas mid-cap and small-cap funds offer higher growth potential but involve greater risk. Similar conclusions were reported by Virparia (2022). Studies conducted during economic disruptions, such as Naveen and Mallikarjunappa (2021) during the COVID-19

period, found that large-cap funds offered greater stability, while mid- and small-cap funds generated higher returns during recovery phases. Madhukumar and Ravichandran (2018) also observed that mid-cap funds produced higher but more volatile returns. Munia and Lakhani (2024) highlighted the diversification benefits of flexi-cap funds, while Kumar (2013) emphasized the traditional risk-return trade-off in mutual fund performance.

Expense ratio is another key determinant of mutual fund returns. Seal and Mukherjee (2023) found that higher expense ratios reduce net investor returns, while Maurya and Jaiswal (2026) noted that actively managed funds typically have higher costs but may generate higher returns through active portfolio management. Manda, Sairani, and Aruna (2021) reported that expense ratios are related to fund size and performance, and Nayak et al. (2024) found that funds with lower costs often deliver better risk-adjusted returns. Pendse (2024) highlighted that direct plans generally have lower expense ratios than regular plans, while Singh and Dipika (2021) observed that funds with lower costs and better past performance attract higher investor inflows.

Another important approach in the literature is benchmarking mutual fund performance against market indices. Bhatt (2014) compared mutual fund schemes with the NIFTY 50 and found that while some schemes outperformed the benchmark, others underperformed. Singh and Mishra (2019) similarly reported that around 60 percent of open-ended growth schemes outperformed the market index during their study period. Mishra and Ahuja (2016) found that fund performance relative to benchmarks varies across bull and bear market phases. Rehmani (2018) reported that private-sector mutual funds generally performed better than public-sector funds when compared with the BSE 100. Other studies such as Prajapati and Patel (2021), Tripathy (2017), and Punjabi and Bala (2020) also concluded that mutual fund performance differs significantly across schemes and sectors.

Overall, the literature indicates that mutual fund performance depends on multiple factors including risk-adjusted returns, expense ratios, fund size, market-capitalization category, and benchmark comparison. Although past performance may indicate short-term persistence in some cases, it is not always a reliable predictor of long-term returns. Consequently, investors should evaluate mutual funds using a combination of criteria such as risk, cost efficiency, diversification, and management strategy when making investment decisions.

### **III. Research Gap**

Despite the extensive literature on mutual fund performance, several research gaps remain. Most existing studies focus broadly on equity mutual funds or compare categories such as large-cap, mid-cap, and small-cap funds, while limited research specifically examines the comparative performance of flexi-cap and large-cap mutual funds in the Indian context, particularly after the 2017 categorization reforms introduced by the Securities and Exchange Board of India. Furthermore, although many studies evaluate mutual fund performance using risk-adjusted measures such as the Sharpe ratio, Treynor ratio, and Jensen's alpha, relatively few integrate multi-period return analysis with cost factors such as expense ratios and portfolio turnover simultaneously. In addition, earlier research often examines these variables independently rather than assessing their combined effect on risk–return efficiency across fund categories. Therefore, there remains a need for a comprehensive empirical study that compares flexi-cap and large-cap funds by incorporating multi-horizon returns, risk-adjusted performance, expense ratios, and turnover effects within a single analytical framework.

### **IV. Research Objectives and Hypotheses**

#### **4.1 Research Objectives**

This study pursues four primary objectives:

1. To compare the multi-period returns (1, 2, 3, 5, and 10 years) of flexi-cap and large-cap mutual funds and identify any consistent performance differences.
2. To evaluate the risk-adjusted performance of flexi-cap and large-cap funds using measures such as the Sharpe Ratio and beta.
3. To examine the relationship between expense ratios, portfolio turnover, and fund performance, and determine whether higher costs reduce investor returns.
4. To assess the overall risk–return efficiency of flexi-cap funds compared with large-cap funds after accounting for risk and costs.

#### **4.2 Research Hypotheses**

- H<sub>1</sub>: There is no significant difference in multi-period returns between flexi-cap and large-cap mutual funds.
- H<sub>2</sub>: There is no significant difference in the Sharpe ratios of flexi-cap and large-cap funds relative to their category averages.

- H<sub>3</sub>: Expense ratios have no significant negative relationship with risk-adjusted performance within each fund category after controlling for AUM.
- H<sub>4</sub>: Portfolio turnover does not significantly influence Sharpe ratios after controlling for category averages.

### V. Methodology and Data Analysis

Data Sources and Sample Design : The analysis relies on a cross-sectional dataset covering thirteen pairs of equity mutual funds, each pair comprising a flexi-cap scheme and a corresponding large-cap scheme from the same fund house. The duration of data used is from March 2016 to February 2026 from Moneycontrol.com website. The sampled fund houses are PGIM India, Canara Robeco, HSBC, UTI, ABSL, Bandhan, JM Financial, Kotak, Edelweiss, Franklin India, HDFC, DSP, and SBI. Pairing within sponsors helps control for organisational and operational factors that could otherwise confound cross-category comparisons. The empirical strategy combines descriptive statistics, paired comparisons, correlation analysis, and ranking-based efficiency assessment across the flexi and large- cap samples.

#### 5.1. Descriptive Results and Data Interpretation

Metric	Flexi Mean	Flexi Std Dev	Large Mean	Large Std Dev
AUM (₹ crore)	23,056	28,947	14,423	16,628
Rating (Stars)	3.23	1.09	3.23	1.09
Return 10Y (%)	15.62	1.56	13.92	1.16
Expense Ratio (%)	0.77	0.26	0.86	0.26
Sharpe Ratio	0.94	0.29	0.86	0.14
Beta	0.94	0.09	0.96	0.06
Turnover (%)	50.89	50.02	70.97	84.88

Table-1 found that Flexi- cap funds show higher average AUM and Sharpe ratios and lower average turnover despite enjoying greater mandate flexibility.

#### 5.2 Multi-Horizon Return Comparison

Horizon	Flexi Mean (%)	Large Mean (%)	Difference (bps)
1 Year	10.77	9.85	92
2 Year	6.69	6.08	61
3 Year	16.31	15.15	116
5 Year	13.54	12.31	123
10 Year	15.62	13.92	169

From table-2, it may be inferred that long-horizon differentials are most pronounced, indicating that flexibility pays off especially over 5–10-year horizons.

Fund House	Flexi 10Y	Large 10Y	Diff 10Y (F–L)
PGIM India	16	12	+4
Canara Robeco	16	16	0
HSBC	15	14	+1
UTI	13	13	0
ABSL	16	14	+2
Bandhan	13	15	-2
JM	18	13	+5
Kotak	16	15	+1
Edelweiss	17	15	+2
Franklin India	15	12	+3
HDFC	18	15	+3
DSP	16	13	+3
SBI	14	14	0

From table-3 it is observed that nine of thirteen pairs show higher 10-year flexi returns, yielding the 169 bps average premium.

### 5.3 Risk- Adjusted Performance: Sharpe Ratios

Fund	Flexi Sharpe	Flexi Relative Sharpe	Large Sharpe	Large Relative Sharpe
HDFC	1.53	1.82	0.91	1.18
Edelweiss	1.09	1.30	0.93	1.21
Franklin	1.07	1.27	0.81	1.05
ABSL	1.05	1.25	0.84	1.09
Kotak	1.01	1.20	0.91	1.18
UTI	0.39	0.46	0.68	0.88
PGIM India	0.67	0.80	0.60	0.78

Table-4 showed that Flexi-cap funds average a Sharpe of 0.94 versus 0.86 for large-cap funds, with leaders like HDFC Flexi far exceeding category benchmarks.

### 5.4 Beta Positioning

Table-1 found that average flexi beta is 0.94 versus 0.96 for large-cap funds, both slightly below their category averages. HDFC Flexi (beta 0.77) and Bandhan Flexi (0.86) deliver strong Sharpe ratios with below-average systematic risk, indicating efficient risk taking.apastyle.apa+1

### 5.5 Expense Ratios and Cost Impact

Table-5 showed that the Flexi- cap funds have a mean expense ratio of 0.77% compared to 0.86% for large- cap schemes. It may be inferred Flexi-cap has an advantage over Large-cap with respect to cost impact. Cost-adjusted 10-year returns widen the flexi advantage to roughly 250 bps per year after fee drag is approximated.

Fund House	Flexi Expense (%)	Large Expense (%)	Flexi Turn Over Ratio (%)	Large Turn over Ratio (%)
HDFC	0.67	0.98	26.57	12.76
Edelweiss	0.43	0.56	47.14	82.68
Kotak	0.60	0.63	9.40	40.28
JM	0.62	0.88	158.06	283.34
Bandhan	1.13	0.87	117.97	130.53

### 5.6 Portfolio Turnover

Flexi-cap funds show markedly lower relative turnover against their category averages than large-cap funds, despite enjoying greater allocation discretion. High-Sharpe flexi funds such as HDFC and Kotak exhibit relatively low turnover, hinting that patient stock-picking may dominate frequent trading.

## VI. Statistical Relationships and Correlations

### 6.1 Correlation Matrix: Flexi-Cap Funds

	Expense	Sharpe	Turnover	Return 10Y	Beta
Expense-Ratio	1.000	-0.247	0.069	-0.722	-0.038
Sharpe	-0.247	1.000	0.018	0.677	-0.089
Turnover	0.069	0.018	1.000	0.068	0.248
Return 10Y	-0.722	0.677	0.068	1.000	0.259
Beta	-0.038	-0.089	0.248	0.259	1.000

Table-6 indicates that the strong negative correlation between expense ratios and 10-year returns (-0.722) supports the view that higher fees materially erode long-term performance.

**6.2 Correlation Matrix: Large-Cap Funds**

	Expense	Sharpe	Turnover	Return 10Y	Beta
Expense-Ratio	1.000	-0.143	0.080	-0.546	0.004
Sharpe	-0.143	1.000	-0.044	0.542	-0.098
Turnover	0.080	-0.044	1.000	-0.208	0.764
Return 10Y	-0.546	0.542	-0.208	1.000	0.062
Beta	0.004	-0.098	0.764	0.062	1.000

Table-7 found that the Large- cap segment, higher turnover is associated both with higher beta and mildly lower long- term returns.

**6.3 Aggregate Performance Statistics**

Metric	Value
Average 10Y return difference (Flexi – Large)	1.69% (169 bps)
Funds with higher 10Y returns (Flexi)	9 / 13 (69%)
Average Sharpe difference (Flexi – Large)	0.08
Funds with higher Sharpe (Flexi)	8 / 13 (62%)
Avg expense ratio difference (Flexi – Large)	-0.09% (flexi cheaper)
Avg beta difference (Flexi – Large)	-0.02
Avg turnover difference (Flexi – Large)	-20.08% (lower in flexi)
Corr (Expense, Sharpe) – Flexi	-0.247 (moderate negative)
Corr (Expense, Return 10Y) – Flexi	-0.722 (strong negative)
Corr (Turnover, Sharpe) – Flexi	0.018 (near zero)
Corr (Turnover, Return 10Y) – Flexi	0.068 (negligible)

**VII. Detailed Performance Profiles**

**7.1 HDFC Flexi-Cap**

HDFC Flexi-Cap combines the largest AUM in the sample (₹1,00,455 crore) with the highest Sharpe ratio (1.53) and a 10-year return of 18%. Its beta of 0.77 is materially below category averages, and its efficiency (Sharpe/expense) is among the highest at 2.28, suggesting very strong risk-adjusted performance for the fees charged.scribbr+1

**7.2 Edelweiss Flexi-Cap**

Edelweiss Flexi-Cap has the lowest expense ratio in the entire sample (0.43%), a Sharpe ratio of 1.09, and a 10-year return of 17%. With an efficiency score of 2.53, it delivers the best Sharpe per unit of fee, indicating exceptional cost-adjusted performance despite its relatively small AUM base.scribbr+1

**7.3 Franklin India Flexi-Cap**

Franklin India Flexi-Cap delivers a Sharpe of 1.07 and a 10-year return of 15%, but its higher expense ratio (0.92%) drags on efficiency, which stands at 1.16. The fund offers solid risk-adjusted returns with below-average beta but is less fee-competitive than HDFC or Edelweiss.scribbr+1

**7.4 UTI Flexi-Cap**

UTI Flexi-Cap illustrates the downside risk of mandate flexibility with poor risk-adjusted outcomes: a Sharpe of 0.39, 10-year return of 13%, and an above-median expense ratio of 1.05%. Despite substantial AUM, the fund significantly underperforms the flexi category on both absolute and risk-adjusted bases.scribbr+1

**VIII. Hypothesis Testing and Key Findings**

- H<sub>1</sub> (Returns): Rejected. Flexi-cap funds outperform large-cap funds by about 169 basis points over ten years, with most flexi funds showing higher returns.
- H<sub>2</sub> (Sharpe Ratio): Rejected. Flexi-cap funds have higher average Sharpe ratios than large-cap funds, though performance variation is greater.
- H<sub>3</sub> (Cost-Performance): Rejected. Expense ratios are negatively related to long-term returns and Sharpe ratios, particularly for flexi-cap funds.

- $H_4$  (Turnover–Sharpe): Not Rejected. Portfolio turnover shows little or no correlation with Sharpe ratios or long-term returns.

Overall, mandate flexibility appears to add value on average, but that value is conditional on low costs and disciplined implementation.

### IX. Research Gaps and Future Directions

The cross-sectional nature of this study prevents analysis of performance persistence, regime dependence, and style drift dynamics. Future work should employ time-series NAV data, factor models, flow data, and governance variables to better understand causality and persistence of Flexi- cap outperformance psychology.

### X. Policy and Investor Implications

Investors should favour low-cost flexi-cap funds with demonstrably high Sharpe ratios, such as HDFC and Edelweiss, while being cautious of high-fee, low-Sharpe offerings despite brand or AUM. Regulators may wish to enhance disclosures around execution costs, style drift, and factor exposures to facilitate more informed capital allocation.

### XI. Conclusion

This paper provides evidence that Indian flexi-cap funds, on average, deliver higher long-term returns and modestly better risk-adjusted performance than large-cap peers, while also tending to charge slightly lower fees. However, dispersion is substantial, and high costs are strongly associated with weaker outcomes, reinforcing the central importance of fee discipline and fund selection in long-term wealth creation.

## 12. Full Fund- by- Fund Data Table

Table 9. Detailed fund- by- fund comparison								
Fund	AUM (₹Cr)	Return 10Y (%)	Sharpe	Expense (%)	Beta	Turnover (%)	Rating	Relative Sharpe
PGIM Flexi	6,022	16	0.67	0.49	0.91	46.44	3	0.80
PGIM Large	568	12	0.60	0.85	0.96	48.59	3	0.78
Canara Flexi	13,390	16	0.88	0.56	0.92	30.46	4	1.05
Canara Large	17,104	16	0.92	0.50	0.92	31.75	4	1.19
HSBC Flexi	5,279	15	0.93	1.20	1.06	42.26	3	1.11
HSBC Large	1,894	14	0.91	1.26	0.94	62.44	3	1.18
UTI Flexi	22,886	13	0.39	1.05	0.87	11.70	2	0.46
UTI Large	12,658	13	0.68	0.92	0.92	36.65	2	0.88
ABSL Flexi	24,700	16	1.05	0.86	0.96	41.61	4	1.25
ABSL Large	30,392	14	0.84	0.97	0.97	48.52	4	1.09
Bandhan Flexi	7,427	13	0.91	1.13	0.86	117.97	3	1.08
Bandhan Large	2,024	15	0.98	0.87	1.04	130.53	5	1.27
JM Flexi	5,152	18	1.00	0.62	1.05	158.06	2	1.19
JM Large	444	13	0.82	0.88	1.03	283.34	2	1.07
Kotak Flexi	56,479	16	1.01	0.60	0.92	9.40	3	1.20
Kotak Large	10,864	15	0.91	0.63	0.97	40.28	4	1.18
Edelweiss Flexi	3,203	17	1.09	0.43	1.00	47.14	5	1.30
Edelweiss Large	1,478	15	0.93	0.56	0.96	82.68	3	1.21
Franklin Flexi	19,598	15	1.07	0.92	0.92	26.70	3	1.27
Franklin Large	7,580	12	0.81	1.14	0.95	89.12	3	1.05
HDFC Flexi	100,455	18	1.53	0.67	0.77	26.57	5	1.82
HDFC Large	40,085	15	0.91	0.98	0.93	12.76	2	1.18
DSP Flexi	11,989	16	0.92	0.69	0.97	25.26	3	1.10
DSP Large	7,163	13	1.09	0.88	0.88	28.24	4	1.42
SBI Flexi	23,148	14	0.77	0.83	0.85	77.96	3	0.92
SBI Large	55,246	14	0.83	0.80	0.91	27.72	3	1.08

### References

- [1]. Bansal, R., & Kaur, R. (2019). Performance evaluation of equity mutual funds in India. *International Journal of Research in Finance and Marketing*, 9(3), 45–55.
- [2]. Berk, J., & Green, R. (2004). Mutual fund flows and performance in rational markets. *Journal of Political Economy*.
- [3]. Chen, J., Hong, H., Huang, M., & Kubik, J. (2004). Does fund size erode mutual fund performance? *American Economic Review*.

- [4]. Debasish, S. S. (2009). Investigating performance of equity-based mutual funds in India.
- [5]. Farid, S., & Wahba, H. (2022). *The Effect of Fund Size on Mutual Funds Performance in Egypt*. *Future Business Journal*, 8, Article 27.
- [6]. Jain, P. K., & Sharma, A. (2012). An empirical analysis of equity mutual funds performance in India. *International Journal of Research in Commerce & Management*, 3(7), 73–79.
- [7]. Jensen, M. C. (1968). The performance of mutual funds in the period 1945–1964. *Journal of Finance*.
- [8]. Jeyaprakash, R. A., Balasubramanian, S., & Maddikera, V. (2025). An empirical study on mutual fund factor-risk-shifting and its intensity on Indian equity mutual funds. *arXiv Working Paper*.
- [9]. Kanodia, M., & Khinchi, K. (2017). *Performance Evaluation of Mutual Funds: A Literature Review*. *Account and Financial Management Journal*.
- [10]. Madhukumar, K., & Ravichandran, A. (2018). A comparative performance evaluation between large-cap and mid-cap mutual fund returns. *Developing Country Studies*.
- [11]. Madhusudhan, K., & Reddy, V. K. (2017). Performance evaluation of equity mutual funds in India. *International Journal of Applied Research*, 3(2), 45–49.
- [12]. Manda, V. K., Sairani, P., & Aruna, P. (2021). Variables Impacting Mutual Fund Expense Ratio: The Indian Midcap Mutual Fund Experience. *Journal of Contemporary Issues in Business and Government*.
- [13]. Maurya, V., & Jaiswal, L. B. (2026). Return Performance and Cost Efficiency of Equity Mutual Funds in India: A Descriptive Study of Active and Passive Funds. *Account and Financial Management Journal*.
- [14]. Munia, H. M., & Lakhani, B. A. (2024). A comparative study on the performance of selected equity mutual funds in India. *International Education and Research Journal*.
- [15]. Naveen, S., & Mallikarjunappa, T. (2021). Performance of mutual funds amidst COVID-19: A study on selected equity diversified categories in India. *Indian Journal of Research in Capital Markets*.
- [16]. Nayak, S., Pradhan, S. K., & Baral, P. K. (2024). Mutual Funds Unveiled: A Performance Review and Comparative Analysis\*. *Journal of Informatics Education and Research*.
- [17]. Pendse, V. (2024). A Review Study on the Indian Mutual Fund Industry and its Performance Evaluation Strategies. *Ajasraa Journal*.
- [18]. Prajapati, K. P., & Patel, M. K. (2021). Comparative Study on Performance Evaluation of Mutual Fund Schemes of Indian Companies. *Researchers World – International Refereed Social Sciences Journal*.
- [19]. Punjabi, N., & Bala, K. (2020). Performance Evaluation of Selected Mutual Fund Equity Growth Schemes in India. *International Journal on Recent Trends in Business and Tourism*.
- [20]. Rehmani, A. (2018). Performance Evaluation of Select Mutual Funds: A Public-Private Comparison. *Indian Journal of Finance*.
- [21]. Seal, N., & Mukherjee, S. (2023). A Study on the Performance of Mutual Funds of Indian AMCs. *Management Journal for Advanced Research*.
- [22]. Securities and Exchange Board of India. (2021). *Mutual fund categorization and rationalization guidelines*. Mumbai: SEBI.
- [23]. Sehgal, S., & Babbar, S. (2017). Performance evaluation of selected mutual funds in India. *Journal of Financial Management and Analysis*, 30(1), 1–14.
- [24]. Sharma, K. B., & Tripathi, S. (2023). Performance analysis and risk assessment of Indian mutual funds through SIPs: A comparative study of small, mid and large cap funds. *VIDYA – Journal of Gujarat University*. <https://doi.org/10.47413/vidya.v2i2.208>
- [25]. Sharma, P., & Shridhar, R. (2024). A Comprehensive Analysis of the Literature Concerning the Performance of Mutual Funds in India. *International Journal of Scientific Research in Science, Engineering and Technology*.
- [26]. Sharpe, W. F. (1966). Mutual fund performance. *Journal of Business*.
- [27]. Shaw, D., & Samanta, P. K. (2023). *Analysis of Performance Persistence in Indian Mutual Funds Using Hurst Exponent*. *VIDYA – A Journal of Gujarat University*.
- [28]. Singh, R. G., & Mishra, S. (2019). Performance Evaluation of Growth Mutual Fund Schemes in India. *Indian Journal of Research in Capital Markets*.
- [29]. 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*.
- [30]. Treynor, J. (1965). How to rate management of investment funds. *Harvard Business Review*.
- [31]. Tripathi, V., & Bhandari, V. (2015). Performance evaluation of Indian mutual funds: A study of risk and return. *Global Business Review*, 16(5), 1–15.
- [32]. Tripathy, N. P. (2006). Market timing abilities of mutual fund managers.
- [33]. Tripathy, N. P. (2017). Efficiency of Mutual Funds and Performance Measurement in India: An Empirical Investigation. *International Journal of Business Excellence*.
- [34]. Virparia, V. (2022). Performance analysis of mutual funds in India. *International Journal of Management, Public Policy and Research*.