

Investigating Influence of Financial Literacy on Investment Decision: Mediating Role of Risk Tolerance

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Abstract

The Financial Risk Tolerance has a big impact on financial decision-making and is essential for understanding investment opportunities. One important characteristic that draws investors to take advantage of market opportunities is a higher risk tolerance. This study looks into how risk tolerance acts as a mediating factor in the relationship between financial literacy and investing performance. A structured questionnaire was used to gather information from 288 individual investors in India. The results show a strong positive association between investment decision and financial literacy, with risk tolerance acting as a partly mediating factor. This study is noteworthy for its innovative approach to investigating the mediating function of risk tolerance. It demonstrates how higher levels of financial literacy lead to a greater willingness to take risks, which in turn produces better and more satisfactory investment returns. This study has ramifications for investors, financial advisors, and legislators. It highlights the value of financial literacy in raising awareness and encouraging non-investors to make investments.

Keywords: Financial Literacy, Investment Performance, Risk Tolerance,

1. Introduction

Amidst the constantly changing global environment of today, financial systems across the globe are becoming more complex and advanced. According to study [1] financial institutions are consistently launching novel products into the financial markets, highlighting the increasing demand for people to become financially literate in order to handle these intricacies. Making wise financial judgments with their money is a difficulty that faces investors as they interact with these financial marketplaces. Research has shown that individuals find it particularly challenging to make decisions about long-term savings [2] the product knowledge is the crucial factor affecting how decisions are made and information is processed. When it comes to financial products in particular, this idea of product knowledge is equivalent to financial literacy, sometimes referred to as financial numeracy [3]. Different studies have offered unique definitions of financial literacy that are specific to the discussion context. This study explores the relationship among investment decision, financial literacy and financial risk tolerance among individual investors. It highlights how financial literacy positively influences risk tolerance, which in turn impacts investment decision. Such findings suggest a crucial link between knowledge, interest, and willingness to take risks in investment decisions.

2. Literature Review

The literature review highlights how financial literacy positively influences risk tolerance, which in turn impacts investment decision.

2.1. Financial Literacy

Financial literacy is the knowledge that people need to have in order to make decisions about their money that are best for them. It is the capacity to do interest rate computations as well as an understanding of basic financial concepts and investments, including risk diversification and inflation [4]. The Organization for Economic Co-operation and Development (OECD) defines financial literacy as the knowledge and comprehension of monetary ideas and risks by an individual. It also entails having the

aptitude, drive, and self-assurance to put that information to good use in order to make wise decisions in a range of financial situations [5]. Financial literacy plays a crucial role in shaping individuals' financial well-being and decision-making processes. Financial literacy encompasses the knowledge and understanding of various financial concepts, such as budgeting, saving, investing, and managing debt. Studies have shown that individuals with higher levels of financial literacy are more likely to make informed financial decisions and achieve greater financial stability. Improving financial literacy through education and awareness programs is essential in empowering individuals to navigate complex financial landscapes and secure their financial futures [6]. It is crucial to develop this talent in order to encourage financial security for individuals as well as society at large and to encourage active engagement in the economy. Financial literacy, is the combination of attitudes, awareness, skills, knowledge, and behavior necessary for making wise financial decisions that eventually help people reach financial well-being. Like other literacy skills, financial literacy advances individual and societal growth by enabling successful and well-rounded decision-making in financial affairs [7]. Different people have different levels of financial literacy for various reasons. These findings highlight the importance of gender and age in determining financial literacy. The results also showed that both the amount and quality of education have a favorable impact on financial literacy, indicating that not only the number of years of study its influence goes beyond bolstering the balance sheets of individual households; it is essential to the development of a strong and effective financial system that distributes resources in the real economy in the most efficient manner [6]. As The World Bank said in 2009, this emphasizes the value and applicability of financial literacy in raising the standard and effectiveness of financial services.

2.2. Risk Tolerance

Risk tolerance refers to an individual's willingness and ability to endure fluctuations in the value of their investments. It is influenced by factors such as financial knowledge, investment goals, time horizon, and psychological traits. Studies have shown that individuals with higher risk tolerance levels are more likely to engage in riskier investment opportunities in pursuit of potentially higher returns [7]. Understanding one's risk tolerance is crucial in developing a well-balanced investment portfolio that aligns with their financial objectives and comfort level. Financial advisors often assess clients' risk tolerance to tailor investment strategies that match their risk preferences and financial goals. Regularly reassessing and adjusting one's risk tolerance as circumstances change can help maintain a suitable investment approach over time. Risk is an important component of financial and real investments [8]. Both individual and institutional investors carefully consider the expected rate of return in relation to the perceived amount of risk involved with an investment when making decisions about tangible assets and individual investments [9]. The paradigm in question highlights the importance of individual investors' financial risk tolerance as a crucial factor that impacts both the choice of financial investments and the distribution of savings among financial markets. As such, this variable takes on significant weight in the context of both individual financial planning and portfolio optimization for investors.

2.3. Investing Decision

A critical component for investors is the decision-making process, which is influenced by a wide range of variables. Each investor interprets and uses these characteristics differently, demonstrating their variety. Some investors use their judgment, carefully weighing a wide range of variables to help them make decisions. As investors recognize and negotiate potential complications, this method streamlines the decision-making process, enabling them to take well-informed positions and minimize potential losses [10]. When making decisions, investors face a variety of complex obstacles, such as conflicting viewpoints, uncertainty, and inherent risks. These difficulties are especially severe for both regular individual households and seasoned investors and financial experts. Investing preferences vary among individuals based on factors such as risk tolerance, financial goals, time horizon, and personal values. Some investors prioritize capital preservation and opt for low-risk investments like bonds or savings accounts to safeguard their principal. Others with a higher risk tolerance may seek growth opportunities through stocks, real estate, or alternative investments to achieve potentially higher returns. Environmental, Social, and Governance considerations are gaining prominence, with socially responsible investors aligning their investment choices with ethical and sustainable practices [12]. Diversification is a common strategy where investors spread their investments across different asset classes to reduce risk and enhance portfolio resilience. Understanding one's investing preferences and aligning them with a well-defined investment strategy can help individuals achieve their financial objectives effectively. Regularly reviewing and adjusting investment preferences in response to changing market conditions and personal circumstances is essential for maintaining a balanced and successful investment approach [13]. Risk perception and financial literacy both affect their investing preferences. Higher-risk investors go toward assets like foreign exchange, equities, and portfolios, whilst lower-risk investors typically choose deposits. Additionally, a significant correlation between investing preferences and financial literacy levels was found in their study [14]. When an investor's financial literacy is low, they tend to favor foreign currency and deposits; nevertheless, when their literacy rises, they start to build portfolios or invest in stocks. Furthermore, gender

disparities in financial literacy were found, with men showing higher levels of financial literacy than women at an advanced level and no discernible variation at the basic level. Men tend to be more financially literate than women, and those with lesser financial literacy are less likely to invest in the stock market [15, 21]. A significant proportion of investors are financially illiterate and frequently rely on friends or parents for information. They also exhibit high levels of behavioral biases. According to the study, financial literacy and biases like confirmation, representativeness, and over-optimism are positively correlated [16]. On the other hand, it was discovered that biases such as cognitive dissonance, loss aversion, overconfidence, and framing had a negative correlation with financial literacy. In a study it highlighted the favorable relationship between improved wealth accumulation and greater financial literacy [17, 22]. Together, these data demonstrate the complex interactions among behavioral biases, investing preferences, and financial literacy that influence individual investment decisions and wealth accumulation.

3. Research Methodology

The research employed a random sampling technique to collect data from a diverse group within the population. Conducted as a cross-sectional study with a descriptive character, the research builds upon existing studies in the field. The participants included individual investors actively involved in the Indian Stock Exchange. Initially, 390 questionnaires were disseminated, and a total of 287 were returned, resulting in a response rate of 74.5%. These 288 responses formed the basis of the study, reflecting the insights and perspectives of individual investors in the specified stock exchange context. The study utilized primary data that was obtained directly from stock exchange participants through the use of a carefully crafted questionnaire. During the distribution procedure, questionnaires were personally given to stock market investors along with a brief explanation outlining the importance and goal of gathering data for the study. The questionnaire was written with clarity and conciseness in mind, making it simple for participants to respond. Upon analyzing the primary data collected, it was noted that certain investors encountered difficulties in providing accurate or complete responses, leading to the exclusion of those specific questionnaires. The questionnaire employed a five-dimensional scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree) to effectively capture participant responses. The demographic profile of 287 respondents is stated below

Table 1: Demographic Profile

Demographic Data	Percentage
Gender	
Male	68%
Female	32%
Age Groups	
25 and under	36%
26-33 years	47%
34-41 years	17%
Qualification	
Bachelors	58%
Masters	23%
MS / M.Phil	19%
Years of Experience	
5 and less	80%
6-13 years	16%
14-21 years	4%

4. Results and Discussions

The study adopted the quantitative cross-sectional design with a respondent size of 288 participants and results and discussions are stated below.

4.1. Reliability and Validity Analysis

Table 2: Cronbach's alpha

Variable	No of Item	Cronbach's alpha
Financial Literacy	08	0.801
Investment Decisions	07	0.721
Risk Tolerance	06	0.768

Based on interpretation of the above table, cronbach alpha is above 0.7 [18], hence acceptable for further analysis.

4.2. Correlation Analysis

Table 3: Person Correlation Test for Correlation

Variables	Financial Literacy	Investment Decisions	Risk Tolerance
Financial Literacy	1		
Investment Decisions	0.438***	1	
Risk Tolerance	0.368**	0.425**	1

This study used correlation analysis, a statistical technique used to determine the direction and degree of a link between two continuous variables. Table 3 summarizes the results. Interestingly, there is a statistically significant positive association (0.438**) between financial literacy and investing decisions. Additionally, the data shows that financial literacy and risk tolerance have a significant positive association (0.368**), and that investment decisions have a positive correlation (0.425**) with risk tolerance. The considerable and positive correlations between the variables under study are highlighted by these findings taken together.

4.3. Confirmatory Factor Analysis Values

Table 4: CFA

	Absolute Fit Indices			Incremental Fit Indices			
	CMIN/df	GFI	AGFI	RMSEA	NFI	TLI	CFI
Observed values	2.482	0.930	0.920	0.085	0.91	0.934	0.905
Threshold values	<3	> 0.90	>0.90	<0.08	>0.9.	>0.9.	>0.90

The criteria, the absolute and incremental fit indices in Table 4 are both within acceptable ranges. The CMIN/DF is 2.482 in absolute fit indices, which is less than the suggested cutoff of 3. The GFI is 0.930, which is higher than the recommended cutoff point of 0.90. The required level of 0.90 or higher is extremely close to being reached by the AGFI of 0.90. The RMSEA is 0.085, which is a little bit higher than the suggested value of less than 0.08; on the other hand, it is close to zero, indicating a good fit. Examining incremental fit indices, the CFI attains a value of 0.905, surpassing the recommended threshold of 0.90. The NFI stands at 0.91, value of above 0.90. The TLI is 0.93, above the recommended range of above 0.90. In summary, the GFI and CFI values align with recommendations, while the other indices (AGFI, RMSEA, NFI, and TLI) are in close proximity to the suggested threshold of 0.90. [18, 19, 20]

4.4. Mediation Results of Risk Tolerance

Table 5: Mediation

Relationship	Direct Effect	Indirect Effect	Total Effect	Mediation Result	Decision
Financial literacy → Risk Tolerance → Investment Decisions	0.44*	0.25*	0.64*	Partial	Supported

The direct effect is 0.44, the indirect effect is 0.25, and the total effect is 0.64, according to Table 5 data. Crucially, every single one of these values has statistical significance at $p < 0.01$, indicating that the observed mediation is only partially present. It follows that there is clear evidence of a significant and favorable correlation between investment decisions and financial literacy. Moreover, even after accounting for risk tolerance's mediating effect, this strong and favorable association remains.

5. Conclusion

The main goal of the study was to investigate how risk tolerance as a mediator in the interaction between investors' decision-making about investments and financial literacy on the Indian stock exchange. Individual investors who actively traded stocks listed on the Stock Exchange made up the target population. 288 respondents made up the sample size for the questionnaires used to collect data for the study. The results of the study showed a strong correlation between investing decisions, risk perception, and financial literacy. Notably, having financial literacy makes an investor's decision-making process better and helps them better manage the intricacies of investing. The study emphasized the critical importance of financial literacy, stating that investors who lack it have difficulty making wise judgments because investing is by its very nature dangerous and complex.

The study also asserted the importance of risk tolerance even in the presence of financial knowledge, underscoring its widespread influence on investing decisions. It was concluded that the relationship between financial literacy and investment decision-making is fully mediated by risk perception. The knowledge acquired from this research is especially beneficial for investors who are actively involved in making investing decisions. Subsequent research directions could build on this work by investigating the association between investment behaviors and financial understanding by integrating economic and human characteristics. Furthermore, investigating the functions of behavioral and human capital variables in this setting may offer a more thorough comprehension of the dynamics involved in investors' decision-making processes.

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