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Mutual Fund Portfolio and Risk Assessment with Reference to HDFC Bank: An Analytical Study

Uppunuti Sai Charan[1], Associate Professor Dr. M.P. Suri Ganesh[2]
Malla Reddy Engineering College (Autonomous), Secunderabad[1]
Department of MBA Master of Business Administration[2]

Abstract **– Mutual funds have emerged as one of the most preferred investment avenues for individual and institutional investors, offering diversification benefits, professional management, and relatively lower risk compared to direct equity investments. This study analyzes the mutual fund portfolio and associated risks with special reference to HDFC Bank — one of India's leading private sector banks and a major distributor of mutual fund products. Using secondary data spanning FY 2021–22 to FY 2025–26, the study evaluates four representative HDFC mutual fund schemes — Large Cap, Mid Cap, Focused, and Dynamic Debt — through key financial metrics including average annual return, Compound Annual Growth Rate (CAGR), standard deviation, beta, Sharpe ratio, and coefficient of variation. The findings reveal that equity-oriented schemes, particularly HDFC Mid Cap Fund and HDFC Focused Fund, significantly outperformed the benchmark index over the study period, though with higher volatility. HDFC Dynamic Debt Fund demonstrated stability and defensive characteristics suitable for conservative investors. The study concludes that a diversified portfolio approach combining growth and stability-oriented schemes offers the most balanced risk-return outcome for investors.**

Keywords **– Mutual Funds, Portfolio Management, Risk Assessment, HDFC Bank, Sharpe Ratio, Beta, Standard Deviation, CAGR, Diversification, Risk-Return Trade-off.**

I. INTRODUCTION

The mutual fund industry in India has witnessed remarkable growth over the past decade. From an Assets Under Management (AUM) of approximately 10 lakh crore in 2014, the industry surged to over 72 lakh crore by May 2025 — a testament to increasing financial awareness, regulatory reforms, and the penetration of digital investment platforms. Systematic Investment Plan (SIP) inflows, which first crossed the 8,000 crore milestone in January 2021, had surged to 26,000 crore by December 2024, reflecting the growing confidence of retail investors in this investment vehicle.

A mutual fund pools capital from multiple investors and deploys it in a diversified portfolio of securities — equities, bonds, money market instruments, and other financial assets — managed by professional fund managers. Portfolio management and risk assessment form the twin pillars of successful mutual fund investing. Portfolio management involves selecting the right asset mix to maximize returns relative to risk, while risk assessment quantifies the uncertainty through measures such as standard deviation, beta, and the Sharpe ratio.

HDFC Bank, established in 1994, plays a pivotal role in the mutual fund ecosystem as a distributor for HDFC Mutual Fund (managed by HDFC Asset Management Company). The bank offers investment advisory services, facilitates SIP enrollments, and provides digital platforms for seamless fund access across its massive customer base. This study examines the performance and risk profile of selected HDFC mutual fund schemes across a five-year period, applying established financial models and performance evaluation frameworks.

II. REVIEW OF LITERATURE

Bhuva and Bantwa (2020) demonstrated that mutual fund evaluation becomes more meaningful when returns are interpreted alongside both systematic and unsystematic risk measures. Maheen (2021) found that extraordinary market conditions such as those triggered by the COVID-19 pandemic weakened fund-specific alpha, highlighting portfolio vulnerability during crisis periods.

Sharma (2023) compared small-cap, mid-cap, and large-cap fund schemes in India and found significant variation in risk-return profiles across categories. Malhotra, Singh, and Ramani (2024) highlighted that volatility patterns and return levels must be analyzed together, making risk-adjusted analysis central to portfolio assessment. Luo et al. (2023) demonstrated that rising economic policy uncertainty encourages fund managers to shift portfolio risk, showing that macroeconomic conditions materially influence portfolio behaviour.

A 2025 study on direct versus regular mutual fund plans in India found that direct plans outperformed regular plans largely due to lower expense ratios — a finding particularly relevant for investors who access funds through bank distribution channels such as HDFC Bank. Koley (2025) linked risk-return dynamics with fund management strategies and market trends across equity, hybrid, and debt categories over 2020–2025. Collectively, the literature affirms that a combination of return analysis, risk measures, and investor suitability assessment is essential for informed portfolio decision-making.

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III. THEORETICAL FRAMEWORK

1. Modern Portfolio Theory (MPT)
Developed by Harry Markowitz, MPT holds that an investor can construct an optimal portfolio that maximizes expected return for a given level of risk. The theory introduces the concept of the efficient frontier — a set of portfolios offering the highest return for each level of risk — and establishes that diversification reduces unsystematic (company-specific) risk without necessarily sacrificing return.

2. Capital Asset Pricing Model (CAPM)
CAPM formalizes the relationship between systematic risk and expected return: E(Ri) = Rf + Beta x (Rm - Rf), where E(Ri) is the expected return, Rf is the risk-free rate, Rm is the market return, and Beta captures the fund's sensitivity to market movements. A beta greater than 1 indicates above-market sensitivity; below 1 suggests a more defensive profile.

3. Key Risk and Performance Metrics
Standard Deviation (□): Measures return volatility. Higher values imply higher risk. Beta (□): Measures market sensitivity. Sharpe Ratio: Calculated as (Rp - Rf) / □p, it measures risk-adjusted return — higher values indicate better reward per unit of total risk. Treynor Ratio: Measures return per unit of systematic risk. Jensen's Alpha: Measures excess return over the CAPM-predicted return, indicating manager skill. Coefficient of Variation (CV): Expresses risk per unit of return, useful for comparing funds across categories.

IV. RESEARCH METHODOLOGY

The study adopts a descriptive and analytical research design, relying exclusively on secondary data. Data sources include scheme NAV history, fund fact sheets, HDFC AMC annual reports, AMFI, NSE, and BSE databases. The study covers FY 2021–22 to FY 2025–26 (five years). Four HDFC mutual fund schemes were selected — Large Cap, Mid Cap, Focused Equity, and Dynamic Debt — with the HDFC Nifty 50 Index Fund serving as the benchmark. Analytical tools include average annual return, CAGR, standard deviation, beta, Sharpe ratio, coefficient of variation, AUM trend analysis, benchmark comparison, and One-Way ANOVA for hypothesis testing. The risk-free rate was assumed at 5% per annum.

V. DATA ANALYSIS AND FINDINGS

1. Year-wise Return Performance

Scheme	2021-22	2022-23	2023-24	2024-25	2025-26
HDFC Large Cap Fund	19.32%	4.50%	38.87%	4.26%	-3.94%
HDFC Mid Cap Fund	22.10%	8.95%	56.70%	9.11%	5.24%
HDFC Focused Fund	28.40%	11.85%	40.40%	14.61%	0.77%
HDFC Dynamic Debt Fund	7.76%	3.67%	7.82%	8.66%	0.72%

The return data reveals a pronounced equity bull cycle in FY 2023–24, with HDFC Mid Cap Fund recording an exceptional 56.70% annual return. All equity schemes experienced moderation or slight negative returns in FY 2025–26, reflecting increased market selectivity. HDFC Dynamic Debt Fund maintained stable returns throughout, consistent with its debt-oriented mandate.

2. Average Return and CAGR

Scheme	Avg. Annual Return (%)	CAGR (%)	Positive Return Years
HDFC Large Cap Fund	12.60	11.64	4
HDFC Mid Cap Fund	20.42	19.07	5
HDFC Focused Fund	19.21	18.42	5
HDFC Dynamic Debt Fund	5.73	5.68	5

HDFC Mid Cap Fund leads on both average return and CAGR, followed closely by HDFC Focused Fund. The debt fund, while lowest in return, achieved positive outcomes in all five years, demonstrating consistency and downside protection.

3. Risk Analysis

Scheme	Std. Dev. (%)	Beta	Sharpe Ratio	CV
HDFC Large Cap Fund	16.91	1.21	0.45	1.34
HDFC Mid Cap Fund	21.27	1.45	0.73	1.04
HDFC Focused Fund	15.40	1.10	0.92	0.80
HDFC Dynamic Debt Fund	3.41	0.18	0.21	0.59

HDFC Mid Cap Fund carries the highest volatility (□ = 21.27%) and greatest market sensitivity (□ = 1.45). HDFC Focused Fund achieves the best Sharpe ratio (0.92), meaning it delivered the strongest risk-adjusted returns — a result of relatively lower volatility despite high absolute returns. HDFC Dynamic Debt Fund's near-zero beta and minimal standard deviation confirm its role as a portfolio stabilizer.

4. Benchmark Comparison (vs. HDFC Nifty 50 Index Fund)

Measure	Large Cap	Mid Cap	Focused
Average Return (%)	12.60	20.42	19.21
Benchmark Avg. Return (%)	9.82	9.82	9.82
Excess Return over Benchmark (%)	2.78	10.60	9.38
Beta against Benchmark	1.21	1.45	1.10

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All three equity schemes outperformed the benchmark over the study period. HDFC Mid Cap Fund generated the widest excess return of 10.60 percentage points, confirming substantial active management alpha during the mid-cap equity cycle. However, higher beta values indicate this alpha came with greater market sensitivity.

5. AUM Growth Analysis

Scheme	Initial AUM (■ Cr)	Latest AUM (■ Cr)	AUM CAGR (%)
HDFC Large Cap Fund	21,177.55	40,085.19	17.29
HDFC Mid Cap Fund	31,309.44	94,256.90	31.72
HDFC Focused Fund	1,209.63	27,136.20	117.63
HDFC Dynamic Debt Fund	528.40	598.17	3.15

HDFC Focused Fund recorded an extraordinary AUM CAGR of 117.63%, driven by a combination of strong returns and significant net inflows. HDFC Mid Cap Fund grew its AUM nearly threefold over five years. HDFC Dynamic Debt Fund's minimal AUM growth reflects the investor shift toward equity during a prolonged bull run.

6. Hypothesis Testing (One-Way ANOVA)

H0 (Null): There is no significant difference in the mean annual returns of the selected HDFC mutual fund schemes.
H1 (Alternative): There is a significant difference in the mean annual returns of the selected HDFC mutual fund schemes.

Test	F-Statistic	p-value	Decision (5% level)
One-Way ANOVA	0.931	0.4487	Fail to Reject H0

Since the p-value (0.4487) exceeds the 0.05 threshold, the null hypothesis is not rejected. The year-to-year variation within each scheme is substantial enough that mean return differences are not statistically significant at the 5% level. This underscores that investors must look beyond headline returns to category-level risk profiles and long-term suitability.

6. Portfolio Suitability and Recommended Allocation

Investor Profile	Recommended Scheme	Rationale
Conservative	HDFC Dynamic Debt Fund	Stable returns, low volatility, defensive beta
Moderate Growth	HDFC Large Cap Fund	Core equity exposure with established companies
Aggressive	HDFC Mid Cap Fund	High return potential in expansion cycles
Alpha-seeking	HDFC Focused Fund	Concentrated selection with best Sharpe ratio

For a balanced investor, a suggested model portfolio allocation would be: 30% in Large Cap (core anchor), 25% in Mid Cap (growth engine), 20% in Focused Fund (alpha enhancer), and 25% in Dynamic Debt (stabilizer). This combination aligns with MPT's emphasis on diversification as the primary tool for optimizing the risk-return profile.

7. The Role of HDFC Bank in Mutual Fund Distribution

HDFC Bank serves as more than a financial institution in the mutual fund ecosystem. As a distributor, it provides access to a wide range of HDFC AMC schemes through its branch network, digital banking platforms, and relationship managers. Key functions include investment advisory, SIP enrollment facilitation, portfolio guidance, and financial literacy initiatives. The bank's strong brand trust and extensive customer base — spanning urban and semi-urban India — make it a crucial intermediary in connecting retail investors with appropriate mutual fund products.

The bank's role in promoting SIP culture has been particularly significant. SIP contributions have grown steadily as HDFC Bank advisors guide investors toward disciplined, goal-based investing rather than timing-oriented lump-sum decisions. Data shows HDFC Bank's distributor AUM share at 35.14% of total AUM managed by HDFC MF, reflecting its substantial distribution footprint.

VI. CONCLUSION

This study demonstrates that mutual fund portfolio performance and risk levels vary substantially across fund categories, even within the same fund family. HDFC Mid Cap Fund delivered the highest long-term wealth creation, while HDFC Focused Fund offered the best risk-adjusted returns. HDFC Large Cap Fund provided a reliable core equity option, and HDFC Dynamic Debt Fund fulfilled the role of a defensive stabilizer. No single scheme dominated across all dimensions, reinforcing the central argument of portfolio theory: diversification across fund categories is essential for achieving balanced financial outcomes.

Risk assessment tools — standard deviation, beta, Sharpe ratio, and coefficient of variation — proved indispensable in revealing the true performance landscape beyond simple return rankings. HDFC Bank's distribution infrastructure plays a meaningful role in helping investors navigate this complexity by providing accessible advisory services and promoting disciplined investment habits.

The study concludes that informed, diversified, and long-term investing — supported by proper risk evaluation and periodic portfolio review — remains the most reliable pathway to achieving financial goals through mutual funds.

REFERENCES

1. Bhuva, H., & Bantwa, A. (2020). Performance evaluation of mutual funds using risk-adjusted measures. Research Journal of Finance and Accounting.

2. Gupta, S.P. (2020). Statistical Methods. Sultan Chand & Sons.
3. Kothari, C.R. (2021). Research Methodology. New Age International.
4. Maheen, M.S. (2021). Impact of COVID-19 on the performance of emerging market mutual funds. Finance Research Letters.
5. Prasanna Chandra (2022). Investment Analysis and Portfolio Management. McGraw Hill.
6. Shanmugam, R., & Ali, A. (2021). Performance of equity-oriented mutual funds in India during COVID-19. Asian Journal of Finance and Accounting.
7. Sharma, R. (2023). Performance analysis of mutual funds in India. International Journal of Finance.
8. Goyal, A. (2023). Mutual fund growth and investor behavior in India. Journal of Financial Studies.
9. Luo, X. et al. (2023). Economic policy uncertainty and mutual fund risk shifting. Journal of Financial Economics.
10. Malhotra, S., Singh, R., & Ramani, D. (2024). Risk and return analysis of mutual funds. Finance Research Journal.
11. Koley, T.K. (2025). Risk-return dynamics of equity, hybrid, and debt mutual funds in India: 2020–2025. Indian Journal of Finance.
12. Association of Mutual Funds in India (AMFI): www.amfiindia.com
13. HDFC Bank Official Website: www.hdfcbank.com
14. Securities and Exchange Board of India (SEBI): www.sebi.gov.in