Journal of Informatics Education and Research
ISSN: 1526-4726
Vol 5 Issue 2 (2025)

ROLE OF RISK RETURN TRADE-OFF ON LONG TERM INVESTMENT DECISIONS BY RETAIL INVESTORS: AN EMPIRICALSTUDY

Ms. Shivangi Ameriya
Assistant Professor, IPS Academy, Institute of Business Management and Research, Indore
Ms Aditi Vyas , Assistant Professor
IPS Academy, Institute of Business Management and Research, Indore
Ms Sarita Yadav , Assistant Professor
IPS Academy, Institute of Business Management and Research, Indore
Ms Neha Pandey, Assistant Professor
IPS Academy, Institute of Business Management and Research, Indore
Dr. Chandra Bhooshan Singh
Faculty of Commerce & Management,
Kalinga University, Raipur

ABSTRACT
Recent studies in empirical finance have shown that, anticipated excess returns on stocks and bonds, real interest rates, and levels of risk change over time in patterns that can often, be predicted. Moreover, these trends usually continue for extended periods. Through this research work, we tend to introduce an empirical model designed to capture these intricate patterns while remaining straight forward to use in real-world scenarios. We also examine what this model means for asset allocation decisions. Shifts in investment opportunities can impact the balance between risk and return for bonds, stocks, and cash over different time horizons, leading to what is known as a "term structure of the risk-return trade-off." This paper explores how changing investment opportunities affect risk over various time horizons. We also present an empirical study that effectively reflects the intricate patterns of expected returns and risk, while remaining practical and easy to implement. While the concept is strongly supported in theory, real-world evidence has shown mixed results this analysis is especially relevant for retail investors looking to understand international investment dynamics. A study survey was conducted among 213 retail investors to know the role of risk-return trade-offs on long-term investment decisions by retail investors and concluded that risk-return trade-offs in the long term play a crucial and significant role in investment decisions.

KEYWORDS: Investment opportunities, Empirical finance, Returns and risk, Intricate patterns, Asset allocation.

INTRODUCTION
The risk-return trade-off can be compared to planning a journey. Taking a smooth, direct route may be quicker and safer (lower risk, lower reward) while choosing a winding, scenic path might be more adventurous and potentially more fulfilling (higher risk, possibly greater return). Therefore, grasping the risk-return balance is key and can significantly enhance the investment approach. According to Singireddy et.al. (2024), to make smart investment choices, it's essential to understand the core idea of risk and return towards managing a portfolio. The above fundamental principle helps you weigh potential gains against possible risks, allowing more thoughtful and effective financial decisions. The risk-return trade-off suggests that investments offering greater potential rewards typically come with increased levels of risk. Simply put, the possibility of earning more usually means accepting a higher chance of loss and return, which are closely connected. Therefore, in the context of retail investors, if an investor aims for greater returns, they must be willing to accept a higher level of risk. This principle is one of the core foundations of investing. It implies that people usually agree to take on more risk only when they anticipate better potential rewards from their investments. Shivaprasad

et.al. (2022), stated that risk-return trade-off plays a vital role in investment decisions, as it helps investors strike the right balance between potential gains and possible losses. Understanding this concept allows individuals to choose investment funds that align with their financial goals and risk tolerance. By applying the risk-return trade-off principle, investors can build a well-diversified portfolio that includes a mix of conservative mutual funds with lower risk and more aggressive ones with higher potential returns. This approach helps maintain a balance between stability and growth. The duration of time an investment is held also significantly influences how well investors can take advantage of the risk-reward balance. Generally, committing to long-term investments can help reduce overall risk while offering better chances for steady growth. Dillon. (2018), asserted that risk-return trade-off supports investors in handling potential risks, maximizing profits, minimizing avoidable losses, and assessing how well their investments are performing. Here, we will also discuss how risk-return trade-off is important; by providing a structured approach towards evaluating potential risks, retail investors can pinpoint investments that promise the greatest potential gains within their limits. This approach enables them to tailor their portfolios to specific goals-whether protecting capital, seeking growth, or generating steady income. The findings are similar to Bannier et.al. (2023), who stated that retail investors rely on the risk-return tradeoff as, a key element in every investment choice and to evaluate their overall portfolio strategy. On a broader scale, this involves examining how diversified or concentrated their assets are and determining whether the combination carries excessive risk or falls short of expected returns. Further analysis revealed that financial knowledge influences how, individuals make risk-related investment choices, whereas hands-on investment experience shapes both their expectations for returns and their willingness to take risks. By reviewing the combined risk-return profile of all their assets, they can determine whether the current mix carries sufficient risk to meet long-term financial goals or, if it exposes them to excessive risk beyond what's necessary.

LITERATURE OF REVIEW

According to Leighton. (2019), the risk-return trade-off is a core principle in investing that emphasizes, the close link between potential rewards and the level of risks involved. Typically, investments that promise higher gains carry greater risks, whereas safer options tend to provide more modest returns. The risk-return trade-off suggests that investments offering greater potential returns usually come with increased risk. Therefore, if an investor aims for higher profits, they must also be ready to accept a higher level of risk. Put simply, it means that aiming for bigger gains usually comes with greater risk- and the chance of losing money. Conversely, if you prefer to play it safe with minimal risk, investors are likely to need to accept more modest returns. Context to retail investors-they are typically everyday individuals who invest their own money and generally lack the extensive resources or deep financial expertise that institutional investors possess. School teachers putting money into mutual funds or an IT professional buying and selling shares are some examples of individual investors who manage their investments, commonly known as retail investors. Aslanidis et.al. (2016), also suggested that in the world of investing, the risk-return trade-off is a key principle that explains how potential gains are tied to potential risks. Often referred to as the risk-reward spectrum, it highlights that as the chance of earning higher returns goes up, the level of risk involved typically rises as well. Therefore, risk-return trade-off plays a crucial role in all investment choices retail investors make. Investments like stocks and equity mutual funds tend to provide greater potential for long-term wealth building. On the flip side, low-risk options helpful for safeguarding savings usually fall short when it comes to meaningful growth, as their returns may not even keep up with inflation. That's why it is essential for individual investors to, evaluate their comfort with risk before choosing where to invest. Retail investors need to thoughtfully assess how much risk they can realistically handle, considering personal factors like age, financial goals, time frame for investing, and their emotional and financial capacity to recover from potential losses. Pursuing high returns without aligning investments to one's risk comfort level can backfire quickly if the market takes an unexpected turn. Different investment options come with varying levels of risk. Duchin & Sosyura. (2014), stated that for retail investors, government bonds are among the safest choices, but they generally provide modest returns. Debt mutual funds involve a bit more risk, yet they also tend to offer better returns than bonds. Hybrid funds bring equities into the mix, which raises both the potential rewards and the risks. At the higher end of the spectrum, are stocks and equity-based mutual funds-these can deliver strong returns, but they also come with greater uncertainty and price volatility. Rather than, just evaluating single investments, retail investors often look at the risk and return balance across their entire portfolio. This broader view plays an important role in ensuring that riskier assets don't overwhelm the portfolio, thus allowing for a more stable and well-rounded investment strategy that aligns with retail investors' financial goals and comfort with risk. According to Mairafi et.al. (2024), the risk-return trade-off guides them in spreading their investments across various asset types, industries, and fund categories. For instance- a portfolio made up entirely of equities may offer high growth potential but comes, with significant risk. By mixing bonds, balanced mutual funds, or diversified options, retail investors can aim for better returns while keeping the overall risk more manageable. Risk-return trade-off allows investors to understand their ability to cope with possible losses. While some can take on market ups and downs in pursuit of higher gains, others may lean toward more secure and steady options that offer, peace of mind over bigger returns. Ashish & Fazalbhoy. (2022), stated that young retail investors usually have the advantage of time on their side, allowing them to bounce back from market dips. In contrast, individuals nearing retirement might prefer a safer strategy to protect their savings and ensure financial stability in the years ahead. Therefore, to understand the balance between risk and reward, retail investors can rely on a few key measures- those investing in mutual funds can assess this trade-off by using tools like ratios, performance indicators, and volatility metrics like Alpha: This metric helps a retail investor understand how much extra return a mutual fund generates compared to its benchmark, after adjusting for risk. For example, a mutual fund tracks the Nifty 50 index, the difference between the fund's performance and that of the index after counting for risk is referred to as alpha. It also reflects whether the fund manager has added value beyond what the market alone would deliver. An alpha of -1 indicates that the mutual fund delivered 1% less return than the Nifty50 benchmark. On the other hand, an alpha of +1 shows, the fund outperformed the Nifty50 by 1%. In simple terms, the greater the alpha, the stronger the fund's ability to generate better returns, making it a more attractive option for retail investors. Beta helps investors understand how much a mutual fund's returns may fluctuate compared to its benchmark index. Frydman & Camerer. (2016), also suggested in other words that, it measures how sensitive the fund is to marker movements, giving retail investors a clearer picture of the fund's risk level relative to the broader market. Positive beta indicates that a mutual fund tends to be more sensitive to market movements compared to its benchmark, making it more volatile. Conversely, a negative beta suggests the fund is less likely to fluctuate with the market, offering more stability. Concerning retail investors, choosing funds with lower betas might help reduce investment ups and downs. Higher beta funds may show more dramatic swings, but that doesn't necessarily guarantee higher returns. The Sharpe ratio helps investors understand how efficiently, a mutual fund generates returns on the risk taken. A higher Sharpe ratio generally indicates that the fund is offering better risk-adjusted returns, making it a useful tool when comparing similar investment options. Sharpe ratio 1 suggests that the mutual fund is delivering returns that are better than what you'd typically expect for the level of risk involved. Whereas, on the other hand, below 1 indicates that the fund may not be offering sufficient returns for the amount of risk taken by investors. The standard deviation shows how much an investment's returns have moved up or down compared to its, average returns over a specific time frame. Umeaduma. (2024), also suggested that for retail investors, Standard deviation is a useful way to understand how unpredictable or stable a mutual fund's performance has been. A lower standard deviation means the returns are more consistent, while a higher one signals greater fluctuations. The main objective of most mutual funds is to help investors grow their wealth though, striking the right balance between risk and reward plays a key role in achieving this. Generally, funds that aim for higher returns also carry greater risks. Katnic et.al. (2024), argued that by carefully, managing this balance, mutual funds can support retail investors in boosting their earnings while keeping potential risks in check. Using the above-mentioned methods offers a clear, numbers-based way to gauge how promising an investment might be for retail investors. Metrics like- Return on Investment (ROI), Earnings Per Share (EPS), and the Price-to-Earnings(P/E) ratio help assess how profitable and fairly priced will be the investment. Looking into real-world investment examples can also provide meaningful lessons on assessing returns. Making use of risk management techniques setting stop-loss limits or using hedging tactics- can support investors in minimizing possible losses. Such approaches act as safeguards, kicking in automatically when specific conditions are reached, helping protect investments during market downturns. After going through the analysis adoption of a long-term outlook is essential for retail investors when trying to balance risk and reward. Sudden market ups and downs in the short run can trigger emotional decisions, which may hurt investment outcomes. Staying focused on long-term goals helps ride out volatility and encourages smarter, more patient investing. Utz & Steuer. (2024), stated risk-return trade-off is beneficial not just for evaluating single investments, but also for looking at the portfolio as a whole. Helps retail investors maintain a healthy mix of assets, manage overall exposure to risk, and align their investments with long-term financial goals.

OBJECTIVE

To know the role of risk-return trade-off on long-term investment decisions by retail investors.

METHODOLOGY

A study survey was conducted among 213 retail investors to know the role of risk-return trade-offs on long-term investment decisions by retail investors. “Random sampling method” along with “T-test” were used to collect and analyse the data.

DATA ANALYSIS

In the total population of the study survey males are 54.9% and females are 45.1%. 21.6% of them are below 32 years, 42.7% comes under the age group of 32-42 years and rest 35.7% are above 42 years of age. 31.9% are graduate and below, 35.2% are post graduate and above, 29.6% are with professional degree, and rest 3.3% are having other educational qualification.

“Table 1 General Details”

“Variables”	“Respondents”	“Percentage”
Male	117	54.9
Female	96	45.1
Total	**213**	**100**
Age (years)		
Below 32	46	21.6
32-42	91	42.7
Above 42	76	35.7
Total	**213**	**100**
Education		
Graduate and below	68	31.9
Postgraduate and above	75	35.2
Professional Degree	63	29.6
Others	7	3.3
Total	**213**	**100**

Table 2 Role of risk-return trade-off on long-term investment decisions

"S. No."	"Statements"	"Mean Value"	"t value"	"Sig."
1.	Risk return trade-off highlights the balance between gain and level of risk in an investment	3.13	1.931	0.027
2.	Risk-return balance is key and significantly enhances the investment approach	3.19	2.840	0.002
3.	Risk return trade-off helps to build a well-diversified portfolio	3.12	1.822	0.035
4.	Helps in assessing how well their investments are performing	3.18	2.678	0.004
5.	Support in maximizing profits and minimizing avoidable losses	3.14	2.117	0.018
6.	Help retail investors consider more informed decisions and aim for improved returns	3.16	2.379	0.009
7.	Suggests that investments offering greater potential rewards typically come with increased levels of risk	3.15	2.251	0.013
8.	Allows individuals to choose investment funds that align with their financial goals and risk tolerance	3.13	1.960	0.026
9.	Risk-return trade-off supports investors in handling potential risks	3.20	2.978	0.002
10.	Help investors pinpoint investments that promise the greatest potential gains within their limits	3.17	2.576	0.005

Table 2 shows the Role of risk-return trade-off on long-term investment decisions. The respondent says that the Risk-return trade-off supports investors in handling potential risks with a mean value of 3.20, the Risk-return balance is key and significantly enhances the investment approach (3.19), Helps in assessing how well their investments are performing (3.18), and Help investors to pinpoint investments that promise greatest potential gains within their limits (3.17). The respondent also says that it helps retail investors to consider more informed decisions and aim for improved returns (3.16), Suggests that investments offering greater potential rewards typically come with increased levels of risk (3.15), and Support in maximizing profits and minimizing avoidable losses (3.14). In respondent's opinion, risk-return trade-off allows individuals to choose investment funds that align with their financial goals and risk tolerance (3.13), Risk return trade-off highlights the balance between gain and level of risk in an investment (3.13), and Risk return trade-off helps to build a well-diversified portfolio with mean value 3.12.

CONCLUSION

Ruslaini et.al. (2025), argue that the risk-return trade-off highlights the balance between how much you might gain from an investment and the level of risk you need to take. Retail investors can rely on three key financial ratios to assess this balance in mutual funds. The above-mentioned tools help determine if, a fund aligns well with their financial goals and comfort level with risk. Given the ever-changing nature of the market, retail investors should refer to practical examples of the risk-return trade-off to better manage their investment portfolios. This approach can help retail investors to consider more informed decisions and aim for improved returns while keeping risks in check. Abu-Alkheil et.al. (2020), concluded by stating that the risk-return trade-off doesn't promise that higher risk will always bring higher returns simply suggests the possibility of greater gains when you take on more risk. Retail investors may earn better returns by putting money into high-risk investments, but there's no certainty-it could just as easily go the other way. Thus, it's essential for retail investors to thoughtfully evaluate how much risk they can realistically handle. Running after high returns without understanding personal risk limits can back-fire quickly if, the market doesn't behave as expected. Retail investors should make it a habit to review their investment portfolios from time to time to ensure the risk level still matches their financial goals and comfort with uncertainty. Tools like alpha, beta, and the Sharpe ratio can offer useful insights into how well your investments are balancing risk and potential returns, helping you stay on track with your investment plan.

The study aims to know the role of risk-return trade-off on long-term investment decisions by retail investors and found that Risk-return trade-off supports investors in handling potential risks, Risk-return balance is key and significantly enhances the investment approach, it helps in assessing how well their investments are performing and also help investors to pinpoint investments that promise greatest potential gains within their limits.

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