

## A Study on Performance Evaluation of Select Mutual Funds

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### ABSTRACT:

Mutual funds are investment instruments that invest in stocks and bonds, allowing investors to gain from bonds, fixed income securities, and commodities. These funds pool cash from investors to buy stocks, bonds, and other securities. Blue chip schemes, money equity funds, are primarily used to finance and equity-related securities of large-cap companies. These funds invest in companies with a reputation for paying regular dividends, resulting in consistent profits over a long period and a risk-return. Blue chip schemes are considered the best mutual fund schemes and safest to invest in. The research used secondary data from the top five blue chip funds in India for five years, using technical measures like Sharpe's, Treynor's, and Jensen's ratio. Blue-chip schemes, which are equity funds, consistently yield significant profits over time and offer a risk-free return. These schemes are considered the best mutual funds and safest investments. The research uses secondary data from the top five blue chip funds in India for five years, using technical measures like Sharpe's, Treynor's, and Jensen's ratio.

**KEY WORDS:** Blue chip Mutual Fund, Risk returns, Sharpe's ratio, Treynor's ratio, Jensen's ratio.

### INTRODUCTION:

Mutual funds are founded as trusts to raise funds from investors for investment in various markets and assets. There is a mutual fund manager who makes decisions about your own money that is invested in mutual fund schemes, and depending on the mutual fund scheme's objectives, it can be invested in equities, debt, or both. The investor will choose the finest mutual fund schemes based on the fund's age, Asset Under Management (AUM), high risk returns, active fund management, historical performance, standard deviation, sharp ratio, and expense ratio. The goal of this study is to examine the performance of the top five prominent mutual funds. The goal of this study is to examine the performance of the top five major mutual fund schemes in India using risk return analysis. This analysis is based on secondary data, with risk returns derived using SIP returns from 2019 to 2023. Technical techniques such as Sharpe's, Jensen's, and Treynor's ratios were employed to evaluate mutual fund schemes. The goal is to research, understand, and analyze the risk and return of the selected mutual fund schemes, as well as evaluate the mutual fund's performance using technical metrics.

## REVIEW OF LITERATURE:

Dr. Bhadrappa Haralayaa(2022) attempted to evaluate some diversified equities mutual funds in India in his research paper titled "Performance evaluation of mutual funds". It is a study of the performance of chosen diversified equities mutual funds in India. The computation is based on both the Sharpe Ratio and the Treynor Ratio, and it uses secondary data. The essential tools are the Chi-square test and ANOVA, and the study style is qualitative.

In her research work "A Study on Performance Evaluation of Equity Mutual Fund Scheme," Sireesha Nanduri (2021) claims that it is important to understand the many inputs and output variables influencing the performance of particular equity large- and small-cap mutual funds. Examine how effective the mutual funds you have chosen are. Analyse the chosen mutual fund schemes' performance variance under constant returns to scale and tools. Chi-square, type of data and research technique secondary data and Convenience sampling method.

In her work "Performance evaluation of debt mutual fund schemes in India," Komala B. Sharma (2020) looks at the mutual funds' risk and return components. Examine the connection between NAV and market portfolio return (BSE Sense), and use Fame's model to assess these mutual funds' performance. It also looks at schemes where the average return is lower than the market index. Chi square, ANOVA, and other secondary data tools are employed in qualitative research.

The research paper "Performance Evaluation of Indian Mutual Fund Schemes and Its Impact on Investment Decision" by Bishwajit Rout (2019) aims to comprehend the market's mutual fund companies' performances. In order to assist with investing in a variety of mutual fund schemes, it will analyses decision-making regarding mutual funds using statistical tools and ratios that assess the risk-adjusted investment performance of Indian mutual funds. Jensen and Sharpe ratios were employed by a tool.

## OBJECTIVES OF THE STUDY:

1. To analyses the performance of Top 5 Blue Chip Mutual Fund schemes in India.
2. To study the risk and return of the selected mutual fund schemes.
3. To evaluate the performance of the mutual fund by adopting technical measures.

### **TYPE OF RESEARCH:**

This survey is on “Performance evaluation of Select mutual funds”. This study is Descriptive in nature and this study an attempt is made to understand the Performance evaluation of select mutual funds in private and public sector in India. It is Descriptive method because this methodology focuses on surveys to collect data about varying subjects. The data has been gathered to make survey on “Performance of the Top 5 mutual fund schemes in India”.

### **SCOPE OF THE STUDY:**

This study leads to investors to invest in mutual funds they were able to expand their investment in common stocks, bonds and other financial securities.

This study, will direct the investor in planning their investment in mutual fund schemes, it will also act as a guide to foundation for the investors.

### **SOURCES OF DATA COLLECTION:**

The study is purely from secondary sources. The monthly NAV and SIPs of the selected schemes has been collected the data for analysis. The risk-free value is collected from RBI and from money control website on monthly bases the data has been has been collected for the study on top 5 Blue Chip Fund.

### **POPULATION AND SAMPLING UNIT:**

There are 44 Asset Management Companies (AMC’s) and in excess of 2,500 mutual fund schemes are operating in India. The sampling unit will be selected on top 5 private and public sector AMC’s operating in India and selected based on the optimal returns.

### **SAMPLING METHOD:**

In this study, the convenience sampling method has been used to analyses the Performance of select Mutual Fund Scheme. Convenience sampling method once it is in a kind of non-prospect sampling method where the sample is taken for a group of people easy to Contact or to reach.

### **SAMPLE SIZE:**

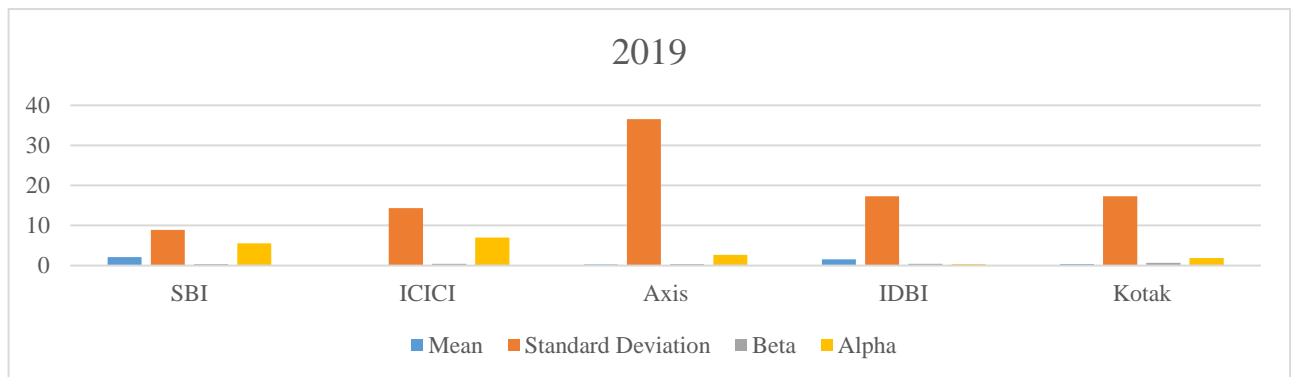
The sampling unit will be Top 5 AMCs selected on risk return, they are SBI mutual fund, ICICI Prudential, Axis, IDBI and Kotak. The “Performance evaluation of Top 5 Leading mutual funds schemes” has covered in a period of 5 years i.e. 2019 to 2022.

### **FINANCIAL TOOLS USED:**

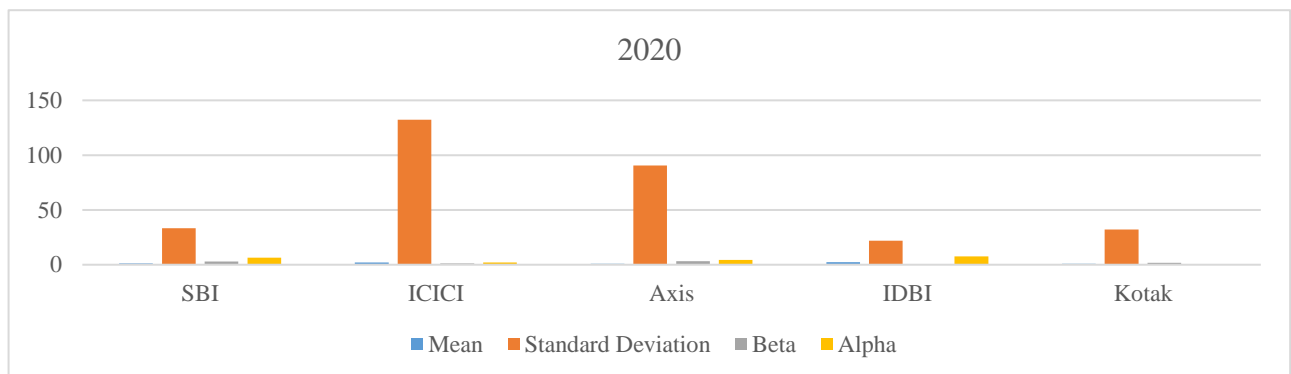
This study has been analyzed used financial tools such as Sharpe’s ratio, Treynor’s ratio and Jensen’s measures of mutual fund evaluation. Sharpe’s Ratio Formula:  $R_p - R_f / \alpha$ , Treynor’s Ratio Formula:  $R_p - R_f / \beta$ , Jensen’s ratio Formula:  $R_p - (R_f + \beta (R_m - R_f))$

**TABLE & GRAPH SHOWING SELECTED MUTUAL FUND SCHEMES BASED ON RETURNS**

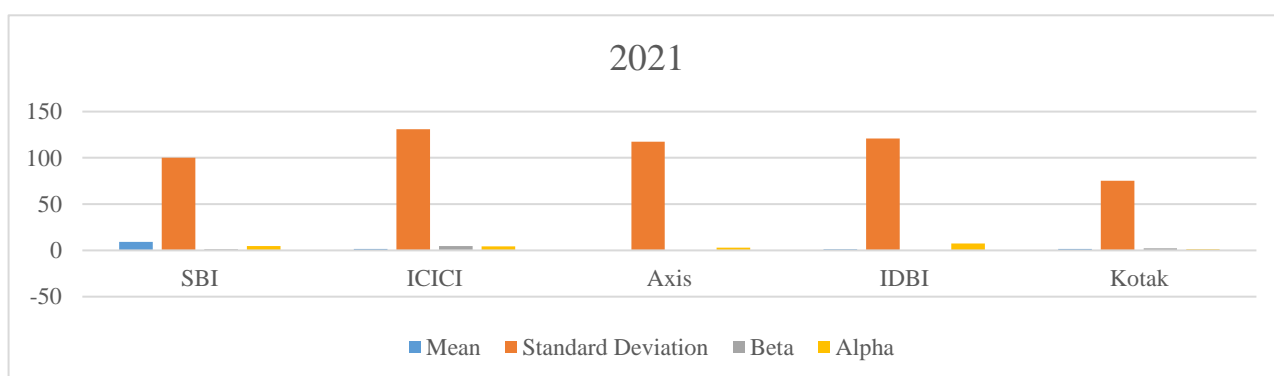
2019				
FUND NAME	Mean	Standard Deviation	Beta	Alpha
SBI	2.09	8.87	0.36	5.53
ICICI	0.07	14.35	0.43	7
Axis	0.27	36.57	0.37	2.66
IDBI	1.56	17.29	0.44	0.33
Kotak	0.33	17.3	0.64	1.89



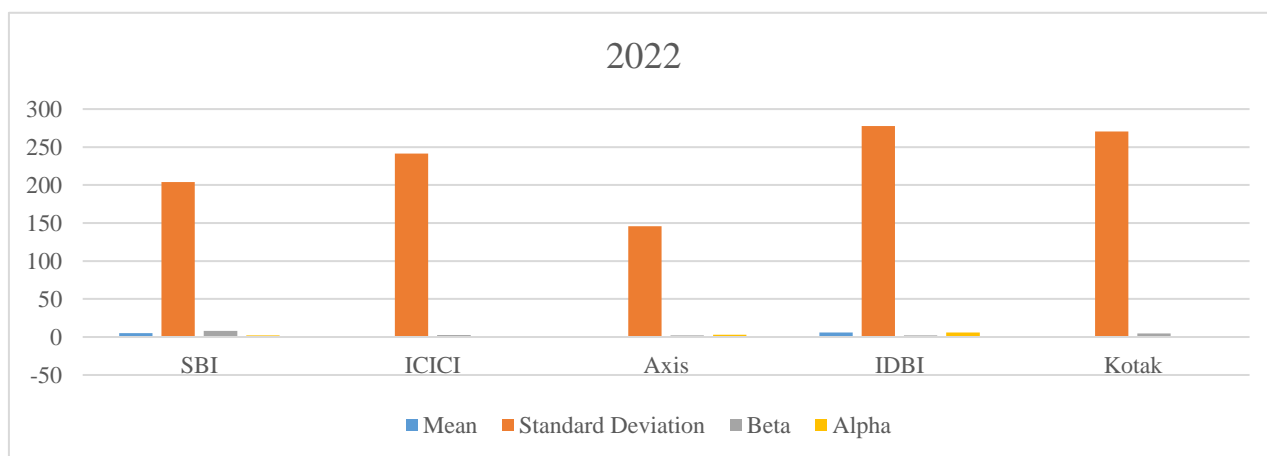
2020				
FUND NAME	Mean	Standard Deviation	Beta	Alpha
SBI	1.27	33.3	2.85	6.53
ICICI	1.95	132.27	1.08	2.01
Axis	0.86	90.61	3.14	4.52
IDBI	2.39	21.86	0.28	7.5
Kotak	0.92	32.11	1.75	0.22



2021				
FUND NAME	Mean	Standard Deviation	Beta	Alpha
SBI	9.11	100.25	1.24	4.56
ICICI	1.76	131.09	4.85	4.23
Axis	-0.47	117.64	0.38	3.0
IDBI	1.4	121.04	0.05	7.45
Kotak	1.54	75.19	2.31	1.25



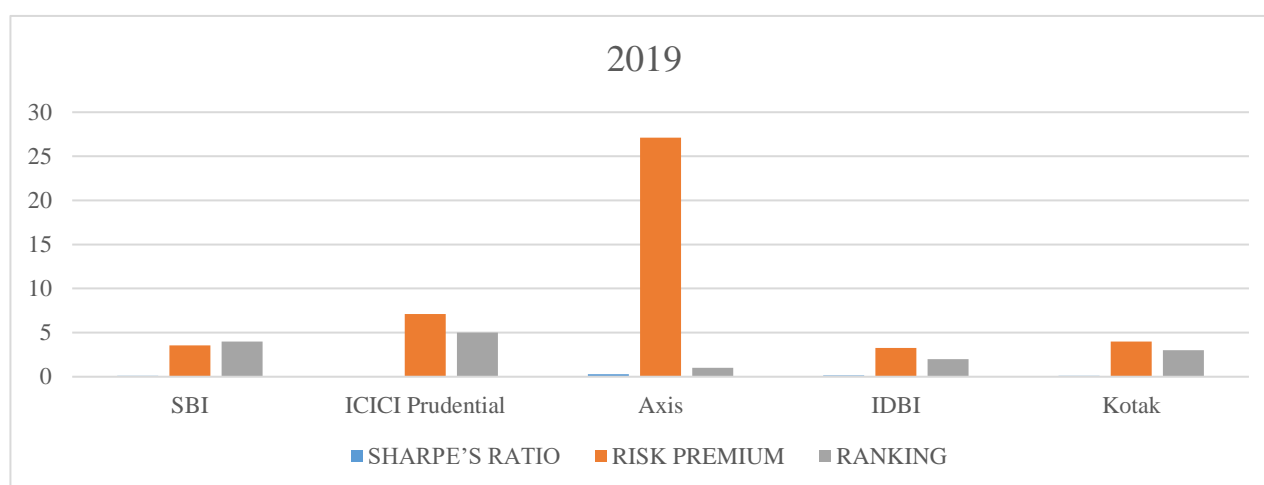
2022				
FUND NAME	Mean	Standard Deviation	Beta	Alpha
SBI	4.99	203.97	8.19	2.3
ICICI	-1.1	241.59	2.68	0.23
Axis	-0.73	145.9	1.93	2.85
IDBI	6.07	277.77	1.98	5.96
Kotak	1.47	270.44	4.81	1.02



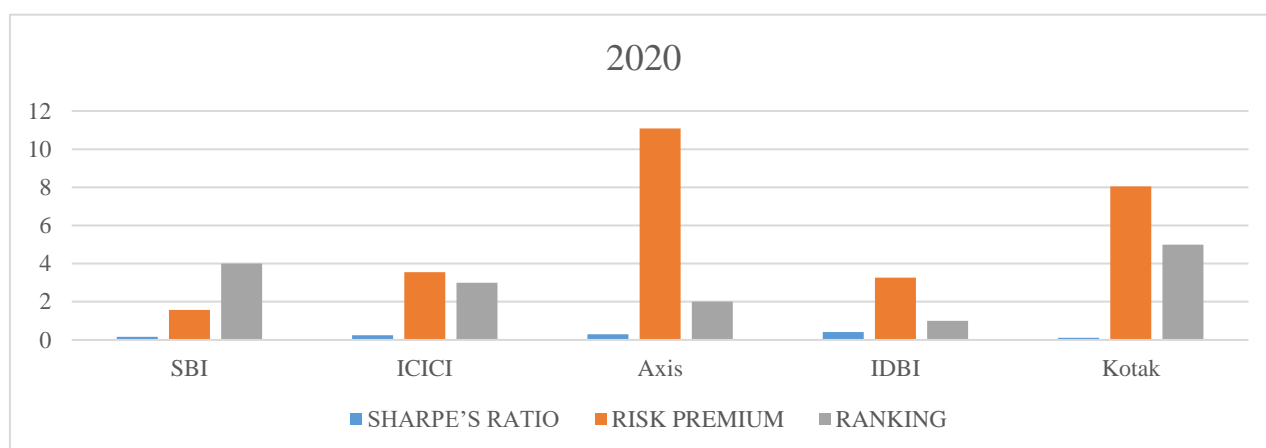
**INTERPRETATION:** Based on four metrics—Mean Return, Standard Deviation, Beta, and Alpha—the study above displays the performance of five mutual funds (SBI, ICICI, Axis, IDBI, and Kotak) during a four-year period (2019–2022). From 2019 to 2022, all funds experienced a significant increase in market volatility, with Standard Deviation values rising significantly. Performance fluctuations were evident in mean return and Alpha figures, indicating potential to beat the market. Beta trends varied for some funds, such as SBI and Kotak, while others, like ICICI, Axis, and IDBI, showed fluctuating market associations. SBI's volatility and beta increased in 2022, indicating higher risk and market adherence. ICICI, Axis, IDBI, and Kotak all showed high volatility, with Beta fluctuating and Mean Return being positive in 2019 and 2020 but negative in 2022. Alpha remained positive, suggesting some outperformance. Axis showed increased volatility, while Beta remained stable. IDBI showed slightly decreased volatility in 2020 but increased in subsequent years. Kotak showed significant volatility and increased Beta, indicating a stronger link with the market. Mean Return was positive in all years except 2020, and Alpha remained positive but declined over time.

**TABLE & GRAPH SHOWING SELECTED MUTUAL FUND SCHEMES BASED ON SHARPE'S RATIO**

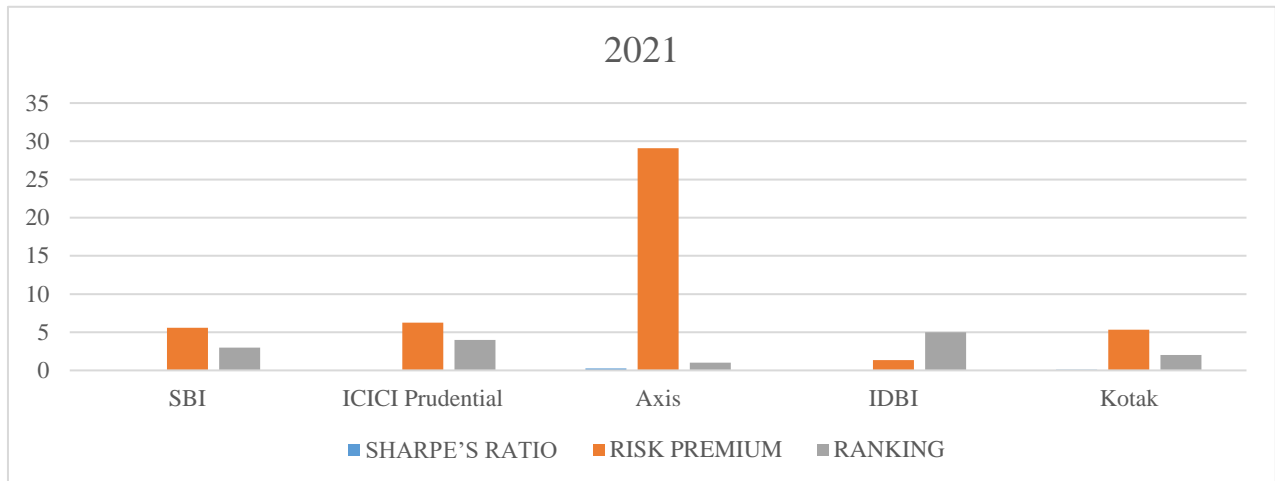
2019			
FUND NAME	SHARPE'S RATIO	RISK PREMIUM	RANKING
SBI	0.11	3.56	4
ICICI	0.05	7.12	5
Axis	0.29	27.1	1
IDBI	0.14	3.26	2
Kotak	0.12	3.99	3



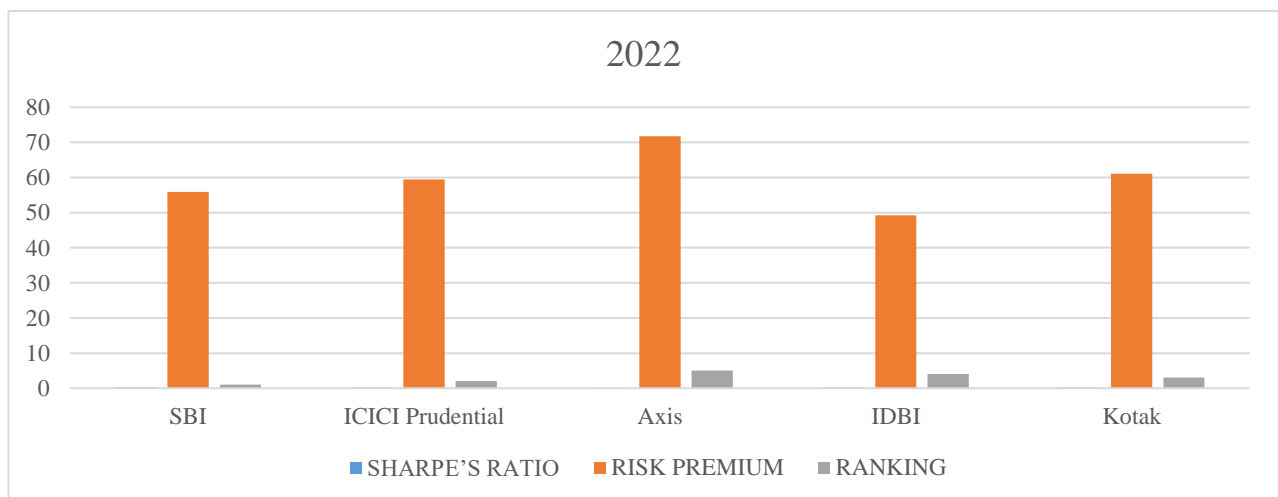
2020			
FUND NAME	SHARPE'S RATIO	RISK PREMIUM	RANKING
SBI	0.17	1.57	4
ICICI	0.25	3.55	3
Axis	0.30	11.09	2
IDBI	0.42	3.26	1
Kotak	0.11	8.04	5



2021			
FUND NAME	SHARPE'S RATIO	RISK PREMIUM	RANKING
SBI	0.05	5.57	3
ICICI	0.04	6.26	4
Axis	0.25	29.07	1
IDBI	0.01	1.34	5
Kotak	0.07	5.32	2



2022			
FUND NAME	SHARPE'S RATIO	RISK PREMIUM	RANKING
SBI	0.27	55.93	1
ICICI	0.24	59.44	2
Axis	0.08	71.75	5
IDBI	0.17	49.21	4
Kotak	0.22	61.08	3

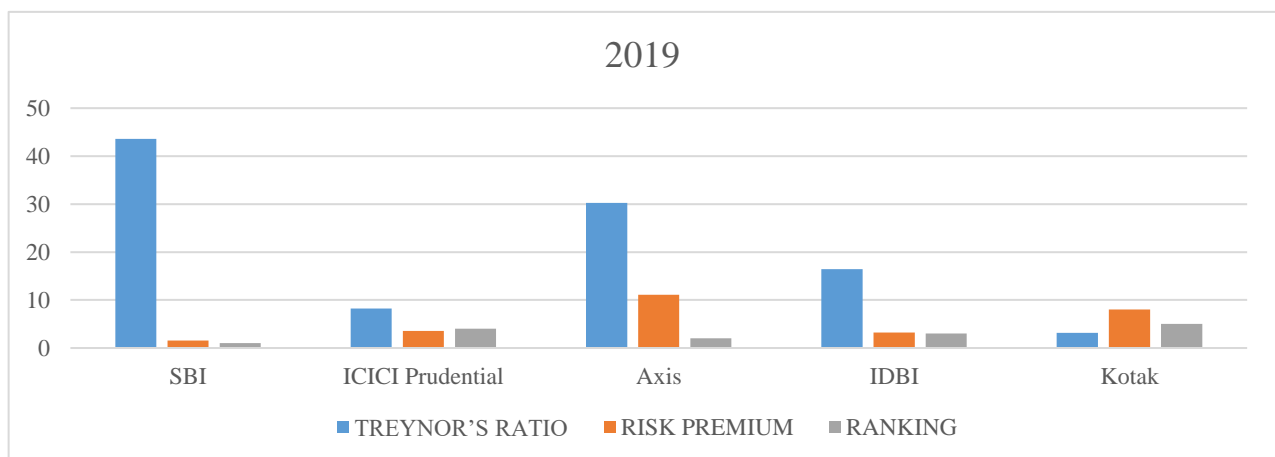




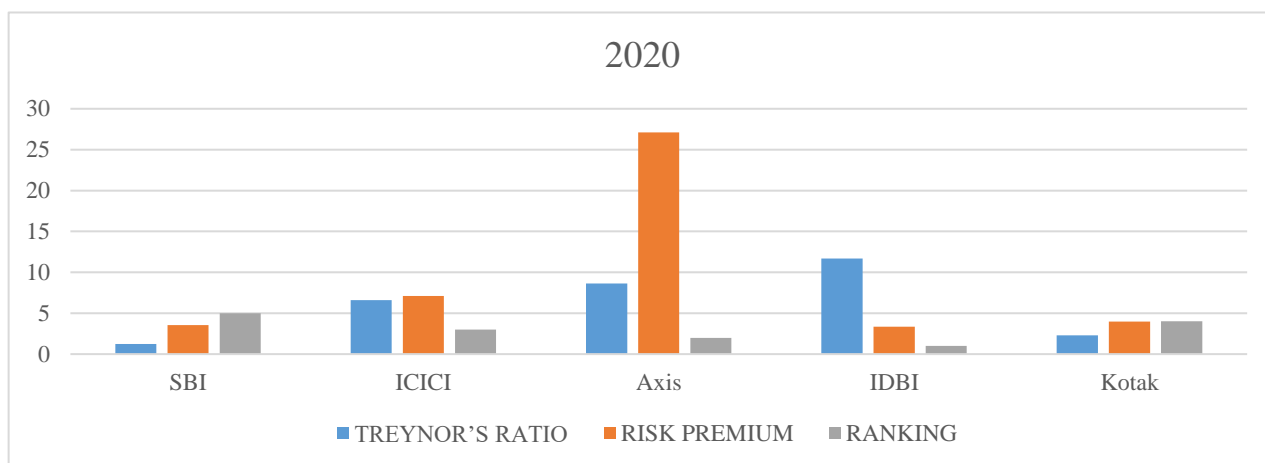
**INTERPRETATION:** The study examines the performance of five mutual funds (SBI, ICICI, Axis, IDBI, and Kotak) over four years (2019-2022) using Sharpe Ratio and Risk Premium metrics. The Sharpe Ratio measures risk-adjusted return, while Risk Premium is the difference between the fund's return and the risk-free rate. The results show that SBI, ICICI, and Kotak displayed significantly higher Risk Premiums in 2022, suggesting larger returns but increased risk. Axis Performance consistently ranked high in Risk Premium but fluctuated in Sharpe Ratio, while IDBI Consistency maintained a positive Risk Premium but declined in later years. SBI Improvement showed a significant improvement in Sharpe Ratio in 2022, suggesting better risk management for potentially higher returns.

**TABLE & GRAPH SHOWING SELECTED MUTUAL FUND SCHEMES BASED ON TREYNOR'S RATIO**

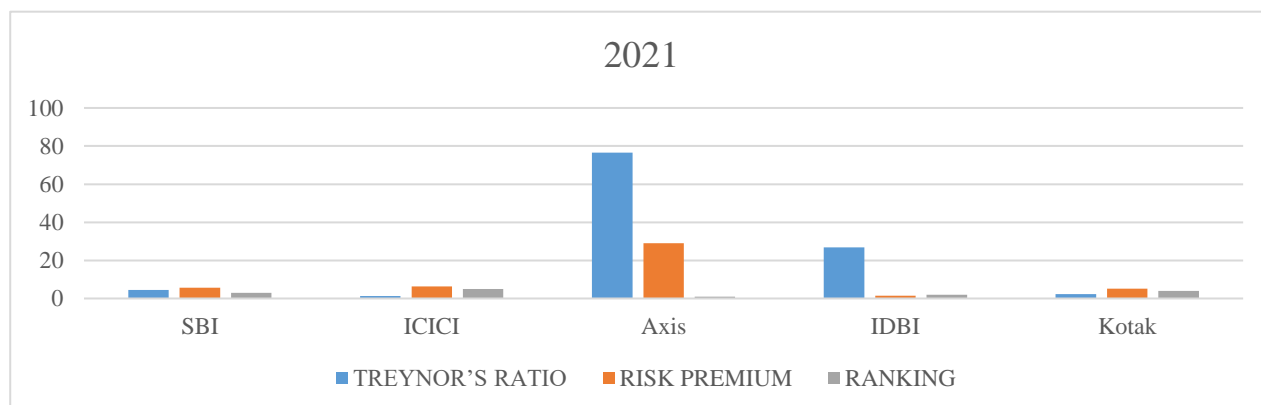
2019			
FUND NAME	TREYNOR'S RATIO	RISK PREMIUM	RANKING
SBI	43.61	1.57	1
ICICI	8.25	3.53	4
Axis	30.24	11.09	2
IDBI	16.43	3.26	3
Kotak	3.18	8.04	5



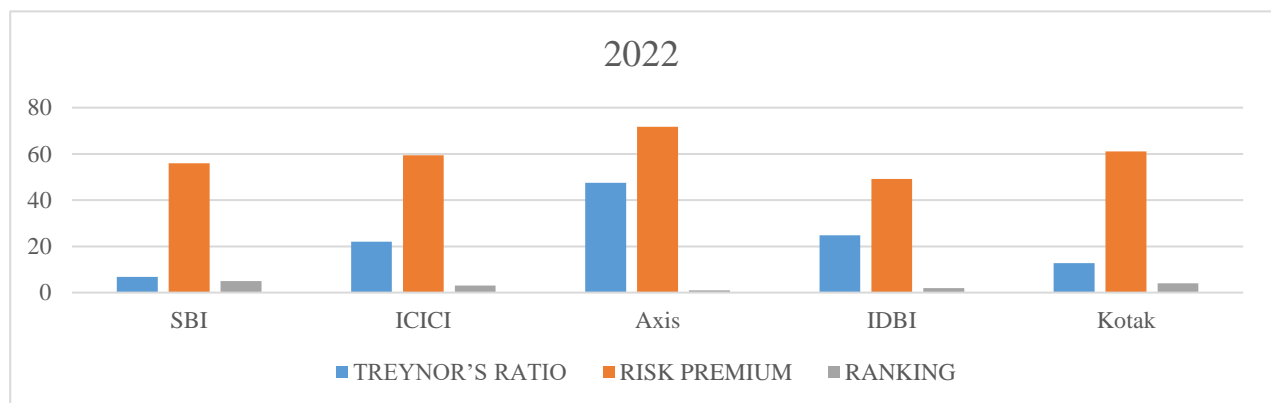
2020			
FUND NAME	TREYNOR'S RATIO	RISK PREMIUM	RANKING
SBI	1.25	3.56	5
ICICI	6.59	7.12	3
Axis	8.63	27.1	2
IDBI	11.69	3.36	1
Kotak	2.28	3.99	4



2021			
FUND NAME	TREYNOR'S RATIO	RISK PREMIUM	RANKING
SBI	4.53	5.57	3
ICICI	1.29	6.26	5
Axis	76.5	29.07	1
IDBI	26.8	1.39	2
Kotak	2.24	5.23	4



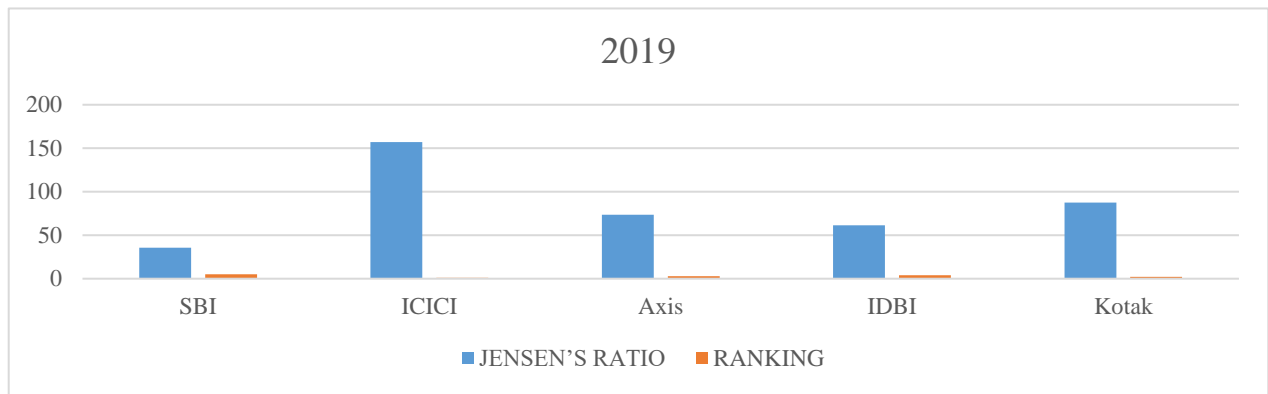
2022			
FUND NAME	TREYNOR'S RATIO	RISK PREMIUM	RANKING
SBI	6.83	55.93	5
ICICI	22.01	59.44	3
Axis	47.54	71.75	1
IDBI	24.8	49.21	2
Kotak	12.69	61.08	4



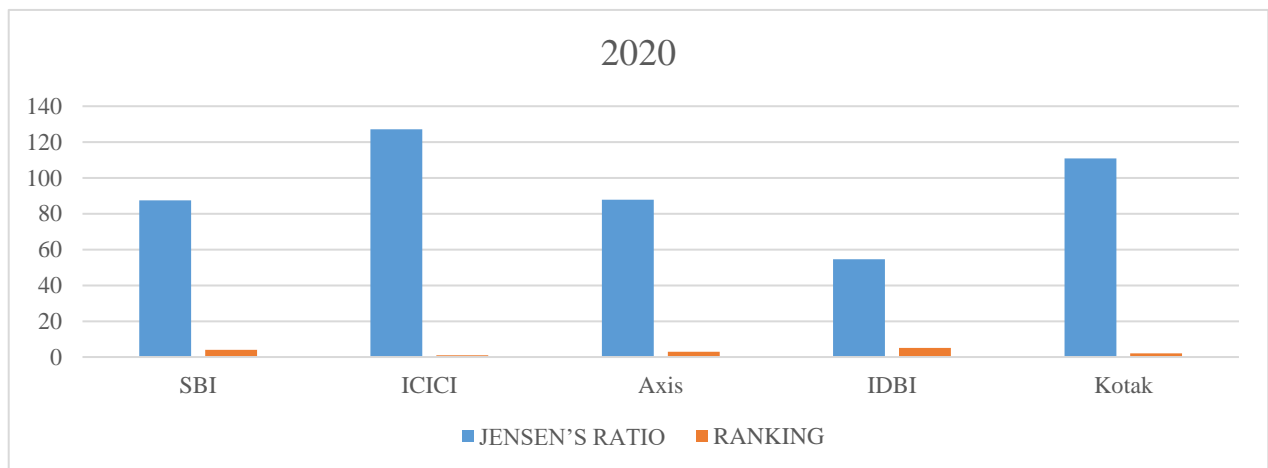
**INTERPRETATION:** The tables show the performance of five mutual funds (SBI, ICICI, Axis, IDBI, and Kotak) over four years (2019-2022) using the Treynor Ratio, which measures the reward earned per unit of market risk. A higher Treynor Ratio indicates better performance relative to systematic market risk. Axis, IDBI, and SBI emerged as top performers in 2022, with Axis consistently ranking high in Risk Premium and strong Treynor Ratios. IDBI's shift in 2020 and SBI's improvement in 2022 suggest potential better returns relative to market risk.

**TABLE & GRAPH SHOWING SELECTED MUTUAL FUND SCHEME BASED ON JENSEN'S RATIO**

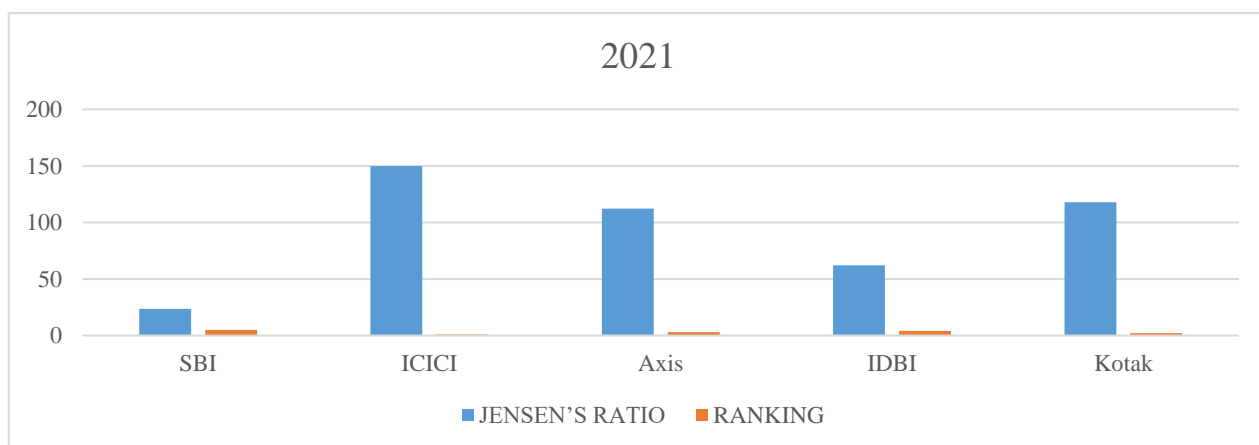
2019		
FUND NAME	JENSEN'S RATIO	RANKING
SBI	35.54	5
ICICI	156.91	1
Axis	73.69	3
IDBI	61.41	4
Kotak	87.47	2



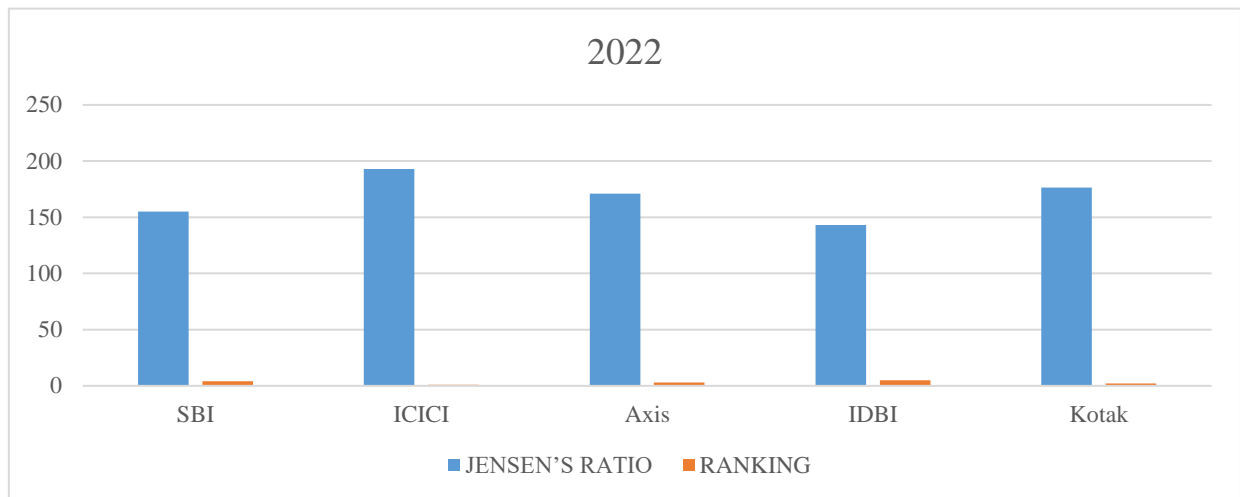
2020		
FUND NAME	JENSEN'S RATIO	RANKING
SBI	87.51	4
ICICI	127.16	1
Axis	87.88	3
IDBI	54.65	5
Kotak	110.85	2



2021		
FUND NAME	JENSEN'S RATIO	RANKING
SBI	23.63	5
ICICI	149.92	1
Axis	112.21	3
IDBI	62	4
Kotak	117.94	2



2022		
FUND NAME	JENSEN'S RATIO	RANKING
SBI	155.08	4
ICICI	192.89	1
Axis	171.01	3
IDBI	143.15	5
Kotak	176.35	2



**INTERPRETATION:** The tables show the performance of five mutual funds (SBI, ICICI, Axis, IDBI, and Kotak) over four years (2019-2022) using Jensen's Alpha and Ranking. ICICI consistently ranked first in Alpha, suggesting significant excess returns compared to market risk. All funds displayed positive Alpha in most years, indicating they generally outperformed expected returns based on market risk. However, SBI's Alpha increased significantly in 2022, suggesting better returns relative to market risk. IDBI maintained positive Alpha throughout the period, but its ranking fluctuated, indicating variations in its ability to outperform market risk expectations.

#### FINDINGS:

1. This analysis examined the performance of five mutual funds (SBI, ICICI, Axis, IDBI, Kotak) across four years using various metrics:
2. Mean Return & Standard Deviation: Highlighted fluctuations in returns and increased market volatility over time.
3. Sharpe Ratio & Risk Premium: Provided insights into risk-adjusted returns. Top performers in 2022 (SBI, ICICI, Kotak) showed significant risk premium increase but also improved Sharpe Ratios, suggesting potentially better risk management.
4. Treynor Ratio: Focused on market risk-adjusted returns. Axis emerged as a consistent leader, suggesting good returns relative to market exposure.
5. Jensen's Alpha: Measured excess returns. ICICI consistently ranked first, potentially delivering the most significant excess returns compared to its market risk. All funds displayed positive Alpha in most years, indicating they generally outperformed the expected return based on market risk.

## SUGGESTIONS:

1. Focus on a Longer Timeframe: While this analysis covered four years, consider including a longer period for a more robust evaluation.
2. Investigate Underlying Factors: Explore the specific investment strategies and risk management approaches used by the funds, particularly those with strong performance in specific metrics.
3. Compare with Benchmarks: Evaluate the funds' performance against relevant benchmarks to understand how they stack up against their category peers.
4. Risk Tolerance Consideration: Prioritize funds with risk-adjusted return metrics (Sharpe Ratio, Treynor Ratio) that align with your individual risk tolerance.
5. Diversification is Key: Don't base investment decisions solely on historical performance. Consider building a diversified portfolio across different asset classes and risk profiles to mitigate risk.

## CONCLUSION:

The mutual fund sector is currently one of the most popular global investing choices. It is essential to a nation's economic development. Because mutual funds are inexpensive and simple to invest in blue-chip schemes, they rank among the finest investments ever made. A number of external factors might impact the performance of funds; thus, investors should choose the correct plan based on their risk tolerance and the plan's aim. It is also advised to invest in blue-chip plans for an extended length of time. The study comes to the conclusion that strong market performance equals strong returns, and vice versa.

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