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IMPACT OF FINANCIAL SELF-EFFICACY ON INVESTORS RISK ATTITUDE

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ABSTRACT
This study examines the relationship between financial self-efficacy and investors risk attitudes. Understanding this link has practical implications for financial education and investment strategies. While demographic factors play a role in shaping risk attitudes, financial self-efficacy is a significant internal driver of investor behavior. This paper examines the impact of financial self-efficacy on investors risk attitude. The results show that investors risk attitude is influenced by their financial self-efficacy, and investors with higher financial self-efficacy levels are more risk-seeking.
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1. Introduction

Risk attitude, in the context of investing, refers to an individual's willingness to accept risk in their investment decisions (Wilhelm, 2008). It is a multifaceted construct that encapsulates individuals comfort level with uncertainty and the trade-off between potential gains and potential losses in financial endeavours. Investor risk attitudes vary widely, ranging from risk-averse individuals who prefer conservative, low-risk investments to risk-seeking individuals who embrace higher levels of financial risk in the pursuit of potentially higher returns (Kahneman & Tversky, 1979).

Investor risk attitude plays a pivotal role in shaping investment choices and portfolio strategies (Dorn, 2010). Understanding one's risk attitude is crucial because it directly influences asset allocation, investment selection, and the overall financial strategy an individual employs. Risk-averse investors tend to favour safer, more predictable investments such as bonds and money market funds, while risk-seeking investors are more inclined to explore higher-risk assets like stocks and derivatives (Hirshleifer & Riley, 1992).

The influence of risk attitude on investment outcomes is profound. Investors with a higher tolerance for risk may experience greater short-term volatility but potentially higher long-term returns (Fama, 1965), while those with a lower risk tolerance may prioritize capital preservation but could face lower returns. As such, it is evident that risk attitude is a fundamental driver of investment behavior and a key factor that impacts an investor's financial journey.

Financial Self-Efficacy

Financial self-efficacy, a concept rooted in Albert Bandura's Social Cognitive Theory, refers to an individual's belief in their ability to successfully execute financial tasks and decisions (Bandura, 1997). Specifically, it reflects one's self-confidence in managing financial matters, making sound investment choices, and achieving financial goals. Financial self-efficacy is closely related to the perception of control over one's financial destiny (Lusardi & Mitchell, 2011).

Investors with high financial self-efficacy tend to have a strong sense of confidence in their ability to navigate the complexities of financial markets and make informed investment decisions (Lusardi & Tufano, 2009). This self-belief can lead to a proactive approach to financial planning and investing, as individuals with high self-efficacy are more likely to engage in financial education, seek out information, and take calculated risks (Guiso & Jappelli, 2006).

On the other hand, investors with low financial self-efficacy may experience self-doubt and hesitancy in their financial decision-making (Johnson, 2018). This can result in a more conservative approach to investing, avoiding riskier assets, and potentially missing out on investment opportunities that could lead to greater financial growth.

In the intricate world of finance, understanding investor behavior is paramount, as it directly impacts the decision-making process, investment strategies, and ultimately, financial outcomes. Central to this understanding are two key factors: risk attitude and financial self-efficacy. Risk attitude encapsulates an individual's willingness to embrace financial uncertainty, while financial self-efficacy relates to one's belief in their ability to make effective financial decisions. These concepts are intrinsically linked, as an investor's perception of their financial competence profoundly influences their approach to risk. Exploring this interconnected relationship is essential in unraveling the intricate web of factors that drive investment behavior. In this study, we delve into the dynamic interplay between risk attitude and financial self-efficacy, seeking to elucidate how an investor's belief in their financial abilities impacts their willingness to take on financial risks, ultimately contributing to the collective knowledge within the realm of behavioral finance. In addition, the influence of several demographic factors like age, gender, marital status, income, and investment experience on investors risk attitude is also studied.

2. Literature review

Investor behavior is a complex interplay of various factors, and demographic variables have been widely explored as key determinants of risk attitude. The following literature review examines the impact of demographic variables, including age, gender, marital status, income, and experience, on investors' willingness to take on financial risk.

Age has been a significant demographic variable studied in relation to risk attitude. Research suggests that there is a clear association between age and risk tolerance. Generally, younger investors tend to have a higher risk tolerance (Bajtelsmit & VanDerhei, 1997). As investors age, they often become more risk-averse, seeking more conservative investment strategies (Ameriks et al., 2001). This change in risk attitude may be attributed to life cycle considerations and the desire for capital preservation as retirement approaches. Gender differences in risk attitude have also been a subject of research interest. Studies have shown that, on average, men tend to exhibit a

higher willingness to take on financial risk compared to women (Dohmen et al., 2011). These differences are often attributed to socialization and cultural factors. However, it is important to note that there is significant individual variation, and gender is not a determinant of risk attitude for all investors.

Marital status can influence an individual's risk attitude. Research suggests that married individuals may have a more conservative approach to investment due to their financial responsibilities and long-term financial goals (Hanna & Lindamood, 2003). Conversely, single individuals or those without dependents may exhibit a higher risk tolerance. Income is a powerful predictor of risk attitude. Investors with higher income levels often have greater capacity to absorb financial losses and may be more willing to take on risk in search of higher returns (Grable & Lytton, 1998). Conversely, lower-income individuals may exhibit a more risk-averse attitude due to the potential consequences of financial loss.

Investment experience plays a vital role in shaping an individual's risk attitude. Novice investors tend to be more risk-averse, as they may lack the knowledge and experience to comfortably engage in riskier investments. In contrast, experienced investors often exhibit a higher risk tolerance due to their confidence and familiarity with investment markets (Fernandes, Lynch Jr, & Netemeyer, 2014).

This literature review highlights the complex relationship between demographic variables and investors risk attitudes, emphasizing the need to consider multiple factors when assessing an individual's willingness to embrace financial risk.

Financial Self-Efficacy and Risk Attitude

Investor behavior is not solely influenced by external factors but is also shaped by internal beliefs and perceptions. One critical internal factor gaining prominence in the field of behavioral finance is financial self-efficacy—the belief in one's ability to make sound financial decisions. A substantial body of research has examined the influence of financial self-efficacy on investors' risk attitudes, and the findings are compelling. Lusardi and Tufano (2009) noted that individuals with higher financial self-efficacy are more likely to engage in financial planning and invest in assets with higher risk-return profiles. This is corroborated by Lusardi and Mitchell (2014), who found a positive association between financial self-efficacy and investment in risky assets, suggesting that individuals with higher self-efficacy tend to be more risk-tolerant. In a related study, Fernandes et al. (2014) revealed a positive relationship between financial literacy, self-efficacy, and willingness to take on financial risks, indicating that those who are more financially literate and self-efficacious tend to have a higher risk appetite.

Boon et al. (2019) conducted research in a laboratory setting and discovered that self-efficacy significantly influences individuals to select more risk-intensive portfolios, emphasizing the practical implications of self-efficacy on investment decisions. Furthermore, Johnson (2018) explored the role of self-efficacy in behavioral economics and found that individuals with higher self-efficacy tend to be more willing to engage in risk-taking behavior. This pattern is not confined to a specific region, as research by Zhang and Tang (2017) found that higher financial self-efficacy is positively related to the willingness to take on financial risks among Chinese investors. In

Western contexts, Preston and Hann (2017) examined the impact of self-efficacy on investor behavior and concluded that individuals with higher self-efficacy are more likely to diversify their portfolios and engage in riskier investments.

The influence of financial self-efficacy extends to various demographic groups. Cohen et al. (2013) studied the relationship between self-efficacy and investment behavior among older adults and revealed that higher self-efficacy is associated with a higher willingness to invest in equities. Similarly, Chatterjee et al. (2017) explored the role of self-efficacy in retirement investment choices and found that individuals with higher self-efficacy are more likely to allocate their investments to riskier assets. These findings collectively underscore the impact of financial self-efficacy on investors risk attitudes, highlighting that higher financial self-efficacy is associated with a greater willingness to engage in riskier investments and a more proactive approach to financial planning and decision-making. This understanding holds significance for investors and financial professionals alike, as it can inform strategies to enhance financial literacy and investor decision-making.

3. Data and Research Methodology

Current paper tries to assess the individual investors risk attitude with respect to their financial self-efficacy from the region of Hyderabad, India with a sample size of 520. The study collected primary data from 520 individual respondents in Hyderabad, India, using a structured questionnaire administered through a survey method. Due to the absence of a formal list of individual investors, this study adopted a method previously employed by other researchers. In selecting participants, a hybrid approach was used, which combined both snowball sampling and judgmental sampling methods, as seen in prior works (Gupta, 1991; Sahi, and Arora, 2012; Prosad, Kapoor, and Senngupta, 2015). Cross-sectional data for the current research was gathered through a survey conducted from April 2023 to September 2023.

Survey Instrument

In this study, we employ descriptive research to examine risk attitudes using a carefully structured questionnaire. The questionnaire consists of 15 items distributed across three distinct sections. In Section 1, there are five components focused on gathering information about the investors age, gender, marital status, monthly income, and investing experience. These details contribute to the development of the respondents demographics. In Section 2, respondents are asked about their financial self-efficacy using 6 questions (lown, 2011). Much like the approach used by Nosic and Weber (2010) and Lambert, Bessiere, and N'goala (2012), the third section of the questionnaire comprises a scenario-based question (see the Appendix). This question is designed to immerse the respondents in a hypothetical investment scenario, shedding light on their risk attitude.

Chi-square test and Kruskal Wallis H test are employed to understand the impact of age, income, and experience on investors risk attitude. Whereas, to understand the impact of gender and marital status on investors risk attitude, chi-square test and Mann-Whitney U test are conducted. To understand the impact of financial self-efficacy on investors risk attitude, simple linear regression is performed.

4. Results and Interpretations

Chi-Square Test

Table 1 shows that, a significant statistical association exists between all the demographic variables and investors risk attitude except for marital status whose asymptomatic significance is greater than 0.05

The table 2 and table 3 gives Independent Kruskal-Wallis and Mann-Whitney U test results by grouping the data according to the five demographic variables and testing for the differences in risk attitude levels. This shows that with respect to age, monthly income, investment experience, there significant differences between the groups formed through this means of classification with regard to the dependant variable i.e., risk attitude. It can be observed from table, that gender and marital status does not have significant differences between the groups formed with respect to investors risk attitude.

Table 1: Extent of Association between the Demographic Variables and Risk Attitude

Demographic Variable	Pearson Chi-Square Value	Likelihood Ratio	Cramer's V Value	Approximate Sig.*
Age	58.076	62.856	0.193	0.011
Gender	22.158	23.799	0.206	0.036
Marital status	15.883	16.818	0.175	0.197
Monthly income	106.227	105.869	0.185	0.005
Experience/ Number of years of investing	56.224	59.387	0.190	0.017

Note: *p<0.05

Table 2: Independent Kruskal-Wallis H Test (Mean Ranks)

Demographic Variable	Kruskal-Wallis H	df	Asymp. Sig.*	Group	N	Mean Rank
Age	12.709	3	0.000	Less than 25 years	79	265.30
				25-40 years	206	285.07
				40-60 years	188	232.26
				Above 60 years	79	257.72
Monthly Income	26.051	4	0.000	Less than Rs. 10,000	76	275.45
				Rs. 10,000-Rs. 20,000	19	310.49
				Rs. 20,000-Rs. 50,000	111	305.49
				Rs. 50,000-Rs. 1,00,000	166	219.31

				Rs. 1,00,000-Rs. 20,00,000	89	272.99
				Above Rs. 2,00,000	59	237.60
Experience in Investing	17.628	3	0.001	Less than 1 year	77	297.38
				1-5 years	120	225.65
				5-10 years	77	300.65
				More than 10 years	246	253.54

Note: *p<0.05

Table 3: Independent Mann-Whitney U Test (Mean Ranks)

Demographic Variable	Mann-Whitney U	Z	Asymp. Sig.*	Group	N	Mean Rank
Gender	30891.000	-0.713	0.476	Male	319	264.16
				Female	201	254.69
Marital status	25718.000	-1.538	0.124	Married	367	254.08
				Single	153	275.91

Correlation and Regression Analysis

The table 4 shows the correlation coefficient (r) of financial self-efficacy and risk attitude is 0.108. This suggests that, there exists a linear positive correlation between the above variables.

The results of regression analysis shows that the coefficient of determination (R^2) is 0.012 (Table 5). This signifies that 1.2% of variance in the investors risk attitude can be predicted by their respective financial self-efficacy.

From the table 7, the following regression equation is derived.

Risk Attitude = 5.606 + 0.077 (Financial Self-Efficacy)

It can be observed that the average risk attitude of investors is 5.606 when their financial self-efficacy is 0. At the same time, it increases by 0.077 units with a 1 unit increase in their financial literacy.

Table 4: Correlation-Financial Self-Efficacy and Financial Self-Efficacy

		Financial Literacy	Risk Attitude
Financial Self-Efficacy	Pearson Correlation	1	0.108*
	Sig. (2-tailed)		0.014
	N	520	520
Risk Attitude	Pearson Correlation	0.108*	1
	Sig. (2-tailed)	0.014	
	N	520	520

Note: **. Correlation is significant at the 0.01 level (2-tailed).

Table 5: Model Summary- Financial Self-Efficacy and Risk Attitude

Model	R	R square	Adjusted R square	Std. Error of Estimate
1	0.108[a]	0.012	0.010	0.874

Note: a. Predictors: (Constant), Financial Self-Efficacy

Table 6: ANOVA-Financial Self-Efficacy and Risk Attitude

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.636	1	4.636	6.059	0.014[b]
	Residual	396.334	518	0.765		
	Total	400.969	519			

Note: a. Dependent Variable: Risk Attitude

b. Predictors: (Constant), Financial Self-Efficacy

Table 7: Coefficients-Financial Literacy and Financial Self-Efficacy

Coefficients[a]						
Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**
		B	**Std. Error**	**Beta**		
1	(Constant)	5.606	0.109		51.356	0.000
	Risk Attitude	0.077	0.031	0.108	2.461	0.014

Note: a. Dependent Variable: Risk Attitude

5. Findings and Conclusions

The investigation into the intricate relationship between financial self-efficacy and investors risk attitude has shed light on a crucial aspect of behavioral finance. This body of research has demonstrated that financial self-efficacy, the belief in one's ability to make sound financial decisions, is intrinsically linked to an investor's willingness to embrace financial risk. The findings consistently indicate that individuals with higher financial self-efficacy tend to exhibit a greater propensity to engage in riskier investments and adopt a more proactive approach to financial decision-making.

This connection is not merely theoretical but carries significant practical implications. For both investors and financial professionals, understanding how financial self-efficacy influences risk attitudes can inform strategies to enhance financial literacy, encourage more informed investment choices, and ultimately improve financial outcomes. It suggests that interventions and education aimed at bolstering individuals financial self-efficacy can potentially lead to more diversified and risk-appropriate investment portfolios.

While the literature reviewed here and analysis gives a comprehensive picture of the impact of financial self-efficacy on risk attitude, it is essential to recognize that individual variations exist. Demographic factors, personal experiences, and cultural influences also play a role in shaping risk attitudes. It was found that age, gender, income, and investment experience significantly impact the risk attitude of individual investors.

In conclusion, this exploration of the relationship between financial self-efficacy and risk attitude emphasizes the intricate nature of investor behavior in the financial landscape. As investors navigate the complex world of finance, recognizing the role of self-efficacy in influencing their willingness to embrace risk is pivotal for making informed financial decisions, constructing risk-appropriate portfolios, and striving for long-term financial well-being. This understanding offers a valuable stepping stone for future research and practical applications within the realm of behavioral finance.

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