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Financial Knowledge and Risky Investment Behaviour: *Insights from Nepalese Stock Market Investors*

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Abstract

This study examines the influence of individual factors, such as risk aversion and locus of control, on risky investment behaviour. Additionally, it explores whether financial knowledge plays a moderating role in the relationship between these factors and risky investment behaviour. Based on a survey of 386 participants from the stock market of Nepal conducted during August and September of 2024, and using hierarchical regression to test the proposed hypotheses, the findings revealed that risk aversion has a significant negative effect on risky investment behaviour, while locus of control showed no evidence of being a predictor of risky investment behaviour. Finally, the study demonstrated that financial knowledge moderated these relationships, altering the dynamics between risk aversion, locus of control, and risky investment behaviour. The study's findings suggest that enhancing financial knowledge can mitigate the negative effects of risk aversion and strengthen investment decision-making, while also highlighting the limited role of locus of control in predicting risky investment behaviour. The main implication of the study finding is that higher financial knowledge encourages individuals with an external locus of control to assume greater personal responsibility when making risky financial decisions. These insights hold particular importance for policymakers and financial intermediaries, highlighting how improved financial knowledge can shape investment attitudes and risk-taking behaviours.

Keywords: behavioural finance, financial knowledge, locus of control, risk aversion, risky investment behaviour

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INTRODUCTION AND STUDY OBJECTIVES

Understanding financial behaviour has remained a consistent focus for scholars, even as their perspectives have occasionally shifted with evolving paradigms. Both financial intermediaries and policymakers have shown keen interest in this subject, addressing it from microeconomic aspects such as product demand, as well as macroeconomic dimensions like savings

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and investments. Rooted in classical finance paradigms, numerous studies (Dwyer et al., 2002; Powell & Ansic, 1997) have traditionally concentrated on demographic and socioeconomic factors to explain financial behaviour. Under the assumption of rational decision-making, this focus was deemed logical. However, the emergence of behavioural finance has introduced a fresh perspective, advocating for extended assumptions such as systematic deviations from rationality and subjective probabilities. As a result, psychological and attitudinal factors have gained prominence, shifting the lens of scholars toward subjective elements within financial behaviour. Simultaneously, financial knowledge has emerged as a key area of interest, with literature extensively exploring its influence on various financial behaviours (e.g., Bayer et al., 1996; Robb, 2011). Despite thes e advancements, relatively less is known about how financial knowledge specifically affects risky investment behaviour, particularly as a moderator. Moreover, prior studies have established the relationship between risk tolerance and financial behaviours (Grable & Lytton, 1998; Weber & Milliman, 1997). Although risk-averse individuals are generally expected to avoid risky behaviours, this relationship is not uniformly straightforward. For instance, Weber et al. (2002) observed that risk-taking tendencies vary across domains, highlighting the complexity of this association.

Understanding the role of financial knowledge is particularly crucial in determining risky investment behaviour for investors in the stock market of Nepal due to the unique characteristics of the nation's financial environment. Nepal's stock market, represented primarily by the Nepal Stock Exchange (NEPSE), is relatively emerging and marked by high volatility, limited market depth, and the dominance of retail investors. These features make it essential for investors to possess adequate financial knowledge to direct the complexities and uncertainties of stock market investments. In Nepal, many individuals engage in stock market investments without a robust understanding of financial concepts, often relying on market rumours, peer advice, or speculative strategies. Such approaches can lead to suboptimal decision-making and significant financial losses, particularly in a volatile market setting. Financial knowledge equips investors with the knowledge to assess risk-return trade-offs, diversify portfolios, and make informed choices based on fundamental analysis rather than speculation.

Moreover, the cultural and socio-economic context of Nepal, where family savings and small-scale investments are pivotal, underscores the need for a deeper comprehension of financial decision-making. Financial knowledge can help bridge the gap between traditional saving practices and modern investment opportunities, fostering a more informed and robust investor base. By studying the interaction between financial knowledge and risky investment behaviour in Nepal's stock market, this study can offer insights into how targeted education and awareness programs might empower investors. This, in turn, could contribute to the development of a more stable and efficient financial market, encouraging greater participation while minimising undue risks. This study particularly attempts to propose that financial knowledge might differentiate between individuals avoiding risk in general but assuming financial risk

and individuals avoiding risk consistently across both contexts.

To sum up, this study makes three important contributions: first, it includes personal traits and financial knowledge into the study of financial behaviour; second, it explores how financial knowledge directly and indirectly affects the link between these traits and risky investment choices; and third, it opens doors for future research, such as looking into combined effects like moderated mediation. To achieve these goals, the study relies on existing research, explains its methods, and discusses practical and theoretical implications.

LITERATURE REVIEW

Risk Aversion and Risky Investment Behaviour

Risk aversion reflects the extent to which individuals tend to avoid risks in their daily lives. Based on the Theory of Reasoned Action (Ajzen & Fishbein, 1977) and the Theory of Planned Behaviour (Ajzen, 1991), attitudes and subjective norms shape behavioural intentions, thereby influencing the likelihood of certain actions. This attitude plays a significant role in determining why individuals prefer certain products while avoiding others. In the finance literature, there are two perspectives on risk-taking, often considered an entrepreneurial trait. The first posits that risk-taking is a stable personality trait, while the second suggests it is a dynamic state of mind influenced by varying circumstances (McCarty, 2000). Schoemaker (1993) highlighted that intrinsic risk attitudes may differ from observed risk-taking behaviour due to factors like problem framing, information processing, value functions, beliefs, and contextual elements. Similarly, Weber et al. (2002) found that risk-taking behaviour is domain-specific, implying that individuals are not consistently risk-averse or risk-seeking across all domains. This variability corresponds to the observations of Sitkin and Weingart (1995), who propose that risk perception acts as an intermediary between problem conceptualisation, past performance, and risk-taking.

Numerous studies (e.g., Selcuk et al., 2010; Weber et al., 2002) have investigated the connection between risk-taking and risky behaviour, often concluding that risk-averse individuals tend to steer clear of risky actions. Van Rooij et al. (2011), however, emphasise the need to account for both risk aversion and financial knowledge when attempting to understand financial behaviour, as differing degrees of risk aversion may shape financial decisions in distinct ways. Building on this foundation, the study hypothesises that risk aversion has a negative effect on risky investment behaviour. Individuals who are reluctant to take risks in their daily lives are expected to avoid high-risk investments, leading to the following hypothesis.

H_1: Risk aversion has a negative impact on risky investment behaviour.

Locus of Control and Risky Investment Behaviour

Rotter (1966) articulates that people differ in how they perceive the source of reinforcement for their behaviour, which determines their locus of control. Those who attribute rewards to their own actions have internal locus of control, while those who associate reinforcement with external factors such as luck, chance, or fate are characterised by external locus of control. This variable is

considered significant in predicting learning processes and consistently distinguishes individuals based on their perceptions.

Locus of control has been extensively examined as a personality trait. Studies, such as Ganesan et al. (2003) indicate that age positively influences locus of control, with older individuals tending toward an internal locus of control. Studies have also shown that managers having robust internal locus of control are further motivated to adopt consultative decision process. Their confidence and self-assured belief in their capabilities encourage active participation and collaboration from others in the decision-making process. In the entrepreneurial domain, internal locus of control is widely recognised as a key trait (Jain & Ali, 2013). Additionally, risk-taking, often linked with entrepreneurship (Kreiser et al., 2013), may have a relationship with locus of control. Studies support this connection, showing that individuals with an external locus of control tend to exhibit more conservative risk-taking behaviour (Baron, 1968). Carpentier et al. (2014) revealed that locus of control, along with attitudes and social norms, significantly predicts risky behaviours. Moreover, Crisp and Barber (1995) found that locus of control mediates the relationship between perception and risky behaviour in health-related contexts.

These findings extend the relevance of locus of control to the studies associated with behavioural finance. Grable and Joo (2004) demonstrated that locus of control, financial knowledge, and gender are predictors of financial risk tolerance, with locus of control providing a more substantial explanatory power compared to the other factors. Similarly, Perry and Morris (2005) identified both direct and indirect effects of locus of control on responsible financial behaviour, noting that individuals with high internal locus of control gain greater benefits from financial knowledge in managing their finances. Thus, considering the link between locus of control and risk-taking, this study also hypothesises that locus of control influences risky investment behaviour. Specifically, the study proposes the following hypothesis:

H_2: External locus of control has a significant negative effect on risky investment behaviour.

Financial Knowledge and Risky Investment Behaviour

Financial knowledge denotes the depth of an individual's knowledge of essential financial principles and the functioning of financial markets. Servon and Kaestner (2008) describe it as the capacity to grasp and effectively apply financial ideas. In recent years, financial knowledge has reaped considerable attention for its pivotal role in influencing financial behaviours and decision-making. The introduction of market deregulation and global reforms in social security systems have encouraged individuals to take a more active and accountable role in financial planning. These changes have highlighted the significance of financial knowledge, driving extensive research on the subject. Most studies, (e.g., Al Tamimi & Bin Kalli, 2009; Shahrabani, 2012) indicate that many individuals lack sufficient financial knowledge, which hampers their ability to make prudent financial choices. These studies particularly have examined the elements that impact financial knowledge, highlighting the importance of demographic factors such as gender, educational background,

professional experience, and income level. For example, Lusardi et al. (2010) revealed that financial illiteracy is more commonly observed among women, individuals under the age of 30, and those with minimal work experience. On the other hand, Hassan Al-Tamimi and Bin Kalli (2009) demonstrated that individuals working in finance-related fields or those with higher income and educational attainment tend to demonstrate stronger financial knowledge.

Studies consistently link financial illiteracy to suboptimal financial behaviours, such as poor portfolio diversification (Guiso & Jappelli, 2008), inadequate retirement planning (Lusardi & Mitchell, 2007), low stock market participation and ineffective wealth accumulation (Van Rooij et al., 2011). Additionally, financially illiterate individuals often display irresponsible financial management, including excessive credit card usage and poor budgeting (Robb, 2011). Similarly, Lusardi and Mitchell (2007) highlighted that households with lower financial knowledge are less likely to plan for retirement or accumulate wealth, while Van Rooij et al. (2011) attributed inadequate stock market participation to financial illiteracy. This lack of knowledge prevents individuals from leveraging financial opportunities such as market participation and portfolio diversification (Guiso & Jappelli, 2008). Based on these findings, this study also proposes that financial knowledge positively affects risky investment behaviour. Individuals with greater knowledge of financial concepts and market mechanisms are more inclined toward engaging in risky investments. Thus, the study attempts to test the following hypothesis:

H_3: Higher levels of financial knowledge positively influence individuals' intentions to engage in risky investments.

In addition, this study also explores the indirect effects among variables, proposing that financial knowledge acts as a moderator, influencing the strength and direction of relationships between individual characteristics and risky investment behaviour. Financial knowledge, a crucial resource in decision-making, is expected to shape these dynamics. While risk-averse individuals generally avoid risky investments, factors such as context, cognitive processes, and information handling may affect their behaviour (Schoemaker, 1993). Financially literate individuals, with their ability to process information effectively, might perceive risky investments differently, potentially engaging in them despite risk aversion (Weber et al., 2002). Thus, the study hypothesises that financial knowledge plays moderating role on the relationship between risk aversion and risky investment behaviour (H_4) and between locus of control and risky investment behaviour (H_5).

RESEARCH METHODS

Variable Measurement

To examine the hypotheses, a questionnaire utilising five-point Likert scales, indicating 1 to 'strongly disagree' and 5 to 'strongly agree', was employed to evaluate all variables. Financial knowledge was measured using Van Rooij et al. (2011) framework, which categorises it into fundamental and comprehensive levels. Fundamental financial knowledge assesses familiarity with core financial concepts. On the other hand, comprehensive financial knowledge evaluates

understanding of financial markets, risk diversification, and the interaction between interest rate level and price of financial instruments. The assessment featured five fundamental and eleven advanced questions, with an index based on correct responses. Respondents could also choose a "don't know" option. The locus of control was evaluated using a modified scale from Perry and Morris (2005) with seven items on a five-point Likert scale, where higher scores signify a stronger external locus of control, and lower scores reflect an internal locus of control. Risk aversion was assessed using a seven-item scale adapted from Burton et al. (1998), where higher scores denote a stronger aversion to risk. Risky investment behaviour was measured using a four-item scale adapted from Putrevu et al. (1994), with higher scores representing a greater inclination toward engaging in risky investments.

Sampling Procedure and Participant Profile

This study has used primary data gathered through a self-administered questionnaire survey targeting stock market participants, specifically college teachers and postgraduate students. Using a convenience sampling method, the study included 386

Table 1
Validity and Reliability Analysis of Latent Constructs

Items	Risky Investment Behaviour (RIB)	Risk Aversion (RA)	Locus of Control (LOC)
RIB1	0.913		
RIB2	0.824		
RIB3	0.810		
RIB4	0.865		
RA1		0.621	
RA2		0.732	
RA3		0.765	
RA4		0.833	
RA5		0.769	
RA7		0.871	
LOC1			0.542
LOC2			0.679
LOC3			0.836
LOC6			0.787
LOC7			0.815
KMO	0.800		
Cronbach's Alpa	0.832		

Note. 'RIB' refers to risky investment behaviour; 'RA' refers to the risk aversion and 'LOC' refers to the locus of control. Author's calculation based on field survey data, 2024.

participants, predominantly college teachers and postgraduates. Undergraduate students, even those aged 18 or above, were excluded due to their financial dependency and limited experience in managing finances and investments. Financially dependent postgraduates were also excluded from the sample. The demographic profile revealed that approximately 72% of respondents were male, with 279 out of 386 participants identified. The majority of participants fell within the 30–50 years age range (61%), followed by those below 30 (32%) and then those above 50 (7%). Marital status data indicated that about 71% of the respondents were married, while the rest were unmarried. Regarding income distribution, more than 70% respondents reported a monthly income of Rs 50,000 or above, while other participants reported an income below Rs 50,000.

Validity and Reliability Measure

In this study, combined items from various scales (e.g., those for general risk averseness and risky investment behaviour) have been modified. Consequently, exploratory factor analysis was conducted to identify the items grouped under common factors. The KMO statistic (0.800), reported in Table 1, verified that the sample size was sufficient for factor analysis.

Through principal component analysis, three factors were extracted and labeled as Risky Investment Behaviour (RIB), Risk Aversion (RA), and Locus of Control (LOC). Varimax rotation was employed to determine the factor loadings for each item, with loadings above the acceptable threshold indicating strong associations between the items and their respective factors. Higher loadings (typically above 0.5) indicate that the item strongly contributes to explaining that factor. Thus, these factor loadings confirmed the clarity and alignment of items with the intended constructs. Table 1 also presents the corresponding Cronbach's alpha values, ensuring the reliability and internal consistency of the constructs. A Cronbach's alpha value of 0.832, as exhibited in this study, is considered very good in terms of reliability. This statistic evaluates the internal consistency of a set of items and assesses how well they correlate with each other. The financial knowledge scale, however, was treated as an observed variable and not included in the factor analysis. It was calculated based on participants' correct answers, with one point awarded per correct response.

DATA ANALYSIS AND DISCUSSION

Results of Descriptive and Correlation Analysis

Table 2 reports the descriptive statistics and the values of correlation coefficients among variables of interest. Risk aversion (RA) has an average score of 3.61 with a standard deviation of 0.81, indicating moderate variability in participants' aversion to risk. Locus of control (LOC) has a mean of 2.59 with a standard deviation of 0.79, while fundamental financial knowledge (FFK) and comprehensive financial knowledge (CFK) have averages of 2.83 and 4.05 with standard deviations of 1.24 and 2.51, respectively. Risky investment behaviour (RIB) has a mean score of 2.51 with a standard deviation of 1.01.

The correlation matrix shows significant relationships among several variables. Risk aversion (RA) is negatively correlated with

Table 2
Descriptive Statistics and Correlation Matrix

Variables	Mean	S.D.	RA	LOC	FFK	CFK	RIB
RA	3.61	0.81	1				
LOC	2.59	0.79	0.068	1			
FFK	2.83	1.24	-0.342*	-0.121	1		
CFK	4.05	2.51	-0.337**	-0.032	0.623**	1	
RIB	2.51	1.01	-0.516**	-0.021	0.047	0.334*	1

Note. 'FFK' refers to the fundamental financial knowledge and 'CFK' refers to the comprehensive financial knowledge. The definitions of other variables are like as given in Table 1. '**' correlation is significant at 1% level; '*' correlation is significant at 5% level; Author's calculation based on field survey data, 2024.

Table 3
Regression results (Dependent Variable: Risky Investment Behaviour)

Variables	Coefficients	ΔR-square
Model 1: Step 1		
RA	-0.516**	
CFK	0.061	
Model 1: Step 2		
RA	-0.481**	
CFK	0.095	
RA × CFK	-0.245**	0.051**
Model 2: Step 1		
LOC	0.013	
CFK	0.347*	
Model 2: Step 2		
LOC	0.001	
CFL	0.269*	
LOC × CFK	-0.211*	0.046*

Note. '**' Results are significant at 1% level; '*' Results are significant at 5% level. Author's calculation based on field survey data, 2024.

both fundamental financial knowledge (FFK) (r = -0.342) and comprehensive financial knowledge (CFK) (r = -0.337), suggesting that higher financial knowledge levels are linked to lower risk aversion. RA also exhibits a strong negative correlation with risky investment behaviour (RIB) (r = -0.516), indicating that more risk-averse individuals are less likely to engage in risky investments. Fundamental financial knowledge and comprehensive financial knowledge are significantly and positively correlated (r = 0.623), confirming that individuals with strong foundational knowledge in financial concepts also tend to

possess advanced financial market knowledge. Additionally, comprehensive financial knowledge is positively associated with risky investment behaviour ($r = 0.334$), suggesting that individuals with comprehensive financial knowledge are more inclined to pursue risky investments.

However, locus of control (LOC) does not exhibit any significant correlations with the other variables. This suggests that LOC plays a limited role in influencing financial knowledge, risk aversion, or risky investment behaviour in this context. These findings underscore the complex relationship between financial knowledge, risk aversion, and investment behaviour.

Regression Analysis

The regression results reported in Table 3 provide insights into the relationships between comprehensive financial knowledge, risk aversion, locus of control, and risky investment behaviour. Comprehensive financial knowledge was included in the models due to its strong correlation with fundamental financial knowledge ($r = 0.623$) and its significant relationship with risky investment behaviour, aligning with Van Rooij et al. (2011). Two separate models were analysed, each with distinct predictor variables and interaction terms.

In Model 1, risk aversion (RA) and comprehensive financial knowledge (CFK) served as predictors of risky investment behaviour (RIB). Risk aversion emerged as a significant negative predictor, confirming hypothesis H_1. However, comprehensive financial knowledge alone did not significantly influence risky investment behaviour. When the interaction term (RA × CFK) was added, it was significant ($p < 0.01$) and increased the variance explained ($\Delta R^2 = 0.051$, $p < 0.01$). This supports hypothesis H_4, indicating that comprehensive financial knowledge plays a moderating role on the relationship between risk aversion and risky investment behaviour. Specifically, the interaction term suggests that comprehensive financial knowledge reduces the negative impact of risk aversion on risky investment behaviour.

In Model 2, locus of control (LOC) and comprehensive financial knowledge (CFK) were predictors. Locus of control showed no significant effect on risky investment behaviour, leading to the rejection of hypothesis H_2. However, comprehensive financial knowledge had a significant positive impact ($p < 0.05$) on risky investment behaviour. When the interaction term (LOC × CFK) was included, it also became significant ($p < 0.05$) and explained additional variance ($\Delta R^2 = 0.046$, $p < 0.05$). Thus, this result provides sufficient evidence to support hypothesis H_5 that comprehensive financial knowledge plays a moderating role on the relationship between locus of control and risky investment behaviour. The results suggest that comprehensive financial knowledge amplifies or diminishes the influence of locus of control on risky investment behaviours. Interestingly, while comprehensive financial knowledge showed a significant correlation ($r = 0.334$) with risky investment behaviour as exhibited in Table 2, its effect seemed to be insignificant in Model 1 when risk aversion was included as a predictor. This raises the possibility that risk aversion mediates the relationship between financial knowledge and risky investment behaviour, or that a moderated mediation effect is at play. However, since these relationships were not hypothesised,

further exploration using structural equation modelling is recommended. Overall, the findings underscore the complex interplay between financial knowledge, individual characteristics, and risky investment behaviour, highlighting the moderating role of comprehensive financial knowledge in these relationships.

CONCLUSION AND IMPLICATIONS

This study empirically demonstrated that general risk aversion and financial knowledge significantly influence risky investment behaviour, as reflected in behavioural intentions. A general tendency to avoid risks in life appears to shape financial behaviour, highlighting the connection between general and financial risk-taking. While Schoemaker (1993) proposed that intrinsic and observed risk-taking behaviours may diverge, this study finds consistency between risk aversion and financial risk-taking behaviour. Comprehensive financial knowledge emerges as a critical advantage, particularly in risky investment decisions. Consistent with previous research, this study underscores the importance of financial knowledge in financial behaviour. Importantly, the findings demonstrate that financial knowledge plays a moderating role in the relationship between individual characteristics, such as risk aversion and locus of control, and risky investment behaviour. Specifically, higher financial knowledge amplifies the negative association between risk aversion and risky investment behaviour, indicating that individuals with comprehensive financial knowledge who are also risk-averse are even less inclined to participate in risky investments. This outcome underscores the restricted capacity of risk-averse individuals to effectively process and utilise additional financial information.

The study found no evidence supporting the direct effects of locus of control on risky investment behaviour. However, financial knowledge was shown to moderate this relationship. Specifically, individuals with an external locus of control and comprehensive financial knowledge are less likely to engage in risky investments compared to those with a lower level of financial knowledge. This indicates that higher financial knowledge encourages individuals with an external locus of control to assume greater personal responsibility when making risky financial decisions. These insights hold particular importance for policymakers and financial intermediaries, highlighting how improved financial knowledge can shape investment attitudes and risk-taking behaviours. Additionally, the study suggests the potential for a moderated mediation effect involving financial knowledge, opening avenues for further research. In sum, the findings enhance the existing literature by emphasising the critical role of financial knowledge, while also shedding light on its indirect and systematic influence on financial behaviour.

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