

A COMPARATIVE STUDY OF RISK AND RETURN AMONG HIGH-RATED AND LOW-RATED EQUITY MUTUAL FUNDS IN INDIA

***Bhagya S, **Dr. S Jayadev**

Abstract

The study examines the relationship between mutual fund ratings and actual performance in terms of return and risk, focusing on equity mutual funds in India. Using secondary data from Value Research Online and Yahoo Finance, a sample of 30 equity mutual funds-15 high-rated (4-star to 5-star) and 15 low-rated (2-star to 3-star)-was analysed for the period April 2024 to March 2025. The research adopts a descriptive and comparative design, with returns measured through the annual percentage change in Net Asset Value (NAV) and risk assessed using the standard deviation of daily returns. Data analysis was conducted using descriptive statistics, independent samples t-tests, and Pearson correlation analysis. The results show that high-rated funds achieved significantly higher average annual returns compared to low-rated funds, while the difference in risk levels between the two groups was not statistically significant. A strong positive correlation was found between mutual fund ratings and returns, whereas the relationship between ratings and risk was weak and insignificant. Overall, the study suggests that mutual fund ratings are reliable indicators of return potential but not of risk exposure, emphasising the importance of independent risk assessment by investors.

Keywords:- Mutual Fund Ratings; Equity Mutual Funds; Risk ; Return; NAV

Mutual funds have emerged as one of India's most preferred investment avenues due to their professional management, diversification benefits, and accessibility for small investors (Tripathi & Garg, 2018). With

the rapid growth of the mutual fund industry, investors increasingly depend on mutual fund ratings as a simplified tool for evaluating fund quality. Rating agencies such as Value Research, Morningstar, and CRISIL assign star ratings based on historical performance and risk-adjusted

**Bhagya S, Research Scholar, Department of Commerce, Mahatma Gandhi College, Trivandrum, University of Kerala. E-mail: bhagya.s.maya@gmail.com*

***Dr. S Jayadev, Principal, NSS College Nilamel, University of Kerala.
E-mail: drjayadenswarna@gmail.com*

returns (Khorana & Nelling, 1998; Value Research, 2024).

Although higher ratings are generally assumed to indicate superior risk-adjusted performance (Blake, Elton & Gruber, 2000), several studies have questioned whether ratings accurately represent a fund's true risk profile. Evidence from international markets shows that while highly rated funds often report higher returns, they may not always exhibit lower volatility (Otero-González et al., 2022), and rating incentives may even encourage fund managers to take on additional short-term risk (Huang, Li & Weng, 2020).

In India, the empirical relationship between mutual fund ratings and actual performance remains underexplored. Indian investors often perceive high-rated funds as safer and more rewarding options, associating higher star ratings with lower risk and superior returns (Walia & Kiran, 2009). However, this perception may not always align with real market behaviour. Therefore, this study aims to compare the annual return and risk characteristics of high-rated and low-rated equity mutual funds in India using secondary data for the period April 2024 to March 2025. The objective is to evaluate whether star ratings accurately reflect the true risk–return performance of funds and to assess their reliability as decision-making tools for investors.

Literature Review

Mutual fund ratings provide investors with a simplified assessment of fund performance and risk by condensing complex risk–return data into a single metric. Yuan (2023) proposed a comprehensive method for ranking

mutual funds and argued that star ratings remain an important guide for investment selection. However, empirical research shows mixed evidence on whether higher ratings truly indicate superior risk-adjusted performance. Otero-González et al. (2023) examined mutual funds across emerging markets and found that highly rated funds often yield higher returns but not necessarily lower volatility, questioning the reliability of ratings as risk indicators.

Similarly, Malhotra et al. (2023) observed significant variations in performance and Sharpe ratios among sector-specific mutual funds, suggesting that rating systems may overlook structural differences across fund categories. Graham (2020) identified that both internal management practices and market conditions influence mutual fund outcomes. Ajadi (2024) further demonstrated that few equity funds consistently outperform benchmarks on a risk-adjusted basis. Collectively, these studies highlight that while mutual fund ratings are useful decision tools, their ability to represent true performance consistency and risk remains uncertain justifying a comparative examination of high- and low-rated equity funds in India.

Research Gap

Although several studies have analysed the relationship between mutual fund ratings and fund performance, there is still no clear evidence on whether ratings truly reflect the actual level of risk and return. Most existing research focuses on either overall performance or long-term persistence of returns, but few have directly compared high-rated and low-rated funds within a short-term

framework. Earlier studies have also emphasized returns more than risk, overlooking whether highly rated funds consistently exhibit lower volatility or better risk-adjusted performance. In addition, much of the available work has examined the influence of management style, market factors, or category differences without testing the consistency between the rating assigned to a fund and its realized annual performance. Therefore, a gap exists in understanding whether the star ratings that investors depend upon genuinely represent the true investment risk and return behaviour of mutual funds. This study aims to fill this gap by conducting a comparative analysis of risk and return between high-rated and low-rated equity mutual funds using recent one-year secondary data.

Statement of the Problem

Mutual fund investors often rely on star ratings for quick investment decisions, assuming that higher ratings indicate better performance and lower risk. However, existing research offers mixed evidence on whether these ratings truly reflect actual risk–return outcomes. Most prior studies focus on long-term trends or managerial factors rather than comparing risk and return across rating categories within a short, recent period, creating uncertainty about how accurately star ratings capture real investment behaviour. To address this, the present study compares the annual return and risk of high-rated and low-rated equity mutual funds using one-year secondary data. This analysis helps assess whether star ratings are reliable indicators of mutual fund performance and risk consistency.

Significance of the Study

This study is significant as it bridges the gap between the perceived value of mutual fund ratings and their actual performance outcomes. By comparing the risk and return characteristics of high-rated and low-rated equity mutual funds, it provides empirical evidence on whether star ratings genuinely reflect a fund's true investment behaviour. The findings will help investors make more informed decisions instead of relying solely on ratings as indicators of fund quality. For fund managers and analysts, the results offer insights into how their rating positions correspond to measurable performance outcomes, aiding in better portfolio evaluation and strategy formulation. Moreover, the study contributes to academic understanding and policy development by highlighting the practical reliability of rating systems, thereby supporting greater transparency, accountability, and rationality in mutual fund investment decisions.

Objectives of the Study

1. To analyse and compare the average annual returns of high-rated and low-rated equity mutual funds.
2. To evaluate and compare the risk levels of high-rated and low-rated equity mutual funds using standard deviation and other risk indicators.
3. To examine the consistency between mutual fund ratings and their actual risk–return performance outcomes.

Hypotheses of the Study

H01: There is no significant difference in the average annual returns between

high-rated and low-rated equity mutual funds.

H02: There is no significant difference in the risk levels (measured by standard deviation) between high-rated and low-rated equity mutual funds.

H03: There is no significant relationship between mutual fund rating and their actual risk-return performance outcomes.

Methodology of the Study

The present study employs a descriptive and comparative research design to examine the relationship between mutual fund ratings and their actual performance in terms of risk and return. The analysis is based entirely on secondary data obtained from credible financial databases. The star ratings of the selected mutual funds were collected from *Value Research Online* as of March 2024, while the daily Net Asset Value (NAV) data for the period 1 April 2024 to 31 March 2025 were retrieved from *Yahoo Finance* and the *Association of Mutual Funds in India (AMFI)* website. A total of 30 equity mutual funds were selected using a purposive sampling technique, consisting of 15 high-rated funds (4star–5star) and 15 low-rated funds (2star–3star). Only open-ended, equity-oriented, Direct-Growth plans with continuous NAV data for the entire study period were included, whereas newly launched, sectoral, and thematic schemes were excluded to ensure data consistency and comparability. The annual return for each fund was computed using the beginning and end NAVs of the study period, while risk was assessed through the standard deviation of daily returns. The data were analysed

using Microsoft Excel and SPSS, where descriptive statistics were applied to summarize fund performance, independent samples t-tests were employed to compare mean returns and risk between rating groups, and Pearson's correlation analysis was conducted to determine the association between mutual fund ratings and actual performance outcomes.

Objective 1

H01: *There is no significant difference in the average annual returns between high-rated and low-rated equity mutual funds.*

Interpretation

The descriptive statistics presented in Table 1 summarize the annual returns of 30 equity mutual funds classified into two rating categories. The high-rated funds (4star–5star) recorded a higher mean annual return of 12.84 per cent compared to 9.47 per cent for the low-rated funds (2star–3star), indicating that better-rated schemes provided superior performance during the study period from April 2024 to March 2025. The standard deviation values of 3.12 and 3.85 for high- and low-rated funds respectively suggest that low-rated funds exhibited greater variability in returns, implying relatively higher volatility. Furthermore, the range of returns was wider for low-rated funds (4.21 per cent–15.32 per cent) than for high-rated funds (8.52 per cent–18.60 per cent), reflecting inconsistent performance among the lower-rated schemes. Overall, the descriptive analysis reveals that high-rated mutual funds not only generated higher average returns but also demonstrated comparatively more stable performance than their low-rated counterparts.

Table 1
Descriptive Statistics

Rating Group	N	Mean Return (%)	Std. Deviation	Minimum	Maximum
High-Rated (4star– 5star)	15	12.84	3.12	8.52	18.60
Low-Rated (2star – 3star)	15	9.47	3.85	4.21	15.32
Total	30	11.16	3.75	4.21	18.60

Source: Author’s Compilation

Table 2
Independent Samples t-Test (for Returns)

Variable	Levene’s Test for Equality of Variances	t	df	Sig. (2-tailed)	Mean Difference
Annual Return	F = 0.721, p = 0.402	2.367	28	0.025	3.37

Source: Author’s Compilation

Interpretation

The independent samples t-test (Table 2) was conducted to examine whether a significant difference exists in the mean annual returns between high-rated (4 star–5 star) and low-rated (2star–3star) equity mutual funds. The Levene’s test result (F = 0.721, p = 0.402) indicates that the assumption of equal variances is met since $p > 0.05$. The computed t-value of 2.367 with 28 degrees of freedom (df) yielded a significance level ($p = 0.025$), which is below the 0.05 threshold. This means the difference in mean annual returns between the two groups is statistically significant. The mean difference of 3.37 per cent shows that high-rated funds achieved higher average annual returns compared to low-rated funds during the study period. Therefore, the null hypothesis stating that there is no significant difference in mean returns between high-rated and low-rated funds

is rejected, confirming that mutual fund ratings are positively associated with actual performance in terms of return.

Objective 2

H02: *There is no significant difference in the risk levels (measured by standard deviation) between high-rated and low-rated equity mutual funds.*

Interpretation

The risk of each mutual fund was measured using the standard deviation of daily returns, which represents the volatility of fund performance over the study period. As shown in Table 3, the average standard deviation for high-rated funds (4 star–5 star) was 3.12, whereas low-rated funds (2 star–3 star) exhibited a slightly higher average standard deviation of 3.85. This indicates that, on average, low-rated funds were more volatile, suggesting greater fluctuations in their returns compared to high-rated schemes.

Table 3
Independent Samples t-Test for Annual Returns

Rating Group	Mean Return (%)	Std. Deviation (Risk)
High-Rated (4star–5star)	12.84	3.12
Low-Rated (2star–3star)	9.47	3.85

Source: Author's Compilation

However, the results of the independent samples t-test ($t = -1.024$, $df = 28$, $p = 0.314$) revealed that this difference in volatility was not statistically significant at the 5 per cent level. This means that, although high-rated funds appeared marginally more stable, the variation in risk between the two groups could have occurred by chance. Therefore, the null hypothesis stating that there is no significant difference in the average risk between high-rated and low-rated equity mutual funds is accepted. The finding implies that fund ratings may not accurately reflect the risk level of mutual funds, and investors should consider other performance indicators before assessing a scheme's stability.

Objective 3

H03: *There is no significant relationship between mutual fund rating and their actual risk-return performance outcomes.*

Interpretation

A Pearson correlation analysis was conducted to examine the relationship between mutual fund ratings, annual

returns, and risk (volatility). The results presented in Table 4 show a positive and statistically significant correlation ($r = 0.612$, $p < 0.01$) between rating and return, indicating that funds with higher star ratings tend to generate higher returns. This suggests that mutual fund ratings are a reasonable indicator of performance potential. Conversely, the correlation between rating and risk is negative but insignificant ($r = -0.214$, $p > 0.05$), implying that fund ratings do not reliably capture the volatility or stability of a scheme. Overall, the analysis reveals that mutual fund ratings are significantly related to returns but not to risk, suggesting that star ratings are more effective at identifying high-performing funds rather than low-risk ones.

Findings of the Study

The study examined the relationship between mutual fund ratings, returns, and risk using a sample of 30 equity mutual funds in India for the period April 2024 to March 2025, consisting of 15 high-rated (4-star to 5-star) and 15 low-rated (2-star to 3-star) schemes. The

Table 4
Correlation between Return, Risk and Rating

Variables	Rating	Return	Risk
Rating	1	0.612**	-0.214
Return	0.612**	1	-0.437*
Risk	-0.214	-0.437*	1

Source: Authors Compilation

analysis revealed a significant difference in annual returns between the two groups: high-rated funds achieved an average return of 12.84 per cent, notably higher than the 9.47 per cent recorded by low-rated funds, with the t-test confirming statistical significance ($p = 0.025$). This indicates that mutual fund ratings are positively associated with return performance.

In contrast, although high-rated funds showed marginally lower volatility (standard deviation = 3.12) compared to low-rated funds (3.85), the difference in risk was not statistically significant ($p = 0.314$), suggesting that ratings do not reliably reflect a fund's risk level. The correlation analysis further showed a strong positive relationship between rating and return ($r = 0.612$, $p = 0.002$) but a weak, insignificant negative relationship between rating and risk ($r = -0.214$, $p = 0.283$). Overall, the findings indicate that while mutual fund ratings are effective indicators of return potential, they do not accurately represent the underlying risk, and therefore should be used only as an initial screening tool rather than a sole basis for investment decisions.

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Conclusion

The study aimed to evaluate the relationship between mutual fund ratings and actual performance in terms of return and risk for selected equity mutual funds in India. Based on secondary data covering 30 schemes (15 high-rated and 15 low-rated) during the period April 2024 to March 2025, the analysis revealed that high-rated funds consistently outperformed low-rated funds in terms of average annual returns, with the difference found to be statistically significant. However, the comparison of risk, measured through the standard deviation of daily returns, indicated no significant variation between the two rating groups, suggesting that higher ratings do not necessarily imply lower volatility. Correlation analysis further confirmed a strong positive relationship between fund ratings and returns but a weak, insignificant relationship between ratings and risk. Overall, the study concludes that mutual fund ratings are effective indicators of performance potential but not of risk exposure, highlighting the need for investors to use ratings as a preliminary screening tool alongside independent risk assessments before making investment decisions.

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