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PERFORMANCE ANALYSIS OF MUTUAL FUND: A COMPARATIVE STUDY OF THE SELECTED HYBRID (AGGRESSIVE HYBRID FUNDS & CONSERVATIVE HYBRID FUNDS) MUTUAL FUND SCHEME IN INDIA

Aroon Raj Jesrani

Faculty of Business, Management and Economics University of Latvia, Latvia jesranidell@gmail.com

Abstract

This above study focused on a comparative analysis of selected aggressive hybrid and conservative hybrid mutual fund schemes in Indian mutual fund market, covering the period from January 2020 to December 2023. The study aims to evaluate the performance of these mutual fund schemes and compare their risk and return components. Data for the analysis was collected from secondary sources, including historical Net Asset Values (NAV) and Factsheets provided by Asset Management Companies (AMCs). Various statistical tools such as Rate of Return (RoR), Alpha, Beta, Standard Deviation, Sharpe ratio, Jensen's Ratio, and Treynor's Ratio were utilized to assess the performance and risk-adjusted returns of the selected mutual fund schemes. The findings indicate that the ICICI Prudential Equity & Debt Fund outperformed among aggressive hybrid funds, showed the highest annual returns and superior risk-adjusted performance. On the other hand, for conservative hybrid funds, the Kotak Debt Hybrid Fund - Direct Plan exhibited the highest annual returns, while the ICICI Prudential Regular Savings Fund - Direct Plan demonstrated strong returns and risk-adjusted performance. The above study highlights the importance of considering risk tolerance and investment objectives before making investment decision and selecting mutual fund schemes. Investors should carefully understand the both historical performance and risk metrics to make well informed investment decisions in consideration with their financial objectives and risk preferences.

Keywords: Mutual Fund, Hybrid Fund, Conservative Funds, Aggressive Funds, Financial Ratios.

INTRODUCTION

A mutual fund is a company that pools the capital of several investors and uses it to buy stocks, bonds, and other financial assets. A portfolio is the total amount of stocks, bonds, or other assets that a fund owns. A portion of these holdings are represented by the shares that each fund investor owns. At present 44 mutual funds are available in India. The fund house has reopened with RBI approval, allowing investors to make investments in outside markets such as the US. Along with this encouraging evolution, the asset classes of today have progressed from solely debt and equity to include gold funds, inflation, and more cutting-edge funds like arbitrage funds. India's mutual fund sector got its start in 1963 when the Reserve Bank of India and the Indian government launched the Unit Trust of India in accordance with a parliamentary act. Later, in 1987, SBI Mutual Fund emerged as India's first mutual fund that wasn't owned by UTI. Consequently, the mutual fund sector entered a new era in 1993. Following the 1992 passage of the Securities Exchange Board of India Act, this was signalled by the entry of private enterprises into the industry. In 1996, the SEBI laws pertaining to mutual funds were implemented. Since then, it has grown rapidly because of international organisations opening offices in India through acquisitions and joint partnerships. The Association of Mutual Fund in India (AMFI), a non-profit organisation, was founded in 1995 as the sector grew. Its goal is to encourage ethical and healthful marketing techniques within the mutual fund sector in India. AMFI certification is now required for anyone marketing or selling mutual fund products, according to SEBI. The UTI Act of 1963 was superseded and split into two distinct entities in 2003. The first is the UTI mutual fund, which is supported by PNB, SBI, LIC, and BOB and is registered and compiled. The Unit Trust of India's defined undertaking is the second entity. The split became official in 2003. Over the course of the following two years, the Indian mutual



fund industry battled to rebuild itself following the worldwide economic downturn of 2009. Acknowledging the paucity of mutual fund penetration in India, SEBI introduced several progressive initiatives in September 2012 to increase security and transparency for the benefit of stakeholders. Since May 2014, the number of investor accounts (portfolios) and overall, AUM have increased steadily in the Indian mutual fund industry. Indians are thought to save between 20 and 30 lakh crores a year. This industry has changed over time from one dominated by UTIs to one where the public and private sectors participate in equal measure.

REVIEW OF LITERATURE

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Sharma & Tripathi (2023), made an attempt to evaluate the performance and compared small cap, large cap and mid cap funds through SIPs, using measures such as standard deviation, beta, Sharpe ratio, Jenson's alpha and Treynor's ratio of different period of one year, 5 year and 10 years. The study found that investors can make investments by looking into their investment objectives and ability to tolerate risk.

Ananthasuresh et al. (2023) examined factors influencing investors' decisions, preferred schemes, and investment patterns, correlating demographic factors with preferences. Using a descriptive research design with 148 responses via structured questionnaires, they found a correlation between investor demographics and mutual fund preferences. Income and short-term funds were favored by most investors, with location and experience being less important considerations. Risk and performance were identified as primary factors influencing fund selection.

Sharma (2023) evaluated the performance of top 30 selected mutual fund schemes through SIPs. The study was based on a purposive sampling method using BSE sensex for risk rate of return. The study observed fluctuations in selected mutual fund performance. Suggesting investment in goal-oriented schemes for satisfaction from mutual fund investment through SIPs.

Klinkowska and Zhao (2022) analyzed US SRI mutual fund performance in relation to new money flows and investor sophistication. They compared retail and institutional share class performance and found SRI funds earn abnormal positive returns. Positive flow performance was observed in SRI mutual funds, while institutional share classes showed linear performance. However, no evidence of a "smart money" effect for retail SRI funds or a "dumb money" effect for institutional funds was found.

Sharma & Joshi (2022) examined the performance of selected debt equity and hybrid mutual funds and also compared the performance of selected funds using financial tools. The study showed that the majority of funds outperformed in financial tools such as: Sharpe's ratio, Treynor's ratio and Jenson's measure. Whereas, in CRISIL ranking debt mutual funds resulted best performer and the rest were average or below the average performers.

Harinie et al. (2022) analyzed mutual fund returns and practices, comparing them to equity investment plans via descriptive research using secondary data. The study identified areas for further research in India, suggesting evaluation of fund growth, size, and volume against the overall market performance. Developing the relationship between specific fund characteristics and performance was deemed crucial for deeper insights. Evaluation of performance ratios and rankings focusing on foreside ratios was recommended for a comprehensive understanding of fund interdependence and their relation to the index.

Sharma (2020) tried to examine the performance of Indian selected mutual fund schemes. The study included NAVs of selected funds from Jan. 2017- Dec. 2019 from authorised websites to achieve the objective of study. To evaluate the performance financial tools and techniques had been used. The study found that out of selected 5 funds three funds performed well during the study period and in highly volatile market condition. The study had further suggested to the investors that they should consider statistical permeameters before making financial investment decision.

Tripathi & Japee (2020) tried to analyse the performance of selected equity open ended selected mutual fund scheme related with risk- return relationship. The study comprises 10 equity fund schemes, concluded that ten funds outperformed in a highly volatile market. The study further found that potential investors should consider risk ratios before making investment decisions.

Maheswari and Dineshkumar (2019) analyzed the performance of Axis mutual funds to identify the best scheme based on risk and return, comparing selected equity diversified mutual fund schemes. Data spanning from 2005-2013 was collected from various sources and analyzed using statistical methods including Liquidity ratios, Profitability ratios, and Asset management ratios. The study revealed that all eight funds had high coefficients of determination (R2) and beta values less than one, indicating diversified portfolios with positive performance. Seven out of eight funds showed superior performance according to both Treynor Ratio and Sharpe Ratio.



RESEARCH METHODOLOGY

Objective of the study

- To evaluate the performance of selected aggressive hybrid mutual and conservative hybrid mutual fund schemes in India.
- To examine and compare the risk and return component among selected aggressive hybrid mutual and conservative hybrid mutual fund.

Sources of data

The study is based on data collected from secondary sources from historical NAV and Factsheets by Asset Management Company (AMC).

Scope of study

The present study comprises of 5 aggressive hybrid mutual and conservative hybrid mutual fund schemes introduced by the different Asset Management Company. The period of this research work is from January 2020 to December 2023. The NAV of the selected scheme has been compared for four years with an annual return.

Statistical tools

Rate of Return (RoR): The Rate of Return (RoR), which is represented as a percentage, calculates the profitability of an investment over a given time period. Investors can evaluate the performance of their investments with its indication of gain or loss with respect to the initial investment.

Alpha: The difference between the actual and predicted returns on a mutual fund is represented by alpha. It serves as a metric for the degree of outperformance, or more simply put, the mutual fund's relative performance versus a benchmark. A mutual fund that has a positive alpha is one that has outperformed its benchmark or yardstick index. **Beta:** Another name for beta is the beta co-efficient. It is a method for calculating a share or mutual fund's volatility by contrasting its performance over a given period of time with that of a relevant benchmark. The relative risk of a mutual fund or portfolio in relation to the market portfolio is measured by beta. The mutual fund's systemic risk is reflected in it. The beta of the market index is one. A beta greater than one indicates that the mutual fund is more risky than the benchmark. In a similar vein, volatility below the benchmark is indicated by a beta of less than one. **Standard deviation:** A technique used to measure the deviation or dispersion of data from averages or the mean

is the standard deviation. The standard deviation of a mutual fund portfolio indicates how far the portfolio's performance deviates from the predicted return.

Sharpe ratio: The Sharpe ratio calculates risk-adjusted returns for mutual fund schemes using the standard deviation. It will demonstrate how well the portfolio of mutual funds has done in comparison to the risk-free return. In essence, this indicates whether returns are the result of wise investing choices or excessive risk. A mutual fund portfolio's risk-adjusted return is better when the Sharpe's ratio is higher.

Jensen's Ratio: A risk-adjusted metric known as Jensen's Ratio is used in finance to evaluate an investment portfolio's performance in comparison to a risk-free investment. It takes into account the volatility of the portfolio and compares the return to the risk-free rate. Once risk is taken into account, a positive ratio denotes outperformance and a negative ratio, underperformance. It is frequently used to assess how well portfolio managers are able to produce excess returns.

Treynor's Ratio: A financial indicator called Treynor's Ratio is used to evaluate an investment portfolio's riskadjusted performance. It calculates the extra return that the portfolio produces for each unit of systematic risk, which is symbolised by its beta. Better risk-adjusted performance is indicated by a greater ratio.

Annual Returns - aggressive hybrid fund					
Scheme Name	Cris il Ran k	2023	2022	2021	2020
Franklin India Equity Hybrid Fund – Growth	4	21.87%	4.82%	23.45%	14.63%

FINDINGS AND CONCLUSION



ICICI Prudential Equity & Debt Fund - Growth	5	29.25%	11.71%	41.22%	9.75%
Sundaram Aggressive Hybrid Fund – Growth	3	16.44%	3.09%	24.53%	18.01%
Kotak Equity Hybrid Fund – Growth	4	19.56%	5.11%	27.15%	14.12%
Mahindra Manulife Aggressive Hybrid Fund - Regular Plan – Growth	3	21.49%	4.38%	26.98%	16.06%

Risk Ratios - aggressive hybrid fund							
Scheme Name	Standard Deviation	Beta	Sharpe Ratio	Jension's Alpha	Treynor' s Ratio		
Franklin India Equity Hybrid Fund – Growth	10.15	1.05	0.94	1.68	1.00		
ICICI Prudential Equity & Debt Fund – Growth	11.22	2.05	1.79	11.02	0.22		
Sundaram Aggressive Hybrid Fund – Growth	11.43	1.18	0.97	1.49	0.12		
Kotak Equity Hybrid Fund - Growth	10.74	1.71	1.20	9.00	0.17		
Mahindra Manulife Aggressive Hybrid Fund - Regular Plan - Growth	10.70	1.15	1.32	5.50	0.33		

Interpretation:

According to the above provided data the following results are found:

Annual Returns: ICICI Prudential Equity & Debt Fund showed the highest annual returns at the end of year 2023 i.e. 29.25%. In 2022 and 2021, the ICICI Prudential Equity & Debt Fund and Franklin India Equity Hybrid Fund showed highest returns, respectively. Overall the funds have depicted varying performance over the years, and in some years performed significantly higher returns compared to others.

Risk Ratios: ICICI Prudential Equity & Debt Fund has the highest Standard Deviation and Beta during the observed study period, showing higher volatility and sensitivity to market movements. Franklin India Equity Hybrid Fund and Mahindra Manulife Aggressive Hybrid Fund have comparatively lower Standard Deviation and Beta relatively to ICICI Prudential, showing comparatively lower volatility and market sensitivity. ICICI Prudential Equity & Debt Fund also had the highest Sharpe Ratio, Jenson's Alpha, and Treynor's Ratio among the funds, representing better risk-adjusted returns and performance relative to its risk.

In essence, ICICI Prudential Equity & Debt Fund has shown higher returns and high volatile market, and showed better risk-adjusted performance compared to other aggressive hybrid funds. Investors should consider their risk tolerance and investment objectives before making investment decision.

Annual Returns - conservative hybrid fund								
Scheme Name	Crisil Rank	2023	2022	2021	2020			
Franklin India Debt Hybrid Fund - Growth	3	11.31%	4.95%	7.78%	8.01%			
ICICI Prudential Regular Savings Fund - Direct Plan – Growth	2	13.24%	6.93%	11.62%	13.57%			
Sundaram Debt Oriented Hybrid Fund - Direct Plan – Growth	1	10.97%	4.75%	14.12%	9.29%			
Kotak Debt Hybrid Fund - Direct Plan - Growth	5	14.45%	6.71%	13.13%	13.70%			
HSBC Conservative Hybrid Fund - Direct Plan – Growth	5	11.30%	2.98%	10.51%	13.80%			

Risk Ratios - conservative hybrid fund							
Scheme Name	Standard Deviation	Beta	Sharpe Ratio	Jension's Alpha	Treynor's Ratio		
Franklin India Debt Hybrid Fund - Growth	4.29	1.91	1.66	2.85	0.08		
ICICI Prudential Regular Savings Fund - Direct	3.44	1.82	1.93	2.95	0.08		



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Plan – Growth					
Sundaram Debt Oriented Hybrid Fund - Direct Plan – Growth	4.29	1.91	0.75	2.74	0.08
Kotak Debt Hybrid Fund - Direct Plan – Growth	4.14	1.23	1.74	4.95	0.09
HSBC Conservative Hybrid Fund - Direct Plan – Growth	4.92	1.24	1.38	1.65	0.05

Interpretation:

According to the above provided data the following results are found:

Annual Returns: From above data Kotak Debt Hybrid Fund - Direct Plan had showed the highest annual returns in 2023, i.e. 14.45%. ICICI Prudential Regular Savings Fund - Direct Plan had the highest returns during 2022 and 2021. Whereas Sundaram Debt Oriented Hybrid Fund - Direct Plan outperformed in 2021. Across the study period years, each selected fund exhibited varying levels of returns.

Risk Ratios: ICICI Prudential Regular Savings Fund - Direct Plan and Franklin India Debt Hybrid Fund - Growth had showed comparatively higher Standard Deviation and Beta, showing higher volatility and sensitivity to market movements. HSBC Conservative Hybrid Fund - Direct Plan has the lowest Standard Deviation and Beta among the funds, providing lower volatility and market sensitivity. ICICI Prudential Regular Savings Fund - Direct Plan had the highest Sharpe Ratio, which showed better risk-adjusted returns relative to its volatility. Jenson's Alpha measures the excess return of a fund in comparison with to expected return, related for risk. ICICI Prudential Regular Savings Fund - Direct Plan and Franklin India Debt Hybrid Fund - Growth have higher Jenson's Alpha, outperformed expected returns for their level of risk.

In essence, ICICI Prudential Regular Savings Fund - Direct Plan and Kotak Debt Hybrid Fund - Direct Plan showed comparatively higher returns with different levels of risk. Investors are suggested to consider their risk tolerance and investment objectives before making investment decision.

CONCLUSION

The present study is focused on a comparative analysis of selected aggressive hybrid and conservative hybrid mutual fund schemes in India from the period January 2020 to December 2023. The analysis was based on various tools and techniques such as annual returns and risk ratios such as standard deviation, beta, Sharpe ratio, Jenson's alpha, and Treynor's ratio.

Aggressive hybrid funds depicted, the ICICI Prudential Equity & Debt Fund outperformed in terms of annual returns, showing the highest returns in 2023, with demonstrating superior risk-adjusted performance according to various risk ratios. This fund resulted in higher volatility but yielded better returns relative to its risk.

The conservative hybrid funds, the Kotak Debt Hybrid Fund - Direct Plan displayed the highest annual returns during 2023. Also, ICICI Prudential Regular Savings Fund - Direct Plan showed strong returns in 2022 and 2021. Like the aggressive hybrid funds, these funds showed varying levels of risk, with ICICI Prudential Regular Savings Fund representing high market volatility but also better risk-adjusted returns.

In conclusion, the study suggested that investors should carefully assess their risk tolerance and investment objectives before selecting mutual fund schemes. As some funds may offer higher returns, they may also come with higher volatile market conditions and risk. It's essential for investors to consider both historical performance and risk metrics, to make well informed investment decisions that are related with their financial goals and risk preferences.

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