

Performance Metrics of Mutual Funds: A Critical Analysis

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Abstract

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This research paper explores how well selected mutual fund schemes perform by examining them through three widely accepted measures: Sharpe Ratio, Treynor Ratio, and Jensen's Alpha. These tools help assess not just the returns, but how those returns relate to the risk taken by the fund managers. The Sharpe Ratio evaluates overall return relative to total risk, Treynor focuses on the return per unit of market risk, and Jensen's Alpha measures the fund's ability to generate excess returns above what the market alone would predict. Using historical data from a range of equity mutual funds, the study provides a comparative look at how effectively different funds manage risk while aiming to deliver value. The results highlight which funds stand out in terms of performance and consistency, offering practical insights for investors, fund managers, and financial advisors. This evaluation supports more thoughtful decision-making when selecting mutual fund investments.

Keywords: Mutual Funds, Sharpe Ratio, Treynor Ratio, Jensen's Alpha, Risk-Adjusted Performance

Introduction

India's mutual fund industry is a major player in its financial world. It offers many investment options to both individual and institutional investors. A mutual fund works by pooling money from many investors to buy various investments like stocks and bonds. This industry is growing rapidly and is expected to more than double in size, from about USD 0.78 trillion in 2025 to USD 1.78 trillion by 2030. This is yearly growth of over 18%. India's mutual fund industry is the second biggest in the world, with over 46 million households investing. Even though there are over 40 different companies managing mutual funds, the top 10 companies manage over 70% of all the money invested. The amount of money managed by the

industry has increased five times in the last 10 years, showing its fast growth.

Several things have led to this growth. India's population and wealth are increasing, leading more people to invest. Mutual funds can generate income, which is helpful for those who can't work. Improvements in technology, like faster internet and smart cities, have made it easier for people in smaller towns and cities to invest. More people are also using online tools like Systematic Investment Plans (SIPs) to invest.

After the COVID pandemic, the amount of money in mutual funds grew by 77% as the market recovered

and new money came in. The increasing number of investment accounts also helped boost individual investor participation. Long-term debt funds have also become more popular, showing that investors trust the stability of the Indian mutual fund industry. A strong financial market with lots of participation is important for a growing economy. India started its first mutual fund, the Unit Trust of India (UTI), in 1963 to encourage saving, investing, and participation in the financial markets. As of December 2024, the average amount of money managed by the Indian mutual fund industry was about ₹69,32,959 crore.

Mutual funds are categorized by their investment strategy. The main types are equity funds, debt funds, and hybrid funds. Equity funds invest mostly in company stocks and are further divided by company size (large cap, mid cap, small-cap and multi cap). Debt funds invest in things like bonds and government securities. They are also divided into categories based on how long the investment is for (overnight, ultra-short-term, short-term, and long-term). Hybrid funds invest in a mix of stocks and bonds to balance risk and return. The mix can change depending on the fund's strategy and the fund manager's decisions.

The Indian mutual fund industry is growing quickly because of technology, financial awareness, and more investors. It's playing a big role in creating wealth and helping India's economy grow.

Equity funds, which are regarded as high-risk but high-return investment options, are mostly concentrated on investments in equities of different firms. These funds are ideal for long-term investors with a high-risk tolerance because they seek to increase capital over time. Market capitalization and investment strategy are two other criteria used to further classify equity funds. Large-cap equity funds provide stability and modest returns by investing in reputable businesses with a significant market

presence. Companies with growth potential are the focus of mid-cap equity funds, which offer higher returns but more volatility. Small-cap equity funds make investments in start-up businesses, which carry a high risk but have the potential to expand significantly. Multi-cap funds balance stability and growth by diversifying across big, mid, and small-cap equities. Furthermore, sectoral and thematic funds are heavily reliant on sector performance because they invest in particular industries like infrastructure, healthcare, and technology. These funds are best suited for investors who are ready to face concentrated risks and have a solid understanding of particular industries.

Treasury bills, corporate bonds, government bonds, and other money market instruments are examples of fixed-income assets that are invested in by debt funds, sometimes referred to as fixed-income funds. Conservative investors looking for steady returns with less risk are the ideal candidates for these funds. Debt funds are a better option for short- to medium-term investing since they are less volatile than equity funds. Liquid funds, which invest in short-term securities within debt funds, offer low risk and great liquidity, making them perfect for storing excess capital.

In order to balance risk and return, hybrid funds invest in a combination of debt and equity. These funds are appropriate for investors seeking a diversified asset allocation and moderate risk. Hybrid funds are appropriate for investors with intermediate risk tolerance because they invest in both debt and equities, balancing risk and return. For more growth, aggressive hybrid funds devote 65–80% of their assets to stocks, whilst balanced hybrid funds have a 40–60% mix. With 70–85% debt, conservative hybrid funds prioritize stability. While Multi-Asset Funds diversify among stocks, debt, and commodities, other funds, such as Balanced Advantage Funds (BAFs), dynamically modify their allocation of debt and equity based on market

conditions. Arbitrage funds produce low-risk returns by taking advantage of market inefficiencies.

In order to preserve capital and provide rapid access to cash, money market funds invest in short-term, highly liquid products. While Commercial Paper (CP) and Certificate of Deposit (CD) funds hold corporate and bank-issued debt instruments, Treasury Bill (T-Bill) funds invest in short-term government assets. In order to provide high liquidity and low risk, overnight funds invest in assets that mature within a day.

Beyond conventional asset classes, specialized funds invest in commodities, real estate, and international markets. Gold and silver funds and other commodity funds invest in physical assets or exchange-traded funds (ETFs), whereas oil and energy funds concentrate on businesses in the energy sector. Real estate funds, such as Real Estate Investment Trusts (REITs) and Real Estate Mutual Funds, invest in securities of the real estate industry and buildings that generate income. Funds of Funds (FoF) invest in a variety of mutual funds for wide diversification, while international funds offer exposure to outside markets. ESG (Environmental, Social, and Governance) funds cater to socially conscious investors by emphasizing ethical and sustainable investing.

Literature Review

(Dr.S.M.ALAGAPPAN, 2019)-This study analyzes the performance of open-ended equity growth mutual funds in India over a one-year period. Using Sharpe's, Treynor's, and Jensen's measures, it assesses risk and returns. Among 12 selected funds, Axis blue chip Fund performed well, while most others saw negative returns due to market fluctuations. The research highlights the importance of balancing risk and return in investment decisions. A longer evaluation period could offer deeper insights into fund performance.

(Singh, 2020)- Mutual funds are a preferred investment option in India due to their high returns and low risk. Their rapid growth has increased participation, requiring close monitoring and evaluation. This study assesses public and private sector mutual funds using Treynor's measure, beta, standard deviation, and the Sharpe ratio. Findings help investors identify top-performing funds and make informed decisions. These insights also provide a foundation for future evaluations of mutual funds and SIPs.

(Mandal, Akshita, & Kumar, 2023)- This study examines the impact of SIPs on mutual fund investments, focusing on past trends, investor behavior, and fund performance. SIPs aid in financial discipline, risk management, and portfolio diversification. Investors use SIPs for long-term goals like retirement, wealth growth, and education. Fund selection depends on expense ratios, risk tolerance, and past performance. SIPs are widely seen as a reliable strategy for steady investing and wealth accumulation.

(Pal & Chandani, 2019)- This study evaluates selected debt mutual funds in India using statistical metrics based on daily NAV. The number of debt funds grew significantly from 91 in 2001 to 506 in 2008, forming a major part of total AUM. Among equity funds, HDFC Midcap Opportunities (G) outperformed Quantum Long-Term Equity (G) due to lower risk. The research highlights the importance of risk assessment and expense ratios in fund selection. These insights help investors make informed mutual fund investment decisions.

(Sharma & Joshi, 2023)-This study examines SIP investors in North Ahmedabad, focusing on their knowledge, preferences, and investment goals. Investors prioritize long-term objectives like retirement (46.2%), children's education, and homeownership. Key factors influencing decisions include funding company goodwill and manager

expertise. The study emphasizes the need for tailored financial strategies and awareness campaigns. Understanding investor priorities can enhance trust, satisfaction, and financial success.

(SIVA & RAMBABU, 2019)- Rising inflation and living costs have made wealth creation essential, but stock market volatility limits access for middle-class investors. Mutual funds offer a safer alternative by pooling funds and investing across various sectors. This study compares HDFC and ICICI mutual funds, finding HDFC performing well while ICICI struggles due to poor asset management. The Children's Gift Plan attracts investors with high bonuses, while ICICI's debt funds face losses. Mutual funds respond strongly to credible analyst information, influencing investment decisions.

(Panigrahi, 2020)- Mutual funds pool investor money into various securities, with Equity Linked Savings Schemes (ELSS) offering tax benefits under Section 80C. This study evaluates the top five ELSS funds using performance metrics like Beta and Sharpe ratio, finding most funds consistently outperforming. ELSS remains attractive due to strong returns and tax revenue, contributing to its ₹22.24 lakh crore AUM. The research highlights business opportunities in portfolio management and investor education. Policymakers could restructure tax laws to boost public participation in ELSS investments.

(Maheshwari, 2020)- The Indian Mutual Fund Industry's AUM reached ₹38.42 trillion in 2022. This study analyzes 24 schemes, showing equity funds have high risk-return, debt funds are low risk, and hybrid funds offer moderate returns. Sharpe and Treynor ratios indicate strong performance, while Jensen's measure shows 16 funds outperforming. Most schemes had acceptable expense ratios, with only six showing high costs. Risk-tolerant investors can choose equity or hybrid funds, while risk-averse investors should opt for debt funds.

(Rani, 2019)- the AUM of the Indian mutual fund industry was ₹38.42 trillion. According to this study's analysis of 24 schemes, hybrid funds provide moderate returns, debt funds are low risk, and equity funds have a high risk-return ratio. Jensen's metric shows 16 funds outperforming, while Treynor and Sharpe ratios show significant performance. Only six schemes had excessive expenses; the majority had acceptable expense ratios. While risk-averse investors should choose debt funds, risk-tolerant investors can choose equity or hybrid funds.

(Raje & Mishra, 2019)- This study evaluates the performance of tax-saver mutual funds in India using statistical tools over a five-year period. LIC MF Tax Saver Plan emerged as the best option with the highest returns, lowest risk, and strong benchmark tracking. HSBC Tax Saver Equity Fund ranked second, showing good performance but slightly higher risk. Nippon India Tax Saver Fund performed the worst, with the lowest returns and highest risk, making it less favorable for investors. The findings help investors make informed decisions and assist fund houses in improving performance.

(Naik & S.G, 2020)- Mutual funds are a preferred investment option in India due to their safety, higher returns, and expert management. They help small investors participate in capital markets while offering benefits like diversification, liquidity, and tax advantages. This study analyzes investor preferences, including asset management companies, investment strategies, and fund options. Understanding investor behavior is crucial as mutual funds evolve to meet changing economic conditions. With rising awareness, more investors are leveraging mutual funds for financial growth and stability.

(Rajput & Chhabra, 2023)- Mutual funds have gained immense popularity in India over the past decade, offering investors a profitable and secure investment avenue. They pool resources from investors and allocate them across various assets like stocks, bonds,

and government securities. This research analyzes mutual fund performance using key metrics like Assets Under Management (AUM) and Net Resources Mobilized. Findings indicate a growing investor base, with mutual funds helping beat inflation and build wealth with professional guidance. However, strategic planning and increased awareness are crucial for maximizing benefits.

(Khurana & Bhatia, 2023)-This study analyzes the performance of large-cap equity mutual funds in India from 2018 to 2022, focusing on returns and risk. It examines factors like asset allocation, portfolio composition, and market trends using quantitative and qualitative methods. Despite market volatility, most funds performed well, though the 2020 NIFTY drop had an impact. Key metrics like Sharpe and Treynor ratios, beta, and standard deviation are crucial for evaluating fund performance. Investors seeking higher returns should focus on funds with strong Sharpe ratio rankings for better diversification and risk-adjusted returns.

(Khanzode, Reddy, & Singh, 2022)-This study analyzes the financial performance of equity mutual funds in India using metrics like Treynor's ratio, Sharpe ratio, and beta. Large-cap funds like Canara Robeco bluechip equity, IDBI India Top 100 Equity, and JM large cap Fund have shown strong returns with lower risk. These funds are less volatile, making them ideal for investors seeking stability and growth. Selecting the right mutual fund remains crucial for wealth creation.

(Murthy, Anjaneyulu, Bhatt, & Srimanth, 2022)- The study uses daily NAV data, the study compares the performance of Indian mutual funds to that of the NSE Nifty. ANOVA, Treynor Index, Sharpe Index, and Standard Deviation are among the metrics used for analysis. Results from April 2019 to March 2022 show that the majority of mutual funds generated profits. The study emphasizes mutual funds as a viable capital market investing choice. Risk-return

analysis is emphasized as a means of making better investing choices.

(Sharma & Tripathi, 2023)- Using metrics such as Treynor's Ratio, Jensen's Alpha, and Sharpe Ratio, this study examines the risk and performance characteristics of Indian mutual funds in the Small Cap, Mid Cap, and Large Cap categories. The Kotak Emerging Equity Fund, HDFC Mid-Cap Opportunities Fund, and Nippon India Small Cap Fund were notable for their robust risk-adjusted gains. While Franklin India Blue-chip Fund generated lower risk-adjusted returns, large-cap funds such as HDFC Top 100 and Nippon India Big Cap Fund displayed comparable risk profiles. The study emphasizes how crucial it is to match investing decisions to a person's financial objectives and risk tolerance.

(Kishori.B. & Midhun, 2019)- In the mutual fund business, innovative investing strategies including Systematic investing Plans (SIPs), which resemble recurrent deposits, have become more and more popular as a result of technological improvements. This study uses Data Envelopment Analysis (DEA), a first for India, to compare SIP with lump sum investments. The results will encourage traditional investors to use SIPs and assist investors, regulators, and policymakers in optimizing portfolio performance. The advantages of SIPs in terms of liquidity, growth, and returns are demonstrated by comparing the performance of mutual funds across various investment strategies.

(Chaudhary, Nigam, & Sayyed, 2020)- according to this study's findings. In order to assist investors in choosing appropriate funds, it evaluates debt schemes using measures such as average maturity, yield to maturity, total returns, and Sharpe's ratio. Mutual funds include market risks, so even if they have the potential to yield rewards, investing in them requires careful consideration. To assist investors in making wise decisions, the study examines several

debt mutual fund plans.

(Sharma M. , 2023)- The study evaluates the performance of Systematic Investment Plans (SIPs) in mutual funds to help investors make informed decisions. It analyzes the top 30 mutual funds in India using SIP returns, with risk assessment through various financial metrics like Sharpe ratio, Treynor ratio, and standard deviation. The research uses the BSE Sensex and 91-day Treasury bills as benchmarks. Findings highlight SIP performance fluctuations, aiding investors in risk evaluation and decision-making.

(Patel, 2020)- Four mutual funds underperformed during the study period, while three mutual funds that were chosen for analysis did well. The DSP Equity & Bond Fund, JM Equity Fund, LIC Hybrid Mutual Fund, and SBI Debt Fund were the only funds that did not perform poorly in a turbulent market. Statistics such as Jensen's alpha , beta, standard deviation, and sharpe ratio should be taken into account by investors in addition to NAV and total return. These elements support steady mutual fund performance and wise investing choices.

Research Objectives:

- 1) Analyze the past performance of selected mutual funds using key measures like the sharpe ratio, treynor ratio and Jensen's alpha
- 2) Study how well small-cap mutual funds perform compared to benchmark indices,

Findings & Analysis:

Selected fund house based on AUM IN 2025

TABLE 1

Fund House	AUM (Rs. 'crores)
SBI Mutual fund	919519.99
ICICI Pru Mutual fund	716867.52
HDFC Mutual fund	614665.43
Nippon India Mutual fund	438276.85
Kotak Mahindra Mutual Fund	381239.57

considering both risk and return.

- 3) Understand the impact of market ups and downs, as well as economic changes, on small-cap mutual fund performance.
- 4) Assess how fund managers contribute to higher returns and stable performance in small-cap mutual funds.

Research Methodology:

Data collection sources

The data is collected from various primary and secondary sources for the study.

Limitation of the study

- 1) Since performance indicators are based on past data, they might not be a reliable indicator of future mutual fund results.
- 2) Unexpected market developments, regulatory changes, and macroeconomic factors are not taken into consideration by metrics such as alpha and beta.
- 3) Unexpected market developments, regulatory changes, and macroeconomic factors are not taken into consideration by metrics such as alpha and beta.
- 4) Performance indicators like Alpha and Sharpe Ratio can be distorted when a fund is compared to an unsuitable benchmark.
- 5) The majority of performance indicators overlook expenses including transaction fees, exit loads, and expense ratios, which lower real investor gains.

TABLE 2

Scheme	Return	Fund Size
SBI Long term equity Fund-Regular Plan-Growth	13.4227	27,305
SBI healthcare opportunities fund	25.8685	3521
ICICI Prudential infrastructure Direct growth fund	11.4151	7434
ICICI Prudential Pharma Healthcare and diagnostics (P.H.D) Fund	23.985	4917.81
HDFC Mid cap opportunities fund-Growth	14.4738	73510
HDFC Focused 30 Fund	16.6573	15,687
Nippon India Multi cap fund	13.2537	37593
Nippon India Consumption Fund	9.9648	2184
Kotak emerging equity fund direct growth	18.9326	43941
Kotak Equity savings fund	8.3652	8177

ABOUT SELECTED SCHEMES

SBI Long term equity Fund-Regular Plan-Growth -It is an equities-Linked Savings Scheme (ELSS) that invests primarily in a diverse portfolio of equities and equity-related securities with the goal of giving investors opportunities for long-term financial appreciation. With a three-year lock-in term, it also provides tax benefits under Section 80C of the Income Tax Act. The sources cited do not provide specific allocation details. ELSS funds typically allocate a minimum of 80% of their investments to stocks, which are diversified across different market capitalizations and industries.

SBI healthcare opportunities fund -The goal of the SBI Healthcare Opportunities Fund is to give investors long-term capital growth by making investments in a diverse portfolio of healthcare-related stock and equity-related instruments. For the Growth option of its Regular plan, the fund's Net Asset Value (NAV) was ₹416.30 as of March 21, 2025. Trailing returns for the fund have been 20.67% for the first year, 21.64% for the third, and 27.45% for the fifth. The Regular plan has an expense ratio of 1.95% and a fund size of ₹3,312.89 crore.

ICICI Prudential infrastructure Direct growth fund - By primarily investing in equities and equity-related securities of infrastructure-related businesses, the

ICICI Prudential Infrastructure Direct Growth Fund seeks to produce long-term capital appreciation. The sources cited do not provide specific allocation details. Infrastructure funds typically invest a large percentage of their assets in businesses operating in industries such as construction, transportation, and energy.

The goal of the June 25, 2018, launched ICICI Prudential Pharma Healthcare and Diagnostics (P.H.D) Fund is to build a portfolio of stocks and equity-related securities of pharmaceutical, healthcare, hospital, diagnostic, wellness, and associated businesses in order to provide long-term capital appreciation. There are no specific allocation specifics in the sources that have been provided. Usually, these funds make large investments in healthcare and pharmaceutical businesses, such as diagnostic centers and hospitals.

The HDFC Mid Cap Opportunities Fund-Growth invests primarily in mid-cap firms with the goal of producing long-term financial appreciation. The sources cited do not provide specific allocation details. Mid-cap funds typically allocate at least 65% of their assets to mid-cap firms, with the remaining portion going to large-cap and small-cap stocks.

HDFC Focused 30 Fund -The HDFC Focused 30

Fund invests in a concentrated portfolio of up to 30 securities with varying market capitalizations in an effort to provide long-term financial appreciation. The sources cited do not provide specific allocation details. Focused funds usually invest in a small number of stocks, enabling high-conviction wagers on a range of market capitalization and industries.

Nippon India Multi cap fund -The Nippon India Multi Cap Fund invests in a diverse portfolio of stock and equity-related securities from large-, mid-, and small-cap companies with the goal of producing long-term capital appreciation. The sources cited do not provide specific allocation details. In order to diversify risk and seize development opportunities, multi-cap funds typically distribute their holdings among businesses of different sizes.

Nippon India Consumption Fund -By investing in stock and equity-related instruments of businesses that are anticipated to profit from India's growing consumption patterns, the Nippon India Consumption Fund aims to provide long-term capital appreciation. The sources cited do not provide specific allocation details. These funds typically make investments in industries that stand to gain from rising consumer spending, such as retail, consumer goods, autos, and services.

Kotak emerging equity fund direct growth -Fund for Kotak Emerging Equity By primarily investing in mid-cap firms, Direct Growth seeks to produce long-term capital appreciation from a portfolio of equities and equity-related instruments. The sources that have been provided do not provide specific allocation details. To provide diversification, these funds often allocate a sizeable amount of their assets to mid-cap firms, with a smaller share going to large-cap and small-cap equities.

Kotak Equity savings fund -By making investments in debt and money market instruments, equity and equity-related instruments, and arbitrage opportunities, Kotak Equity Savings Fund aims to produce both income and capital appreciation. The sources that have been provided do not provide specific allocation details. Equity savings funds generally distribute their assets among debt and equity instruments, including arbitrage positions, in order to balance risk and return.

Benchmark of each scheme Rm taken of 5-year CAGR

Tools used

SHARPE'S PERFORMANCE INDEX

The Sharpe Ratio is a measure of risk-adjusted return, which tells us how much excess return a mutual fund

TABLE 3

Scheme	Bechmark	RM
SBI Long term equity Fund direct plan-growth	BSE 500 TRI	24.14
SBI healthcare opportunities fund direct plan growth	BSE Healthcare TRI	28.57
ICICI Prudential infrastructure Direct growth fund	BSE India Infrastructure TRI	36.52
ICICI Prudential Pharma Healthcare and diagnostics (P.H.D) Fund	BSE Healthcare TRI	28.57
HDFC Mid cap opportunities fund	NIFTY Midcap 150 TRI	26.56
HDFC Focused 30 Fund	NIFTY 500 TRI	17.55
Nippon India Multi cap fund	Nifty 500 Multicap 50:25:25 TRI	23.4
Nippon India Consumption Fund	NIFTY India Consumption TRI	21.33
Kotak emerging equity fund direct growth	NIFTY Midcap 150 TRI	26.56
Kotak Equity savings fund direct growth	NIFTY Equity Savings TRI	9.89

generates for the risk taken. It helps compare different investments by assessing whether higher returns come with proportionate risk.

$$\text{Sharpe Ratio} = \frac{R_p - R_f}{\sigma_p}$$

Where:

- R_p = Portfolio return (mutual fund return)
- R_f = risk-free rate
- σ_p = standard deviation of the portfolio (volatility or risk level)

Investors can determine if the returns on a mutual fund are commensurate with the level of risk assumed by using the Sharpe Ratio. An investment option with a greater Sharpe Ratio is more efficient since it shows that the fund is yielding larger returns per unit of risk. A lower Sharpe Ratio, on the other hand, indicates that the fund's returns fall short of sufficiently offsetting the risk.

One mutual fund having a higher Sharpe Ratio than

the other, for instance, indicates that it has produced returns with less volatility and is a superior risk-adjusted investment. A fund is a less desirable investment choice if its Sharpe Ratio is negative or extremely low, which indicates that the returns are not appreciably higher than those of a risk-free asset (such government bonds).

All things considered, the Sharpe Ratio is a useful measure for comparing mutual funds, particularly for investors who want to minimize risk and optimize returns. It shouldn't, however, be the sole deciding criterion; other factors including portfolio composition, expense ratio, and fund consistency should also be taken into account.

The table displays ten mutual fund schemes' performance using key metrics, such as returns (R_p), risk-free rate (R_f), standard deviation (SD), excess returns ($R_p - R_f$), and Sharpe Ratio. An important metric for evaluating risk-adjusted returns is the

TABLE 4

Scheme	R_p	R_f	SD	$R_p - R_f$	Sharpe ratio
SBI Long term equity Fund direct plan-growth	32.04	6.81	14.33	25.23	1.76
SBI healthcare opportunities fund direct plan -growth	32.12	6.81	14.61	25.31	1.73
ICICI Prudential infrastructure Direct growth fund	40.35	6.81	14.82	33.54	2.26
ICICI Prudential Pharma Healthcare and diagnostics (P.H.D) Fund	32.73	6.81	16.06	25.92	1.61
HDFC Mid cap opportunities fund	34.16	6.81	15.31	27.35	1.79
HDFC Focused 30 Fund	33.85	6.81	11.26	27.04	2.40
Nippon India Multi cap fund direct growth	32.83	6.81	17.74	26.02	1.77
Nippon India Consumption Fund direct growth	28.72	6.81	14.78	21.91	1.48
Kotak emerging equity fund direct growth	31.07	6.81	15.97	24.26	1.52
Kotak Equity savings fund direct growth	14.09	6.81	5.04	7.28	1.44

Sharpe Ratio, since the standard deviation is the excess return obtained per unit of total risk. A fund with a higher Sharpe Ratio may be ideal for an investor who wants to reduce risk and maximize profits because it indicates that the fund has generated better returns relative to the risk it has assumed.

The HDFC Focused 30 Fund is the most notable of the mentioned schemes, with the greatest Sharpe Ratio of 2.40. Taking into account its overall risk, this fund has produced the best risk-adjusted returns. According to the high Sharpe Ratio, the fund manager has successfully controlled overall volatility while producing robust returns. This

performance stands out in particular because it shows that the fund can yield better returns than its risk profile, which appeals to investors who are risk averse

The ICICI Prudential infrastructure direct growth fund, which comes after the HDFC Focused 30 Fund, also shows impressive performance, with a Sharpe Ratio of 2.26. This suggests that this fund has generated returns and managed risk effectively, as evidenced by its impressive risk-adjusted returns. A fair balance between returns and risk is indicated by the HDFC Midcap Opportunities Fund's Sharpe Ratio of 1.79. The Sharpe Ratios of 1.76 and 1.77 for the SBI Long Term Equity Fund Direct Plan-Growth and Nippon India Multicap Fund Direct Growth, respectively, indicate moderate to strong risk-adjusted performance. A Sharpe Ratio of 1.73 indicates that the SBI Healthcare Opportunities Fund Direct Plan Growth is performing moderately as well.

On the other hand, some strategies have lower Sharpe Ratios, which could mean that their returns are lower or that their risk is higher than their returns. Having the lowest Sharpe Ratio (1.44), the Kotak Equity savings fund has had difficulty producing returns without taking on a lot of risk. The direct growth of the Kotak emerging stock fund and the Nippon India Consumption Fund both have lower Sharpe Ratios, at 1.48 and 1.52, respectively, suggesting less favorable risk-adjusted performance. The Sharpe ratio of 1.61 for the ICICI Prudential Pharma Healthcare and Diagnostics (P.H.D.) Fund is likewise rather low.

Remember that though the Sharpe Ratio is a useful indicator, it shouldn't be the only consideration when making investments. Individual risk tolerance, investment objectives, and the fund's overall performance measures should all be taken into account by investors. Furthermore, the returns presented do not necessarily reflect historical performance, which does not necessarily predict

future outcomes. A vital tool for investors who are concerned about risk, the Sharpe Ratio provides a convincing view of how well a fund balances returns and risk. According to its outstanding Sharpe Ratio, the HDFC Focused 30 Fund has performed exceptionally well in this area, generating robust returns while skillfully controlling risk.

TREYNOR'S PERFORMANCE INDEX

A mutual fund's excess return per unit of systematic risk (market risk) is measured by the Treynor Ratio, also called the Reward-to-Volatility Ratio. Whereas the Treynor Ratio only takes systematic risk, as shown by beta (β), into account, the Sharpe Ratio takes into account overall risk (standard deviation). When assessing mutual funds, where market risk is the main issue, it is helpful.

$$\text{Sharpe Ratio} = \frac{R_p - R_f}{\sigma_p}$$

Where:

- R_p = Portfolio return (mutual fund return)
- R_f = Risk-free return (e.g., government bond yield)
- β_p = Beta of the portfolio (systematic risk, where Beta of the market = 1)

Investors can evaluate how well a mutual fund produces returns in relation to the systematic risk (market risk) assumed by using the Treynor Ratio. A fund with a greater Treynor Ratio is a superior investment since it offers more rewards per unit of market risk. On the other hand, a lower Treynor Ratio indicates that, in comparison to comparable market-linked investments, the fund is not sufficiently rewarding investors for the risk they are incurring.

A fund is more efficient for risk-adjusted performance if, for example, two funds have comparable returns but one has a higher Treynor Ratio. This indicates that the fund is producing those returns with less exposure to general market swings. However, the Treynor Ratio is best suited for well-

diversified portfolios where the majority of the risk originates from general market movements because it only takes into account market risk (Beta) and excludes unsystematic risk (fund-specific risk).

To make well-rounded investing selections, investors can combine the Treynor Ratio with other indicators like the Sharpe Ratio and Alpha.

TABLE 5

Scheme	Rp	Rf	Beta	Rp-Rf	Treynor ratio
SBI Long term equity Fund direct plan-growth	32.04	6.81	0.96	25.23	26.28
SBI healthcare opportunities fund direct plan -growth	32.12	6.81	0.85	25.31	29.78
ICICI Prudential infrastructure Direct growth fund	40.35	6.81	0.53	33.54	63.28
ICICI Prudential Pharma Healthcare and diagnostics (P.H.D) Fund	32.73	6.81	0.94	25.92	27.57
HDFC Mid cap opportunities fund	34.16	6.81	0.88	27.35	31.08
HDFC Focused 30 Fund	33.85	6.81	0.76	27.04	35.58
Nippon India Multi cap fund direct growth	32.83	6.81	0.93	26.02	27.98
Nippon India Consumption Fund direct growth	28.72	6.81	0.76	21.91	28.83
Kotak emerging equity fund direct growth	31.07	6.81	0.89	24.26	27.26
Kotak Equity savings fund direct growth	14.09	6.81	0.73	7.28	9.97

Ten mutual fund schemes' performance indicators are shown in the table, with particular attention paid to the Treynor ratios, beta, excess returns (Rp-Rf), returns (Rp), and risk-free rate (Rf). A crucial metric for risk-adjusted return, the Treynor ratio assesses how much extra return a fund produces for every unit of systematic risk, or beta. An elevated Treynor ratio signifies better performance in relation to market risk.

The ICICI Prudential infrastructure direct growth fund has the highest Treynor ratio of all of the schemes, at 63.28. This indicates that, when taking systematic risk into account, this fund has produced the best risk-adjusted returns. The fund's manager appears to have successfully produced robust returns while reducing market risk, as indicated by the high Treynor ratio. Subsequently, the Treynor ratio of 35.58 for the HDFC Focused 30 Fund indicates noteworthy performance in relation to market risk. The Treynor ratio for the HDFC Midcap Opportunities Fund is 31.08, which indicates a fair trade-off between market risk and reward.

Some schemes, however, have lower Treynor ratios, which indicates either lower returns or greater market risk relative to returns. It has struggled to generate returns without taking on significant market risk, as seen by the Kotak Equity savings fund direct growth having the lowest Treynor ratio at 9.97. The Treynor ratios for the SBI Long Term Equity Fund Direct Plan-Growth, SBI Healthcare Opportunities Fund Direct Plan-Growth, ICICI Prudential Pharma Healthcare and Diagnostics (P.H.D) Fund, Nippon India Multicap Fund Direct Growth, Nippon India Consumption Fund Direct Growth, and Kotak Emerging Equity Fund Direct Growth range from 26.28 to 29.78, indicating moderate risk-adjusted performance.

In conclusion, with the highest Treynor ratio, the ICICI Prudential infrastructure Direct growth fund is exceptional in terms of risk-adjusted performance in comparison to market risk. The Treynor ratio is a useful indicator, but it's crucial to keep in mind that past success does not guarantee future outcomes. Instead, investors should think about their personal

risk tolerance and investing objectives.

JENSEN'S ALPHA

The excess return of a mutual fund relative to the expected return given its risk level (Beta) is measured by Jensen's Alpha, often known as Alpha. It informs investors of whether active management by a fund manager has increased value. When the fund's Jensen's Alpha is positive, it has exceeded its projected return; when it is negative, it has underperformed.

Formula for Jensen's Alpha:

$$\alpha = R_p - [R_f + \beta_p(R_m - R_f)]$$

Where:

- α = Jensen's Alpha (excess return)

- R_p = Portfolio return (mutual fund return)
- R_f = Risk-free rate (e.g., government bond yield)
- β_p = Beta of the portfolio (market risk)
- R_m = Market return (benchmark return, e.g., NIFTY 50)

Interpretation of Jensen's Alpha

- $\alpha > 0$ (Positive Alpha): The mutual fund outperformed the expected return based on its risk level. This suggests that the fund manager's stock-picking skills and active management added value.
- $\alpha = 0$ (Zero Alpha): The fund performed as expected given its level of risk. There was no extra value from active management.
- $\alpha < 0$ (Negative Alpha): The fund

TABLE 6

Scheme	Beta	Rp	Rf	Rm	Rm-Rf	$\beta_p(R_m - R_f)$	$R_f + \beta_p(R_m - R_f)$	$\alpha = R_p - [R_f + \beta_p(R_m - R_f)]$
SBI Long term equity Fund direct plan-growth	0.96	32.04	6.81	24.14	17.33	16.64	23.45	8.59
SBI healthcare opportunities fund direct plan growth	0.85	32.12	6.81	28.57	21.76	18.50	25.31	6.81
ICICI Prudential infrastructure Direct growth fund	0.53	40.35	6.81	36.52	29.71	15.75	22.56	9.55
ICICI Prudential Pharma Healthcare and diagnostics (P.H.D) Fund	0.94	32.73	6.81	28.57	21.76	20.45	27.26	5.47
HDFC Mid cap opportunities fund	0.88	34.16	6.81	26.56	19.75	17.38	24.19	9.97
HDFC Focused 30 Fund	0.76	33.85	6.81	17.55	10.74	8.16	14.97	10.90
Nippon India Multi cap fund	0.93	32.83	6.81	23.4	16.59	15.43	22.24	10.59
Nippon India Consumption Fund	0.76	28.72	6.81	21.33	14.52	11.04	17.85	10.87
Kotak emerging equity fund direct growth	0.89	31.07	6.81	26.56	19.75	17.58	24.39	6.68
Kotak Equity savings fund direct growth	0.73	14.09	6.81	9.89	3.08	2.25	9.06	5.03

underperformed compared to the expected return. This suggests that the fund manager's decisions did not add value, and the investor might have been better off choosing a passive index fund instead.

With an alpha of 10.90, the HDFC Focused 30 Fund has the best value according to the data presented. The fund has significantly surpassed its predicted return, as indicated by this significant positive alpha, which also suggests that the fund management and stock selection were exceptional. The significance of this outperformance lies in the fact that it separates the fund's returns from what would be anticipated in light of market fluctuations and the fund's risk profile, as shown by its beta.

One of the main factors contributing to the fund's success seems to be its "Focused 30" strategy, which keeps a concentrated portfolio of 30 high-conviction stocks. This tactic enables the fund manager to distribute funds among their top investment suggestions, possibly optimizing returns. The fund manager may have a significant capacity to find and buy stocks that do better than the market as a whole, as shown by the high alpha. Effective risk management is further demonstrated by the fund's comparatively low beta of 0.76, which shows that it has produced these excellent returns with less volatility than the market. A longer-term analysis of the fund's alpha is necessary to verify steady outperformance.

The market return (R_m) in the table ranges from 9.89 to 36.52, which is a large variation across schemes. This shows that several schemes were compared to various market indices or time periods. It is important to remember that a high alpha does not always follow from a high R_m . Alpha calculates the excess return over the predicted return based on the fund's beta and market return.

The ICICI Prudential infrastructure direct growth

fund, for example, has the greatest market return (R_m) at 36.52. Nevertheless, even if the HDFC Focused 30 Fund has a lower market return (R_m) of 17.55, its alpha of 9.55 is less than the latter's alpha of 10.90. This discrepancy demonstrates that alpha is a more accurate indicator of fund success. Despite the fact that the general market environment was more beneficial for the ICICI Prudential fund, it demonstrates that the manager of the HDFC Focused 30 Fund was able to generate more value in relation to the market than the manager of the ICICI Prudential fund.

Simply put, a high R_m denotes a positive market environment, but a high alpha shows that the fund manager has successfully tapped into that environment and produced better returns than the market would have produced on its own. The HDFC Focused 30 Fund's performance shows that a competent fund manager may provide outstanding alpha through risk management and clever stock selection, even with a lower overall market return.

SORTINO RATIO

A more sophisticated form of the Sharpe Ratio, the Sortino Ratio gauges the risk-adjusted return of mutual funds by concentrating just on downside risk rather than overall volatility. Investors are mainly worried about negative returns, yet traditional risk measurements like standard deviation take into account both upward and downward variations. For investors who value capital protection, the Sortino Ratio is a more accurate indicator of risk because it employs downside deviation rather than total standard deviation. To calculate it, deduct the risk-free rate from the return on the portfolio, then divide the result by the downside deviation, which is the standard deviation of exclusively negative returns.

$$\text{Sortino Ratio} = \frac{R_p - R_f}{\sigma_p}$$

Where:

- R_p = Portfolio or fund return

- **Rf** = Risk-free rate (e.g., government bond yield)
- **σd** = Downside deviation (standard deviation of negative returns)

A fund with a greater Sortino Ratio is favored by risk-averse investors because it produces superior returns with less downside risk. While a negative ratio indicates that the fund performs worse than a risk-free investment, a value above 1 indicates strong risk-adjusted performance. The Sortino Ratio's main

advantage is that, in contrast to the Sharpe Ratio, which considers both equally, it distinguishes between good (positive) and bad (negative) volatility. Nevertheless, it has drawbacks, including the subjective nature of the minimum acceptable return (MAR) and its reliance on historical data. Notwithstanding these limitations, the Sortino Ratio is especially helpful for evaluating debt, equity, and hybrid mutual funds, assisting investors in making more informed choices on the management of downside risk.

TABLE 7

Scheme	1Y	3Y	5Y	Sortino Ratio
SBI Long term equity Fund direct plan-growth	12.22%	23.68%	32.04%	1.97
SBI healthcare opportunities fund direct plan -growth	25.41%	24.03%	32.12%	1.57
ICICI Prudential infrastructure Direct growth fund	10.93%	28.92%	40.35%	2.40
ICICI Prudential Pharma Healthcare and diagnostics (P.H.D) Fund	24.01%	23.61%	32.73%	1.54
HDFC Mid cap opportunities fund	13.92%	24.59%	34.16%	1.59
HDFC Focused 30 Fund	16.92%	23.54%	33.85%	2.42
Nippon India Multi cap fund direct growth	12.65%	22.62%	32.83%	1.66
Nippon India Consumption Fund direct growth	9.02%	18.92%	28.72%	1.15
Kotak emerging equity fund direct growth	18.93%	19.57%	31.07%	0.93
Kotak Equity savings fund direct growth	8.37%	11.26%	14.09%	1.14

Various mutual fund schemes' performance is displayed in the table, along with their Sortino Ratios and returns over one, three, and five years. Because it focuses on downside risk, the Sortino Ratio—a critical indicator for assessing risk-adjusted returns—is especially pertinent for investors who are worried about possible losses. With a Sortino Ratio of 2.42, the HDFC Focused 30 Fund Direct Plan Growth is the most notable of the mentioned plans. Accordingly, this fund has produced the best returns in relation to the downside risk it has assumed. An elevated Sortino Ratio indicates proficient risk mitigation and a steady capacity to produce profits while reducing the effects of adverse market swings. The Kotak emerging equities fund direct growth, on

the other hand, has the lowest Sortino Ratio (0.93), suggesting that it has not done as well in terms of risk-adjusted returns, particularly when it comes to downside risk.

With a solid Sortino Ratio of 2.40, the ICICI Prudential Infrastructure Direct Growth Fund lags behind the HDFC Focused 30 Fund. This implies that in addition to providing excellent returns, the ICICI Prudential fund has successfully minimized downside risk. A decent mix between returns and downside risk is shown by the SBI Long Term Equity Fund-Direct Plan-Growth, which comes in second with a Sortino Ratio of 1.97.

The remaining schemes exhibit Sortino Ratios ranging from 1.14 to 1.66. These include the Kotak Equity Savings Fund Direct Growth, the SBI Healthcare Opportunities Fund Direct Plan Growth, the ICICI Prudential Pharma Healthcare and Diagnostics (P.H.D) Fund-Direct Growth, the HDFC Mid Cap Opportunities Fund, the Nippon India Multicap Fund Direct Growth, and the Nippon India Consumption Fund Direct Growth. These numbers indicate different levels of risk-adjusted performance, with certain schemes showing superior risk management for the downside.

EXIT LOAD

Exit load is a fee charged by mutual fund companies when investors redeem their units before a specified period. It is expressed as a percentage of the redemption amount and is meant to discourage premature withdrawals, ensuring that investors stay invested for a longer duration. The exit load varies depending on the type of mutual fund. Equity mutual funds typically charge around 1% if units are redeemed within a year, while debt mutual funds may have an exit load ranging from 0.25% to 1% for redemptions within a few months. Liquid funds

generally do not impose an exit load, making them suitable for short-term investments. ELSS (tax-saving mutual funds) do not have an exit load but come with a mandatory 3-year lock-in period. The exit load is deducted from the redemption proceeds before the investor receives the final amount, directly impacting returns.

Investors should consider the exit load structure before making withdrawal decisions. For example, if an investor redeems ₹1,10,000 from an equity mutual fund with a 1% exit load, they will receive ₹1,08,900 instead of the full amount. Unlike expense ratios, which are deducted annually for fund management, exit load is a one-time charge applied only upon redemption. Mutual funds used to have an entry load, a fee at the time of investment, but SEBI abolished it in 2009 to make investing more transparent. Exit load details are available in the mutual fund fact sheets, Scheme Information Documents (SID). Additionally, Systematic Withdrawal Plans (SWP) and Systematic Transfer Plans (STP) may also attract exit loads if withdrawals occur within the specified exit load period.

TABLE 8

Scheme	1Y	3Y	5Y	Exit Load
SBI Long term equity Fund-Regular Plan-Growth	12.22%	23.68%	32.04%	NIL
SBI healthcare opportunities fund direct plan growth	25.41%	24.03%	32.12%	0.05%
ICICI Prudential infrastructure Direct growth fund	10.93%	28.92%	40.35%	1% within 15 days
ICICI Prudential Pharma Healthcare and diagnostics (P.H.D) Fund-Direct growth	24.01%	23.61%	32.73%	1% within 15 days
HDFC Mid cap opportunities fund	13.92%	24.59%	34.16%	1% within 1 year.
HDFC Focused 30 Fund Direct Plan Growth	16.92%	23.54%	33.85%	1% within 1 year
Nippon India Multi cap fund Direct Growth	12.65%	22.62%	32.83%	1% within 1 year
Nippon India Consumption Fund Direct Growth	9.02%	18.92%	28.72%	1% within 1 month
Kotak emerging equity fund direct growth	18.93%	19.57%	31.07%	1% redemption within 365 days.
Kotak Equity savings fund	8.37%	11.26%	14.09%	1% redemption within 90 days.

Understanding exit load is crucial for investors to optimize their returns and avoid unnecessary costs. Those with short-term liquidity needs should opt for funds with low or no exit load, such as liquid or overnight funds. Long-term investors, who do not require immediate withdrawals, may not be affected by exit loads if they hold their investments beyond the stipulated period. Before investing or redeeming, checking the exit load policy on the fund house's official website or financial advisory platforms can help investors make well-informed decisions.

EXPENSE RATIO

A mutual fund's expense ratio shows the yearly cost of fund ownership as a proportion of your investment. It pays for management fees, administrative charges, and other ancillary costs associated with the fund's operations. Consider the cost of the fund's expert management and related services. There is no separate bill for this ratio because it is subtracted straight from the fund's assets. Rather, the price per unit of the fund, or its net asset value (NAV), reflects it.

The expense ratio is made up of several parts, each of which adds to the total cost. The fund manager is compensated for their skill in choosing and

overseeing the investments in the fund by management fees, often referred to as advisory fees. Record-keeping, shareholder servicing, legal and auditing fees, and other daily operating costs of the fund are covered by administrative expenditures.

Marketing and distribution expenses, also known as 12b-1 fees, get their name from the Securities and Exchange Commission (SEC) rule that allows funds to charge them. The overall expense ratio may be significantly influenced when 12b-1 fees are applied, even though they are not imposed by all funds. Finally, there are a number of extra charges, such as custodian fees, transfer agent fees, and printing and mailing costs.

The return on your investment is directly impacted by the expense ratio. When the expense ratio is higher, the fund's expenses take up a greater percentage of your investment, leaving less for you. This can gradually reduce your earnings, especially over an extended period of time.

To begin with, a greater cost ratio results in lower returns because it takes money away from the assets of the fund. Your net returns may be reduced by excessive expenses, even if the fund does well.

TABLE 9

Scheme	1Y	3Y	5Y	Expense Ratio
SBI Long term equity fund-regular plan-growth	12.22%	23.68%	32.04%	1.07%
SBI healthcare opportunities fund direct plan growth	25.41%	24.03%	32.12%	0.97%
ICICI Prudential infrastructure Direct growth fund	10.93%	28.92%	40.35%	1.16%
ICICI Prudential pharma healthcare and diagnostics (P.H.D) fund-direct growth	24.01%	23.61%	32.73%	1.11%
HDFC Mid cap opportunities fund	13.92%	24.59%	34.16%	0.83%
HDFC Focused 30 Fund Direct Plan Growth	16.92%	23.54%	33.85%	0.71%
Nippon India Multi cap fund Direct Growth	12.65%	22.62%	32.83%	0.81%
Nippon India Consumption Fund Direct Growth	9.02%	18.92%	28.72%	0.58%
Kotak emerging equity fund direct growth	18.93%	19.57%	31.07%	0.45%
Kotak Equity savings fund	8.37%	11.26%	14.09%	0.65%

Furthermore, this effect is amplified over time by the compounding effect. Over a number of years, even a slight variation in expense ratios might result in a significant variation in returns since larger expenses lower the foundation upon which returns are computed.

An important consideration when investing in mutual funds is the expense ratio, which has a direct effect on returns and has the potential to gradually reduce profits. Investors can decrease expenses and enhance returns by choosing low-cost funds and closely examining expense ratios. Investor returns are eventually impacted by the expense ratio since it lowers the fund's NAV. Enhancing long-term profitability in mutual fund investments can be achieved by maintaining low expense ratios.

The table shows the performance of ten mutual fund schemes, together with their corresponding expense ratios and returns over one, three, and five years. The expense ratio shows how much it costs to own the fund each year as a percentage of your investment. Because it has a direct effect on investors' net returns, it is an important consideration.

With an expense ratio of 1.16%, the ICICI Prudential infrastructure direct growth fund is the scheme with

the highest expense percentage. This indicates that the fund's annual operational costs are paid using 1.16 for every 100 invested in the fund. Particularly in the long run, this very high expense ratio may lower investors' total returns.

On the other hand, the Kotak developing equities fund direct growth plan has the lowest charge ratio, at 0.45%. Among the schemes mentioned, this fund has the lowest operational costs, according to this information. In general, investors benefit from reduced expense ratios since they can keep a bigger share of their investment profits.

Although a lower expense ratio is typically preferred, it should not be the only consideration when making investing decisions. In addition, investors should think about their personal risk tolerance, investment goals, and the fund's performance. But if all else is equal, net profits will rise with decreasing spending ratios.

In conclusion, the ICICI Prudential infrastructure direct growth fund has the highest expense ratio, while the Kotak developing equities fund direct growth offers the lowest. Investors must to be aware of these variations and how they could affect returns.

TABLE 10

Scheme	Rp	Rf	Beta	SD	1Y	3Y	5Y	Treynor ratio	Sharpe ratio	Sortino Ratio	Alpha	Expense Ratio
SBI Long term equity Fund direct plan-growth	32.04	6.81	0.96	14.33	12.22%	23.68%	32.04%	26.28	1.76	1.97	8.5932	1.07%
SBI healthcare opportunities fund direct plan growth	32.12	6.81	0.85	14.61	25.41%	24.03%	32.12%	29.78	1.73	1.57	6.814	0.97%
ICICI Prudential infrastructure Direct growth fund	40.35	6.81	0.53	14.82	10.93%	28.92%	40.35%	63.28	2.26	2.4	9.55	1.16%
ICICI Prudential Pharma Healthcare and diagnostics (P.H.D) Fund	32.73	6.81	0.94	16.06	24.01%	23.61%	32.73%	27.57	1.61	1.54	5.4656	1.11%
HDFC Mid cap opportunities fund	34.16	6.81	0.88	15.31	13.92%	24.59%	34.16%	31.08	1.79	1.59	9.97	0.83%
HDFC Focused 30 Fund	33.85	6.81	0.76	11.26	16.92%	23.54%	33.85%	35.58	2.40	2.42	10.9	0.71%
Nippon India Multi cap fund direct growth	32.83	6.81	0.93	14.74	12.65%	22.62%	32.83%	27.98	1.77	1.66	10.5913	0.81%
Nippon India Consumption Fund direct growth	28.72	6.81	0.76	14.78	9.02%	18.92%	28.72%	28.83	1.48	1.15	10.8748	0.58%
Kotak emerging equity fund direct growth	31.07	6.81	0.89	15.97	18.93%	19.57%	31.07%	27.26	1.52	0.93	6.6825	0.45%
Kotak Equity savings fund direct growth	14.09	6.81	0.73	5.04	8.37%	11.26%	14.09%	9.97	1.44	1.14	5.0316	0.65%

Ten mutual fund schemes are thoroughly reviewed in the table, which also assesses each scheme's performance using a number of different indicators. The goal of this research is to determine which scheme offers the best combination of cost-effectiveness, risk management, and rewards. Particular attention is paid to the Treynor, Sharpe, Sortino, and alpha ratios in this assessment since they offer a strong grasp of risk-adjusted returns and fund manager effectiveness. Since the expense ratio has a direct effect on net returns, it is also crucial. When interpreting these data, investors should carefully examine their own investing horizons and risk tolerance.

The HDFC Focused 30 Fund is by far the best-performing fund on the list. It has the highest Treynor and Sharpe ratios, which indicate superior risk-adjusted returns, and it continuously shows good returns throughout all timeframes. Strong fund management is demonstrated by the fund's notable alpha and high Sortino ratio, which both demonstrate its efficient downside risk management. Its low expenditure ratio increases investor profits, and its low beta and standard deviation indicate less volatility, making it an extremely efficient option. The fund's approach, which focus

Although the ICICI Prudential infrastructure direct growth fund's expense ratio is little higher than that of the HDFC Focused 30 Fund, it likewise shows impressive performance, especially in its 5-year returns and risk-adjusted measures. For investors looking for a moderate level of risk exposure, the HDFC Midcap Opportunities Fund offers a balanced profile with strong returns and moderate risk indicators. Although it doesn't quite match the HDFC Focused 30 Fund's performance, it remains steady.

The Nippon India Multicap Fund Direct Growth and the SBI long-term equity fund direct plan growth are two schemes that rank moderately on a variety of parameters. Conversely, Kotak Equity savings fund

direct growth and Nippon India Consumption Fund have lower risk-adjusted returns and bigger risk profiles. Finally, the most attractive choice is the HDFC Focused 30 Fund, which offers a good combination of high returns, strong risk management, and cost effectiveness. Before making any investment selections, however, investors should always conduct a thorough market analysis and consider their risk tolerance and personal financial goals. In addition, they should understand that past performance does not ensure future profits.

Conclusion

The importance of many variables in assessing risk-adjusted returns and investment efficiency is shown by the examination of mutual fund performance metrics. Key performance metrics that are examined in the study are the Treynor Ratio, Jensen's Alpha, Sharpe Ratio, and Expense Ratios. Each of these metrics offers distinct perspectives on the profitability, volatility, and overall performance of a fund. Together, these metrics assist investors in making well-informed choices by determining if a fund's returns outweigh the amount of risk assumed.

According to research, funds with greater Treynor and Sharpe ratios offer better risk-adjusted returns, which appeals to investors looking for steady and reliable gains. While a greater Treynor Ratio implies better returns per unit of systematic risk, a higher sharpe ratio shows that a fund is successfully compensating investors for the risks faced. In a similar vein, a positive Jensen's Alpha indicates sound fund management since it shows how well a fund may beat its benchmark index after accounting for market risk. Conversely, a negative Alpha indicates poor performance, emphasizing how crucial it is to choose funds with capable management techniques.

Additionally, the report emphasizes how important it is to diversify and strategically allocate assets while investing in mutual funds. Diversified funds often

exhibit more stable performance over market cycles, lowering volatility and protecting investor capital. Funds can reduce the risk of economic downturns and industry-specific variations by distributing assets across a variety of asset classes and industries. The key factor influencing long-term investment success is performance consistency rather than quick profits, highlighting the necessity of patience and disciplined investing.

In conclusion, mutual fund selection should be guided by a comprehensive evaluation of performance metrics rather than past returns alone. Investors must consider risk-adjusted measures, cost implications, and fund management strategies to make well-informed decisions. A balanced approach—combining fundamental analysis with market trends and risk assessment—will enhance portfolio resilience and maximize investment

potential. Additionally, regulatory oversight ensures transparency in fund operations, further assisting investors in making prudent financial choices. By carefully analyzing these factors, investors can build robust portfolios that align with their financial goals while effectively managing risk and maximizing returns over time.

BIBLIOGRAPHY

<https://groww.in/mutual-funds/amc/sbi-mutual-funds>

<https://tradingeconomics.com/india/government-bond-yield#:~:text=The%20India%2010%2DYear%20Government%20Bond%20Yield%20is%20expected%20to,6.72%20in%2012%20months%20time.>

<https://groww.in/blog/top-amc-asset-management-company-india-biggest>

<https://www.valueresearchonline.com/indices/>