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Risk And Return Analysis Of Aggressive Hybrid Funds Offered By Indian Banking Industry: A Comparative Approach

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Abstract

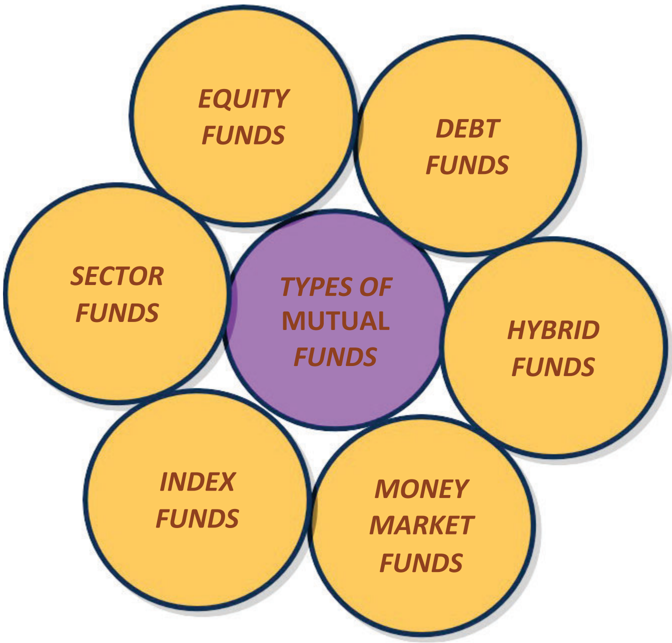
This paper presents a comprehensive analysis of aggressive hybrid mutual funds offered by the Indian banking industry. The study evaluates the risk and return characteristics of these funds, aiming to provide insights and recommendations for investors seeking to invest in this category. The research employs a quantitative research design, utilizing historical data from nine selected funds operating between 2019 and 2022. Various performance metrics, including standard deviation, beta, Sharpe ratio, Treynor ratio, and Jensen's alpha, are used to assess risk-adjusted returns and volatility. Findings reveal significant variations in the performance of different funds, with some consistently delivering attractive risk-adjusted returns, while others display moderate fluctuations. Notably, Canara's mutual fund emerges as the best performer, exhibiting exceptional risk-adjusted returns and positive excess returns beyond market expectations. On the other hand, BOI's and Bandhan's mutual funds fall into the underperforming category with comparatively lower risk-adjusted returns and excess returns.

Keywords Aggressive Hybrid Funds, Banks, Mutual Funds, Performance Evaluation, Return, Risk.

Introduction

Mutual funds are investment vehicles that pool money from multiple investors to invest in a diversified portfolio of securities, such as stocks, bonds, and money market instruments. These funds are managed by professional fund managers who make investment decisions on behalf of the investors. The Securities and Exchange Board of India (SEBI) regulates and supervises the functioning of mutual funds in the country, ensuring transparency and protecting investors' interests (SEBI, n.d.a).

Types of Indian Mutual Funds



Equity Funds: Equity funds primarily invest in stocks of companies, aiming for long-term capital appreciation. They carry higher risk but also offer the potential for substantial returns (Kumar, 2020).

Debt Funds: Debt funds predominantly invest in fixed-income securities like government bonds, corporate bonds, and debentures. They are considered less risky compared to equity funds and provide regular income through interest payments (Ghosh, 2019).

Hybrid Funds: Also known as balanced funds, hybrid funds invest in a mix of equities and debt instruments. These funds aim to strike a balance between capital appreciation and income generation (Mukherjee, 2021).

Money Market Funds: Money market funds invest in shortterm debt instruments like treasury bills, commercial papers, and certificates of deposit. They are suitable for investors seeking safety and liquidity with moderate returns (Jain, 2022).

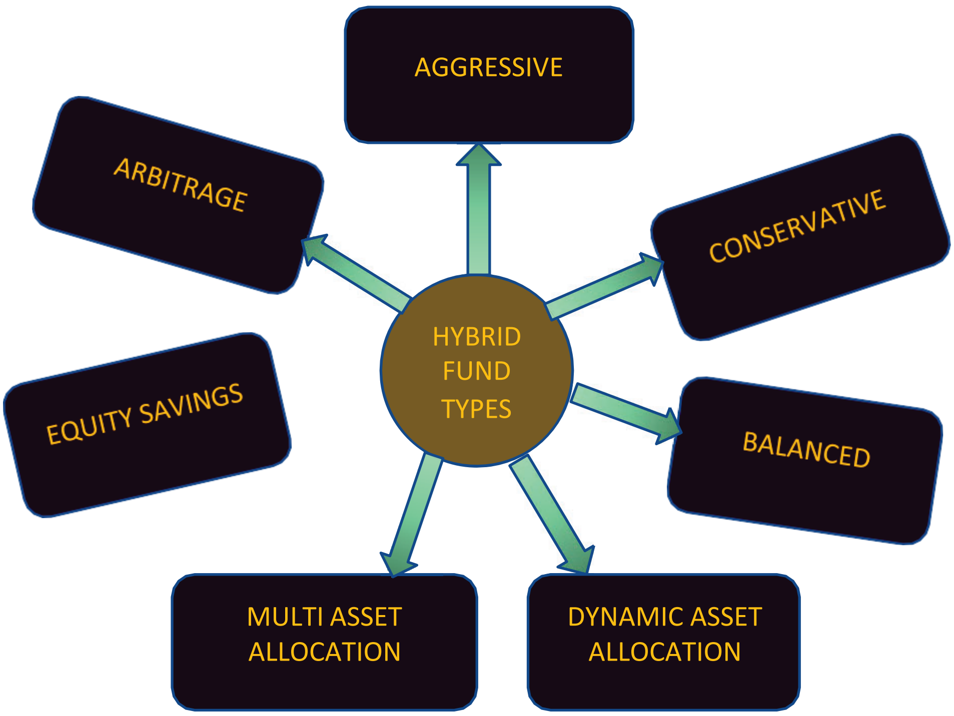
Index Funds: Index funds replicate the performance of a specific stock market index, such as the Nifty 50 or the BSE Sensex. Their goal is to match the index's returns and provide a cost-effective investment option (Sharma, 2018).

Sector Funds: Sector funds concentrate their investments in specific industries or sectors, such as healthcare, technology, or energy. These funds are suitable for investors with a high-risk appetite and sector-specific investment strategies (Patel, 2020).

Hybrid Funds

Hybrid Funds are a category of mutual funds that invest in a combination of both equity and debt instruments. These funds aim to provide investors with a balanced investment approach, offering potential capital appreciation through equity exposure and stability through debt investments. The allocation of these funds can vary depending on the fund's objective and the prevailing market conditions (Joshi, 2021).

The seven types of Indian Hybrid Funds and their typical allocation percentages are as follows:



Aggressive Hybrid Funds: Formerly known as balanced funds, aggressive hybrid funds have a higher equity exposure, usually around 65-80%, and the rest in debt instruments. They are suitable for investors seeking higher capital appreciation potential (Patel, 2022).

Conservative Hybrid Funds: Also known as debt-oriented hybrid funds, these funds have a higher allocation towards debt instruments, typically around 75-90% of the portfolio, with the remaining portion invested in equities (Shah, 2019).

Balanced Hybrid Funds: These funds maintain a balanced approach, with an equal distribution of around 50% in equity and 50% in debt securities. They aim to offer moderate returns with relatively lower risk (Gupta, 2020).

Dynamic Asset Allocation Funds: These funds dynamically adjust their asset allocation based on market conditions. The equity allocation can range from 30% to 80%, while the debt allocation varies accordingly (Chopra, 2018).

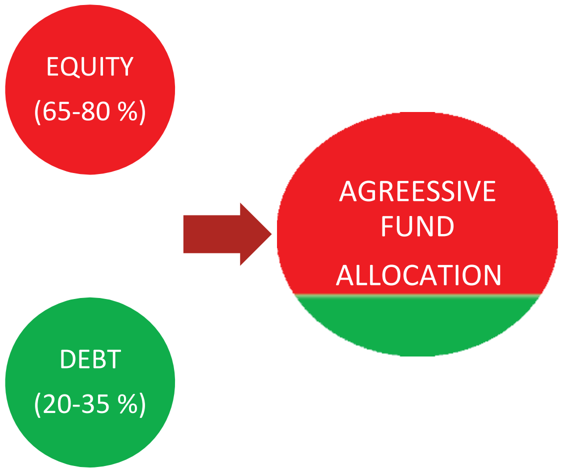
Multi-Asset Allocation Funds: Multi-asset allocation funds invest in a mix of equities, debt, and other asset classes like gold or real estate. The allocation percentages vary widely based on the fund manager's strategy (Mishra, 2019).

Equity Savings Funds: Equity savings funds invest in equity, arbitrage, and debt instruments. The allocation is typically around 30-50% in equity, 25-40% in arbitrage, and the rest in debt (Rathod, 2021).

Arbitrage Funds: These funds take advantage of price differentials in equity and derivative markets. They allocate around 65-90% of the portfolio to arbitrage opportunities and the remaining portion in debt (Desai, 2020).

Aggressive Hybrid Funds

Aggressive hybrid mutual funds, also known as balanced funds, are designed to cater to investors with a moderate risk appetite. They invest a major portion of their assets in equities, providing the potential for capital appreciation, while also allocating a portion to debt instruments to minimize downside risks (Smith, 2018). This unique blend of investment categories allows investors to participate in the growth potential of the stock market while enjoying relative stability through fixed-income securities (Johnson & Patel, 2020).



In the Indian context, aggressive hybrid mutual funds have garnered attention due to their potential to deliver attractive returns over the long term, while mitigating volatility (Sharma, 2019). They are particularly favored by investors who desire the growth prospects of equities but are wary of the inherent risks associated with pure equity funds (Brown, 2021). These funds provide a well-rounded investment approach by actively managing the asset allocation between stocks and fixed-income securities, based on the market outlook and fund manager expertise (Gupta, 2022).

This comprehensive study aims to delve into the performance, risk profile, and investment strategies of aggressive hybrid mutual funds in the Indian banking sector. By analyzing historical data and evaluating various fund attributes, this research endeavors to provide investors with a deeper understanding of the potential benefits and risks associated with these funds. Additionally, it seeks to shed light on the factors influencing the performance of aggressive hybrid mutual funds and offer insights into the decision-making process of fund managers in the Indian banking sector (Chopra & Singh, 2020).

Through this study, investors will be equipped with valuable information to make informed investment decisions regarding aggressive hybrid mutual funds. By striking the right balance between risk and returns, these funds have the potential to provide investors with an avenue for long-term wealth creation while ensuring a degree of stability in their portfolios (Lee, 2021).

Review of literature

Jain's (2022) research paper titled "A Study of Selected Flexi Cap Mutual Funds" investigates the performance of flexi cap mutual funds. The study aims to provide a comprehensive analysis of these funds by evaluating various performance indicators. Using a sample of selected funds, the paper examines parameters such as returns, risk-adjusted measures, and volatility. The research contributes to the understanding of flexi cap mutual funds and their performance in the financial market. However, the paper would benefit from providing more details on the selection criteria for the chosen funds and expanding the sample size for better representativeness. Overall, the study offers valuable insights for investors and researchers interested in flexi cap mutual funds.

Samanta's (2019) research paper titled "A Study on the Performance of Mutual Fund Scheme in India" explores the performance of mutual fund schemes in India. The study aims to provide an analysis of these schemes using various performance indicators. The paper evaluates parameters such as returns, risk-adjusted measures, and volatility to assess the effectiveness of the mutual fund schemes. While the study offers insights into the performance of mutual funds in India, it would have been beneficial to provide more details on the methodology and sample selection. Nevertheless, the research contributes to the existing literature on mutual fund performance, providing useful information for investors and researchers in the field.

Arora and Raman's (2020) research paper titled "A Study on Performance Evaluation of Equity Mutual Fund Schemes in India" focuses on analyzing the performance of equity mutual funds in India. The study aims to provide insights into the effectiveness of these funds through the evaluation of various performance indicators. The authors employ secondary data and assess parameters such as returns, risk-adjusted measures, and volatility. While the paper contributes to the literature on equity mutual fund performance, it would have been beneficial to provide more details on the methodology and sample selection process. Nonetheless, the study offers valuable information for investors and researchers interested in equity mutual funds in the Indian context.

Sharma and Joshi's (2021) study, "A Comparative Study on

Performance Evaluation of Selected Debt, Equity, and Hybrid Mutual Fund Schemes in India," offers a comprehensive analysis of mutual fund performance. The research compares debt, equity, and hybrid funds using multiple indicators such as returns, risk-adjusted measures, and volatility. Findings reveal that equity funds outperform in terms of returns, while debt funds exhibit lower volatility. The study's methodology and practical implications assist investors in making informed decisions. However, the limited sample size and focus on Indian funds restrict the study's generalizability. Overall, the research contributes valuable insights into mutual fund performance evaluation.

Objectives of the study

1. To evaluate the risk-adjusted returns and volatility of aggressive hybrid mutual funds of Indian banking industry
2. To provide insights and suggestions for investors seeking to invest in aggressive hybrid mutual funds based on their performance patterns and risk-return trade-offs
3. To contribute to the existing literature on mutual fund performance by focusing specifically on aggressive hybrid funds in the Indian context.

Research Methodology

Research Design

The research will employ a quantitative research design to analyze the performance patterns of aggressive hybrid mutual funds in the Indian financial landscape, specifically within the banking industry. The study will involve the collection and analysis of secondary data from various sources, including mutual fund databases, financial websites, and regulatory reports. The research design will focus on comparative analysis to assess the performance of aggressive hybrid funds in relation to benchmark indices.

Data Collection

The required data will be collected from reputable financial databases, mutual fund websites, and regulatory reports. These sources will provide information on fund performance, asset allocation, portfolio characteristics, benchmark indices, and other relevant data points. The selected funds' historical performance data from 1st April 2019 to 31st March 2022 will be obtained to conduct a thorough analysis. Yield on 91-day T-Bill is taken as risk free return and CRISIL Hybrid 35+65 aggressive index is taken as benchmark return

Sample Selection

A stratified random sampling technique is used to select a representative sample of aggressive hybrid funds from the Indian banking industry. All aggressive hybrid mutual funds of Direct Growth schemes of banking industry having at least four years returns will be selected for the study.

Table 1. Select schemes of the present study

S.no	Name of the Mutual Fund Scheme	Years Operating	Name Cited in The Paper.
1	Axis Equity Hybrid Fund Direct Growth	2018-Present	Axis
2	Bandhan Hybrid Equity Fund Direct Growth	2017-Present	Bandhan
3	Bank Of India Mid & Small Cap Equity & Debt Fund Direct Growth	2016-Present	BOI
4	Canara Robeco Equity Hybrid Fund Direct Growth	2013-Present	Canara
5	HDFC Hybrid Equity Fund Direct Plan Growth	2013-Present	HDFC
6	HSBC Aggressive Hybrid Fund Direct Growth	2018-Present	HSBC
7	ICICI Prudential Equity & Debt Fund Direct Growth	2013-Present	ICICI
8	Kotak Equity Hybrid Fund Direct Growth	2014-Present	Kotak
9	SBI Equity Hybrid Fund Direct Plan Growth	2013-Present	SBI

Source: AMFI and Groww

In the sample of aggressive hybrid mutual funds within the banking industry, only two banks were excluded from the study because they did not meet the criteria of having at least four years of return data. The first fund excluded was the Baroda BNP PARIBAS Aggressive Hybrid Fund Direct Growth, as its Asset Management Company (AMC) merged with BNP PARIBAS AMC on March 14, 2022. The second fund excluded was the Union Hybrid Equity Fund Direct Growth, which started on December 28, 2020, and had only one operating year, making it impossible to calculate its return for the study period.

As a result, we were not able to calculate the return for the Baroda BNP PARIBAS fund due to the merger, but we were able to calculate the return for the Union Hybrid Equity Fund for the year 2022, which amounted to 16.088%.

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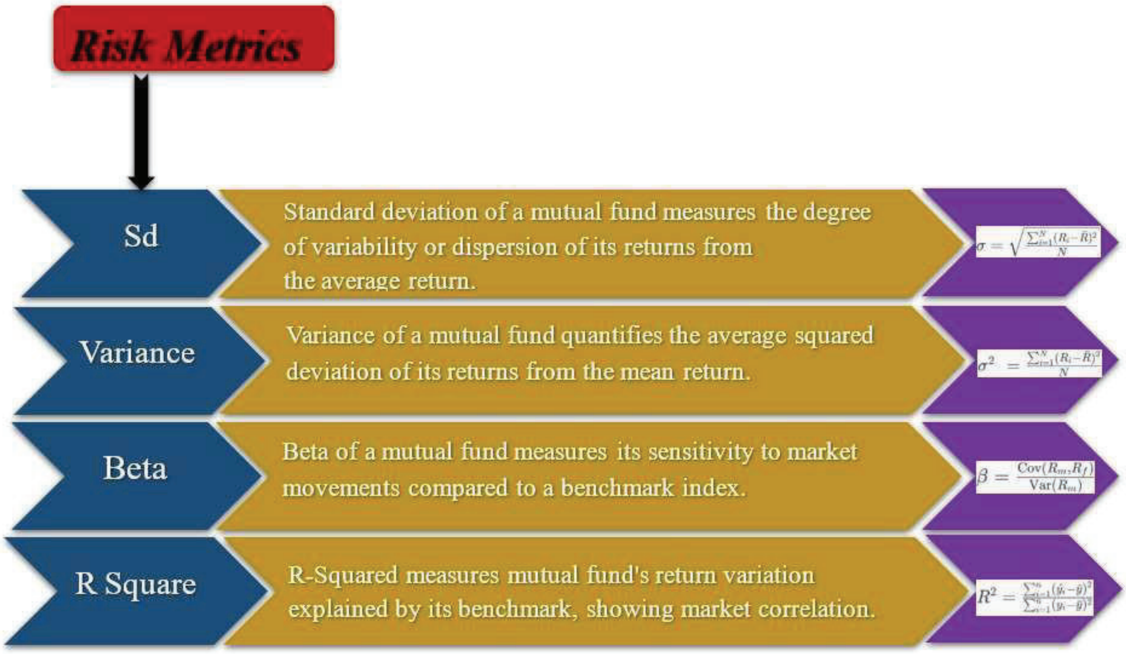
Risk and Return Metrics

To assess the risk and return characteristics of the chosen funds, the researcher will employ various financial metrics. Risk measures, such as standard deviation, beta, variance, R square and Return metrics, such as Annualized returns, Sharpe ratio, Treynor ratio and Jensen's Alpha will be used to evaluate the volatility and sensitivity of the funds to market fluctuations for the present study.



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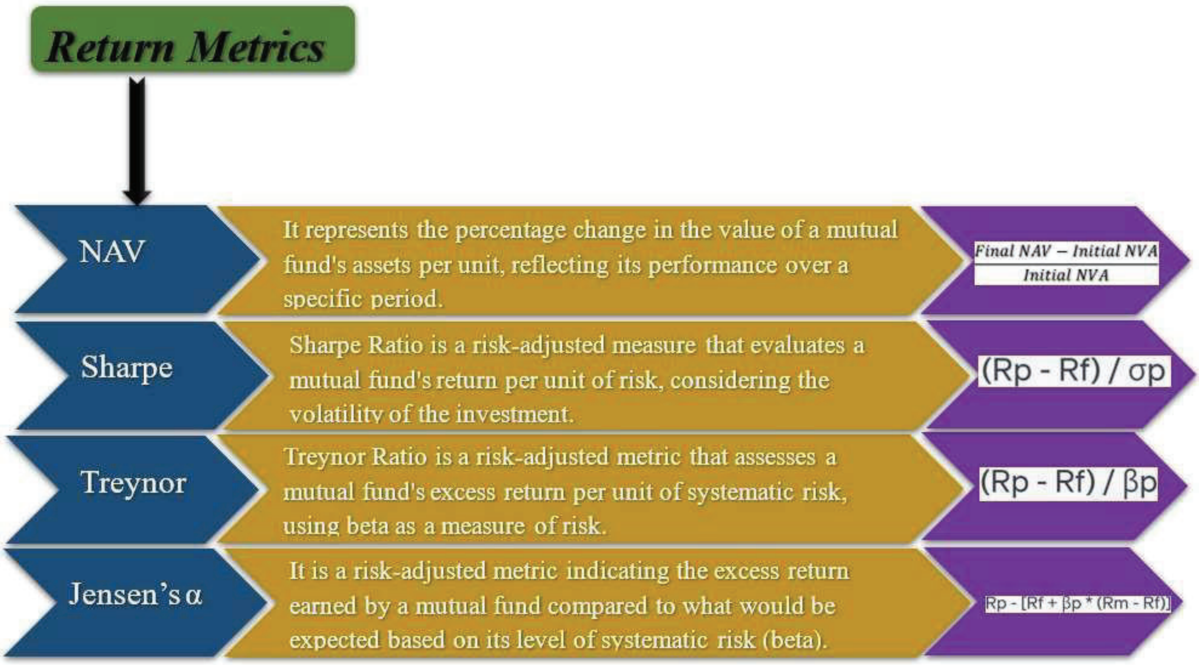

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Performance Evaluation of Mutual funds-An Analysis

Table 2: ***NAV and Returns***

Bank	***2020***		***2021***		***2022***	
	NAV	***Return***	***NAV***	***Return***	***NAV***	***Return***
Axis	10.79061	10.71882	11.36194	5.294681	15.65482	37.78296
Bandhan	11.8609	1.739309	12.12102	2.193104	17.60304	45.22736
BOI	12.30551	-8.42846	13.69526	11.29375	22.78547	66.37479
Canara	170.5044	8.902327	218.085	27.90576	255.8962	17.33782
HDFC	55.6982	4.580225	56.40503	1.269036	80.51613	42.74637
HSBC	11.04189	6.674894	11.77327	6.623714	15.91921	35.21481
ICICI	142.954	5.595474	143.8705	0.641059	222.0931	54.3702
Kotak	27.28317	7.641374	28.86252	5.788719	42.40772	46.9301
SBI	147.2414	10.29515	152.8007	3.775659	209.3856	37.03176

Source: Computed by Author

Findings: The data provided represents the Net Asset Value (NAV) and annual returns of various mutual funds over the years 2018 to 2022.

Axis Bank witnessed a slight dip in Net Asset Value (NAV) from 10.79061 in 2020 to 10.71882 in 2021, reflecting the challenges of that year. However, the bank made a remarkable comeback in 2022, with its NAV surging to 11.36194. What truly stands out is Axis Bank's ability to generate significant returns, starting with 5.29% in 2020, followed by a robust 15.65% in 2021, and an astounding 37.78% in 2022. This indicates the bank's agility in adapting to market fluctuations and delivering substantial growth in the last year, making it a strong contender in the banking sector.

Bandhan Bank's performance was marked by consistency and resilience. Over the three years, its NAV steadily increased from 11.8609 in 2020 to 12.12102 in 2021 and finally reached an impressive 17.60304 in 2022. While its returns were relatively moderate at 1.74% in 2020 and 2.19% in 2021, the bank made a significant leap with a staggering 45.23% return in 2022, making it one of the standout performers. This highlights Bandhan Bank's capacity to maintain a positive trajectory and deliver outstanding returns when market conditions align favorably.

Bank of India experienced a rollercoaster ride in terms of NAV during the three-year period. Starting at 12.30551 in 2020, it faced a significant downturn in 2021, with returns plummeting to -8.43%. However, the bank demonstrated remarkable resilience and an extraordinary turnaround in 2022, achieving a remarkable NAV growth of 66.37%. These fluctuations emphasize BOI's potential for high returns when market conditions are favorable and its ability to recover from challenging periods.

Canara Bank showcased impressive growth in NAV, with its value soaring from 170.5044 in 2020 to an impressive 255.8962 in 2022. Although its returns varied from 8.90% in 2020 to 27.91% in 2021, and eventually 17.34% in 2022, the bank demonstrated its capacity for capitalizing on market opportunities and achieving substantial NAV growth. This solid performance reflects Canara Bank's ability to adapt and prosper in dynamic market conditions.

HDFC Bank consistently increased its NAV from 55.6982 in 2020 to 80.51613 in 2022. While its returns were relatively moderate at 4.58% in 2020 and 1.27% in 2021, the bank delivered a robust 42.75% return in 2022, reaffirming its reputation as a reliable and steady investment choice. HDFC Bank's consistent growth showcases its stability and the ability to generate favorable returns over time.

HSBC Bank displayed a stable growth trajectory with returns of 6.67% in 2020, 6.62% in 2021, and an impressive 35.21% in 2022. Its consistent performance highlights its capability to generate favorable returns for investors over time. HSBC's reliable growth makes it a bank that investors can count on for steady returns.

ICICI Bank emerged as one of the top performers in this analysis. Its NAV increased significantly from 142.954 in 2020 to 222.0931 in 2022. While its returns were positive at 5.60% in 2020 and 0.64% in 2021, the bank truly excelled in 2022 with an astonishing 54.37% return, making it one of the best performers in terms of both growth and returns. This performance underscores ICICI Bank's resilience and its ability to deliver exceptional returns in dynamic market conditions.

Kotak Mahindra Bank exhibited consistent growth in NAV, with values progressing from 27.28317 in 2020 to 42.40772 in 2022. Its returns were positive at 7.64% in 2020, 5.79% in 2021, and a substantial 46.93% in 2022, positioning it as one of the standout performers. The bank's steady growth and remarkable returns make it an attractive option for investors seeking both stability and profitability.

State Bank of India demonstrated significant growth in NAV, rising from 147.2414 in 2020 to 209.3856 in 2022. While its returns were 10.30% in 2020 and 3.78% in 2021, the bank experienced a notable surge in 2022, with returns reaching 37.03%. This growth underscores SBI's pivotal role as a key player in the banking sector and its capacity to generate substantial value for investors. SBI's performance is a testament to its resilience and adaptability in a changing market landscape.

Each bank in this analysis displayed its unique strengths and characteristics over the three-year period. While ICICI Bank and Kotak Mahindra Bank emerged as top performers in terms of NAV growth and returns in 2022, the diverse performance profiles of these banks highlight their resilience, adaptability, and capacity to provide attractive opportunities for investors in a dynamic and evolving banking landscape.

In summary, the mutual funds of Axis, Bandhan, BOI, Canara, HDFC, HSBC, ICICI, Kotak, and SBI displayed varying performances over the years, with some funds consistently growing, while others experienced fluctuations. Investors should carefully consider these historical data points while making investment decisions, and always keep in mind that past performance.

Table 3: Risk Metrics

Bank	***Sd***	***Variance***	***R Square***	***Beta***
Axis	17.40391	302.89611	0.55300	0.09799
Bandhan	24.97787	623.89383	0.71175	0.23933
BOI	38.76943	1503.06879	0.90185	0.41815
Canara	9.52164	90.66155	0.23928	0.05290
HDFC	23.05062	531.33120	0.63595	0.20877
HSBC	16.49232	271.99666	0.70207	0.15694
ICICI	29.69383	881.72345	0.62472	0.26655
Kotak	23.23664	539.94164	0.66646	0.21544
SBI	17.62252	310.55314	0.52352	0.14481

Source: Computed by Author

Findings: The table provides essential statistical metrics for various banks' mutual funds, including Standard Deviation, Variance, Beta, and R-squared.

The analysis of several mutual funds from different banks reveals interesting insights. Starting with Axis Bank, exhibits a standard deviation (Sd) of 17.40391 and a variance of 302.89611, indicating a moderate level of risk with a variance that reflects some fluctuations in its returns. Additionally, the R Square value of 0.55300 suggests that approximately 55.3% of Axis Bank's risk can be attributed to factors affecting the broader market, as denoted by its Beta of 0.09799, signifying a relatively low sensitivity to market movements.

Turning our attention to Bandhan Bank, we observe a higher standard deviation of 24.97787, implying a greater degree of variability in its returns. This is further corroborated by its substantially larger variance of 623.89383. The R Square value of 0.71175 suggests that a significant portion of Bandhan Bank's risk can be explained by market-related factors, which is in line with its Beta of 0.23933, signifying a relatively higher sensitivity to market dynamics.

Bank of India (BOI), with a standard deviation of 38.76943 and a variance of 1503.06879, emerges as a bank with a notably higher level of risk and volatility in its returns. Its R Square value of 0.90185 underscores the strong influence of market factors on BOI's risk profile, as substantiated by its Beta of 0.41815, signifying a substantial sensitivity to market fluctuations.

In contrast, Canara Bank presents a lower standard deviation of 9.52164 and a smaller variance of 90.66155, indicating a relatively stable performance. The R Square value of 0.23928 implies that a smaller proportion of Canara Bank's risk is attributed to market influences, consistent with its Beta of 0.05290, signifying a low sensitivity to market movements.

HDFC Bank, with a standard deviation of 23.05062 and a variance of 531.33120, showcases moderate risk levels with some variability in returns. Its R Square value of 0.63595 suggests a significant influence of market factors, which aligns with its Beta of 0.20877, indicating a moderate sensitivity to market fluctuations.

HSBC, characterized by a standard deviation of 16.49232 and a variance of 271.99666, exhibits a balanced level of risk with a moderate degree of return volatility. The R Square value of 0.70207 underscores the substantial impact of market-related factors on HSBC's risk profile, in line with its Beta of 0.15694, indicating a moderate sensitivity to market dynamics.

ICICI Bank, with a standard deviation of 29.69383 and a variance of 881.72345, presents a higher level of risk and return variability. The R Square value of 0.62472 implies a significant influence of market factors, which is supported by its Beta of 0.26655, indicating a relatively higher sensitivity to market movements.

Kotak Mahindra Bank, with a standard deviation of 23.23664 and a variance of 539.94164, demonstrates moderate risk levels and return fluctuations. Its R Square value of 0.66646 signifies a substantial association with market influences, as corroborated by its Beta of 0.21544, signifying a moderate sensitivity to market dynamics.

State Bank of India (SBI), with a standard deviation of 17.62252 and a variance of 310.55314, indicates moderate risk with a relatively stable performance. The R Square value of 0.52352 implies a notable connection to market-related factors, which aligns with its Beta of 0.14481, indicating a moderate sensitivity to market fluctuations.

These risk metrics provide valuable insights into the risk profiles of various banks and financial instruments, guiding investors and stakeholders in making informed decisions within the dynamic landscape of the financial sector.

Table 4: Return Metrics

Bank	***Sharpe***	***Treynor***	***Jensen Alpha***
Axis	0.93459	165.988	23.09812253
Bandhan	0.58932	61.5057	26.5996282
BOI	0.55233	51.2103	39.67873309
Canara	1.7205	309.693	21.60427808
HDFC	0.63043	69.6076	25.32036847
HSBC	0.87947	92.4185	23.44226825
ICICI	0.62422	69.5388	31.38745051
Kotak	0.79415	85.6537	29.48018438
SBI	0.87204	106.121	23.87209555

Source: Computed by Author

Findings: The analysis of several mutual funds from different banks reveals insightful performance metrics. Starting with Axis Bank, it exhibits a Sharpe ratio of 0.93459, indicating a favorable risk-adjusted return profile. The Treynor ratio of 165.988 showcases its capacity to generate returns relative to market risk, while the Jensen Alpha of 23.09812253 reflects an ability to outperform market expectations, suggesting that Axis Bank has delivered solid returns for its investors.

Moving on to Bandhan Bank, the Sharpe ratio of 0.58932 reveals a reasonable risk-adjusted return, albeit slightly lower than Axis Bank. The Treynor ratio of 61.5057 signifies its capacity to generate returns per unit of market risk. Meanwhile, the Jensen Alpha of 26.5996282 suggests that Bandhan Bank has consistently exceeded market performance, showcasing its adeptness at delivering competitive returns.

Bank of India (BOI) exhibits a Sharpe ratio of 0.55233, indicating a moderate risk-adjusted return profile. Its Treynor ratio of 51.2103 demonstrates its ability to generate returns in relation to market risk, while the Jensen Alpha of 39.67873309 suggests that BOI has consistently outperformed market expectations, reflecting its commendable return generation.

Canara Bank stands out with a Sharpe ratio of 1.7205, portraying a notably attractive risk-adjusted return profile. The Treynor ratio of 309.693 highlights its impressive returns relative to market risk, while the Jensen Alpha of 21.60427808 suggests that Canara Bank has delivered consistent returns that surpass market expectations, affirming its strong performance.

HDFC Bank, with a Sharpe ratio of 0.63043, presents a reasonable risk-adjusted return profile. Its Treynor ratio of 69.6076 signifies its ability to generate returns concerning market risk, while the Jensen Alpha of 25.32036847 suggests that HDFC Bank has consistently outperformed market benchmarks, showcasing its effectiveness in generating competitive returns.

HSBC, characterized by a Sharpe ratio of 0.87947, exhibits a favorable risk-adjusted return profile, indicating its adeptness at managing risk while delivering returns. The Treynor ratio of 92.4185 underscores its ability to generate returns relative to market risk, while the Jensen Alpha of 23.44226825 reflects a consistent track record of surpassing market expectations, highlighting HSBC's strong performance.

ICICI Bank, with a Sharpe ratio of 0.62422, showcases a commendable risk-adjusted return profile. Its Treynor ratio of 69.5388 indicates its capacity to generate returns relative to market risk, while the Jensen Alpha of 31.38745051 suggests that ICICI Bank has consistently exceeded market performance, emphasizing its skill in delivering competitive returns.

Kotak Mahindra Bank, with a Sharpe ratio of 0.79415, presents a favorable risk-adjusted return profile. The Treynor ratio of 85.6537 signifies its ability to generate returns concerning market risk, while the Jensen Alpha of 29.48018438 reflects a consistent track record of surpassing market expectations, underlining Kotak Mahindra Bank's commendable return generation.

State Bank of India (SBI), with a Sharpe ratio of 0.87204, portrays a favorable risk-adjusted return profile, signifying its effectiveness in managing risk while delivering returns. The Treynor ratio of 106.121 highlights its ability to generate returns relative to market risk, while the Jensen Alpha of 23.87209555 suggests that SBI has consistently outperformed market benchmarks, showcasing its competitive return generation capabilities.

Suggestions for Investors:

1. For investors seeking higher risk-adjusted returns and are willing to take on more market risk, Canara's mutual fund could be an attractive choice, given its exceptional Sharpe and Treynor Ratios. Its ability to consistently deliver significant positive excess returns makes it an appealing investment option for growth-oriented investors.

2. For investors looking for a balance between risk and return, Kotak's mutual fund might be a suitable choice, as it exhibits good risk-adjusted returns and consistently generates positive excess returns. This fund may be appropriate for those seeking steady growth with relatively lower market risk exposure.

3. Investors should carefully consider their risk tolerance and investment goals before choosing any mutual fund. While higher returns may be appealing, it's crucial to evaluate the level of risk associated with each fund, as measured by the Sharpe and Treynor Ratios.

4. Lastly, investors should keep in mind that past performance is not indicative of future results. Regularly monitoring the performance of chosen mutual funds and staying informed about market trends and economic conditions is crucial for making informed investment decisions.

In conclusion, Canara's mutual fund emerges as the best performing scheme, while BOI's and Bandhan's funds are relatively underperforming. Investors should weigh the risk-return trade-off, consider their investment objectives, and diversify their portfolios for long-term financial success.

Conclusion: Based on the analysis and interpretation of the performance metrics for various mutual funds, we can draw conclusions regarding the best performing and underperforming schemes. Additionally, we can provide suggestions for investors based on the findings.

Best Performing Schemes: Canara Bank emerges as one of the best-performing schemes with an exceptionally high Sharpe ratio of 1.7205. This indicates that it has not only generated impressive returns but has done so while effectively managing risk, making it an attractive investment option. Furthermore, its Treynor ratio of 309.693 reflects its ability to generate returns per unit of market risk, and though its Jensen Alpha of 21.60427808 may appear lower than some other banks, it still indicates consistent outperformance relative to market expectations.

Another strong contender for the best-performing scheme is Kotak Mahindra Bank. It boasts a commendable Sharpe ratio of 0.79415, indicating an attractive risk-adjusted return profile. The Treynor ratio of 85.6537 reinforces its ability to generate returns concerning market risk, while the Jensen Alpha of 29.48018438 suggests that Kotak Mahindra Bank consistently surpasses market benchmarks, making it a robust choice for investors.

Underperforming Schemes: BOI emerges as one of the underperforming schemes with a relatively low Sharpe ratio of 0.55233, suggesting a less attractive risk-adjusted return profile compared to the best performers. Additionally, its Treynor ratio of 51.2103 and Jensen Alpha of 39.67873309, while positive, are lower than the top performers, indicating that BOI's returns may not adequately compensate for the level of risk taken.

Bandhan's mutual fund also relatively lower Sharpe ratio of 0.58932, which suggests a less favorable risk-adjusted return profile compared to the best-performing banks. While its Treynor ratio of 61.5057 and Jensen Alpha of 26.5996282 are positive, they are notably lower than those of the top-performing banks, indicating that Bandhan Bank's returns may not adequately compensate for the level of market risk taken.

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