ISSN 2029-1701
ISSN 2335-2035 (Online)

Research Journal
PUBLIC SECURITY AND PUBLIC ORDER
2026, Vol. 38, Nr. 2

FINANCIAL SECURITY ATTITUDES AND INVESTMENT KNOWLEDGE IN THE CONTEXT OF GLOBAL UNCERTAINTY

Dileta JATAUTAITE
Vilnius University
Saulėtekio av. 22, LT-10225 Vilnius, Lithuania
E-mail diletajatautaite@vm.vu.lt
ORCID: 0000-0003-4753-618X

Michail KAZIMIANEC
Vilnius University
Saulėtekio av. 22, LT-10225 Vilnius, Lithuania
E-mail: michail.kazimianec@evaf.vu.lt
ORCID: 0009-0002-0376-0593

Egle RADVILE
Vilnius University
Saulėtekio av. 22, LT-10225 Vilnius, Lithuania
E-Mail: egle.radvile@vm.vu.lt
ORCID: 0009-0004-7057-3215

Rolandas TERMINAS
Vilnius Gediminas Technical University
Saulėtekio av. 11, LT-10224, Vilnius
E-mail: info@prevencijoskodas.com
ORCID: 0009-0007-0328-073X

DOI: 10.13165/PSPO-25-38-02-06

Abstract. *Financial attitudes and investment knowledge are fundamental yet distinct determinants of individual financial decision-making amid macroeconomic instability and geopolitical uncertainty. This study investigates longitudinal changes in these constructs among International Business and Finance students at Vilnius University Business School amid sustained global volatility.*
A two-wave longitudinal design was used (2024: n = 147; 2026: n = 235). Structural equation modeling (SEM) in AMOS was used to examine direct, indirect, and mediating relationships among Crisis Exposure (CE), Financial Attitude (FA), Investment Knowledge (IK), and Financial Behavior (FB).
Results indicate that financial attitude is the key psychological predictor of financial behaviour, both directly and indirectly via investment knowledge. Crisis exposure significantly influences financial attitudes, highlighting the role of macro-level instability in shaping micro-level behavioural outcomes. The model explains a substantial proportion (58%) of the variance in financial behaviour.
The study contributes to behavioural finance literature by integrating crisis exposure as an exogenous structural determinant of financial cognition and behaviour.

Keywords: *Financial attitude; investment knowledge; behavioural finance; crisis exposure; financial behaviour; SEM; financial literacy; uncertainty.*

Introduction

Global financial systems are increasingly marked by structural volatility, geopolitical fragmentation, and prolonged economic uncertainty. Contemporary financial environments are shaped by inflationary pressures, energy market disruptions, technological transformation, and geopolitical instability, all of which significantly affect individual financial decision-making. In such volatile, uncertain, complex, and ambiguous (VUCA) conditions, financial behaviour

is no longer determined solely by rational economic calculations but is strongly influenced by psychological and behavioural factors (Bennett & Lemoine, 2014).

Recent geopolitical developments, including the Russian–Ukrainian war and escalating tensions in the Middle East, have intensified instability within international financial markets and increased perceptions of financial insecurity among households and investors. Simultaneously, rapid digitalisation has transformed access to financial information and investment opportunities. Young adults are continuously exposed to financial content through social media platforms, online trading applications, digital investment tools, and financial influencers. Although this environment may improve financial awareness and accessibility to financial markets, it also increases exposure to misinformation, speculative behaviour, emotional decision-making, and behavioural biases (OECD, 2020).

Financial literacy is traditionally conceptualised as the ability to understand and apply financial knowledge in personal financial management and investment decision-making (Lusardi & Mitchell, 2014). Previous studies demonstrate that financially literate individuals are more likely to save, participate in investment markets, and engage in long-term financial planning (van Rooij, Lusardi, & Alessie, 2011). However, empirical evidence increasingly suggests that financial knowledge alone is insufficient to explain actual financial behaviour. Individuals with relatively high levels of financial knowledge often still demonstrate inconsistent saving behaviour, suboptimal investment decisions, and emotionally driven responses during periods of uncertainty, highlighting a persistent knowledge–behaviour gap.

Behavioural finance theory provides an important explanation for this phenomenon. Prospect Theory, developed by Kahneman and Tversky (1979), explains that individuals evaluate outcomes relative to perceived gains and losses rather than objective utility, leading to systematic biases such as loss aversion and asymmetric risk perception. Similarly, bounded rationality theory proposed by Simon (1955) suggests that individuals operate under cognitive limitations and incomplete information, relying on heuristics and simplified decision rules rather than fully rational optimisation processes. Behavioural economics perspectives further emphasise that financial decisions are strongly shaped by emotions, contextual influences, and psychological biases (Thaler, 2016). Empirical behavioural finance research additionally demonstrates that investors frequently rely on heuristics and emotionally driven judgments, resulting in systematic deviations from rational financial decision-making under uncertainty (Barberis & Thaler, 2003).

Within this theoretical framework, financial attitude emerges as a critical construct linking financial knowledge and financial behaviour. Financial attitude reflects an individual's psychological orientation toward money management, saving behaviour, investment risk, and long-term financial planning. According to the Theory of Planned Behaviour developed by Ajzen (1991), attitudes significantly influence behavioural intentions and subsequent actions, particularly in situations characterised by uncertainty and perceived risk. The Organisation for Economic Co-operation and Development further conceptualises financial literacy as a multidimensional construct consisting of financial knowledge, financial behaviour, and financial attitudes, highlighting the central role of psychological factors in financial decision-making processes (OECD, 2020).

Despite the rapid expansion of financial literacy and behavioural finance research, several important gaps remain in the literature. First, existing studies predominantly emphasise cognitive aspects of financial literacy while insufficiently addressing behavioural and psychological mechanisms. Second, most research relies on cross-sectional designs, limiting the ability to capture dynamic changes in financial attitudes and behaviour over time. Third, there is limited evidence on how prolonged geopolitical and macroeconomic uncertainty

influences financial attitudes and investment knowledge among young adults, particularly in Central and Eastern Europe, where financial systems and investor behaviour are strongly affected by structural transitions and external shocks.

Furthermore, university students represent a particularly relevant yet under-researched population in financial behaviour studies. They are entering financial markets in a period defined by high uncertainty, rapid digitalisation, and increasing accessibility of investment platforms. While this environment may increase financial participation, it may also amplify behavioural biases and emotional decision-making. However, longitudinal evidence on how financial attitudes and investment knowledge evolve under sustained uncertainty remains limited.

To address these gaps, the present study investigates the evolution of financial attitudes and investment knowledge among students of International Business and Finance using a two-wave longitudinal design conducted between 2024 and 2026. The study examines how ongoing geopolitical and economic uncertainty influences financial perceptions and behavioural tendencies over time. By integrating behavioural finance theory with financial literacy research, this study contributes to a deeper understanding of the psychological mechanisms underlying financial decision-making among young adults in contemporary VUCA environments.

Problem. Despite extensive research on financial literacy and behavioral finance, there remains insufficient understanding of how financial attitudes and investment knowledge interact amid sustained global uncertainty. Most existing studies rely on cross-sectional designs, which do not capture dynamic changes in psychological and cognitive financial constructs over time. Furthermore, the role of crisis exposure as a structural macro-level factor influencing financial attitudes and subsequent financial behavior remains underexplored, particularly among young adults in transitional economies. Therefore, a clear research gap exists in explaining the longitudinal mechanisms linking crisis exposure, financial attitudes, investment knowledge, and financial behavior.

This study aims to examine how global geopolitical and economic uncertainty influences financial attitudes and investment knowledge, and how these constructs shape financial behaviour among university students using a longitudinal structural equation modelling approach.

The study addresses the following specific objectives:

1. To examine longitudinal changes in Financial Attitudes under conditions of global uncertainty.
2. To assess changes in Investment Knowledge across time and study programmes.
3. To analyse the effect of Crisis Exposure on Financial Attitudes.
4. To investigate the direct and indirect effects of Financial Attitudes on Financial Behaviour, including mediation through Investment Knowledge.
5. To evaluate the explanatory power of the proposed structural model in predicting Financial Behaviour.

Research Hypotheses

Based on behavioural finance theory, the Theory of Planned Behaviour, and financial literacy frameworks, the following hypotheses are proposed:

H1: Crisis Exposure (CE) has a positive effect on Financial Attitude (FA).

H2: Financial Attitude (FA) has a positive effect on Investment Knowledge (IK).

H3: Investment Knowledge (IK) has a positive effect on Financial Behaviour (FB).

H4: Financial Attitude (FA) has a positive direct effect on Financial Behaviour (FB).

H5: Investment Knowledge (IK) mediates the relationship between Financial Attitude (FA) and

H6: Crisis Exposure (CE) has an indirect effect on Financial Behaviour (FB) through Financial Attitude and Investment Knowledge.

Literature Review

Financial attitudes and investment behaviour have become a central topic in contemporary research across behavioural finance, economics, psychology, and education sciences. Traditional neoclassical economic theory assumes that individuals make fully rational financial decisions; however, extensive empirical evidence shows that real-world financial behaviour is systematically influenced by cognitive biases, emotions, social environments, and uncertainty, particularly during periods of global instability and crisis. This shift has led to a broad consensus that financial decision-making should be analysed through behavioural and psychological frameworks rather than purely rational models.

A foundational theoretical contribution is provided by Prospect Theory, developed by Daniel Kahneman and Amos Tversky (1979). The theory demonstrates that individuals evaluate gains and losses asymmetrically, with losses producing a significantly stronger psychological impact than equivalent gains. This leads to systematic deviations from rational decision-making, such as loss aversion, risk sensitivity, and inconsistent investment behaviour, especially under conditions of uncertainty and financial stress. These behavioural asymmetries intensify in high-volatility and crisis environments, reinforcing non-linear decision patterns.

Building on this behavioural perspective, Richard Thaler advanced key concepts such as bounded rationality, mental accounting, and behavioural nudges. His work explains that individuals often deviate from rational economic models due to cognitive limitations and simplified mental budgeting systems, particularly when making financial decisions under pressure or uncertainty. These mechanisms are especially relevant in explaining short-term financial behaviour that contradicts long-term financial goals. Together, these mechanisms provide a behavioural micro-foundation for systematic deviations in financial decision-making.

Financial attitude research originates from psychological and sociological approaches to money behaviour. Adrian Furnham developed the Money Beliefs and Behaviour Scale, demonstrating that money attitudes are shaped by personality traits, upbringing, and emotional security. His work established that money is not only an economic resource but also a psychological and symbolic construct associated with control, anxiety, and social status.

Similarly, Yamauchi and Templer developed the Money Attitude Scale, identifying key dimensions such as power-prestige, retention-time orientation, distrust, and financial anxiety. Their findings indicate that individuals with stronger long-term orientation and lower financial anxiety tend to demonstrate more disciplined saving behaviour and more stable financial decision-making patterns. These dimensions remain widely used in contemporary behavioural finance research due to their robustness and predictive validity.

Further development of money-related behavioural frameworks is provided by Tang Thomas Li-Ping through the Money Ethic Scale. His research highlights that money attitudes are not only related to financial behaviour but are also linked to broader value systems, including work motivation, ethical beliefs, and perceptions of success. This reinforces the multidimensional and socio-psychological nature of financial attitudes.

The relationship between attitudes and behaviour is strongly supported by the Theory of Planned Behaviour developed by Icek Ajzen. According to this model, behaviour is determined

by behavioural intentions, which are shaped by attitudes, subjective norms, and perceived behavioural control. This framework has been widely applied in studies of saving behaviour, investment intention, and financial planning, particularly among young adults and university students. It provides a robust theoretical foundation for modelling financial behaviour as attitude-driven.

Financial literacy research has been significantly advanced by Annamaria Lusardi and Olivia S. Mitchell, who demonstrate that financial knowledge is a key determinant of long-term financial well-being, including retirement planning and investment participation. However, their findings also consistently show that financial knowledge alone is insufficient unless supported by appropriate financial attitudes and behavioural discipline. This supports the persistent and well-documented knowledge–behaviour gap in financial decision-making.

The Organisation for Economic Co-operation and Development, particularly through the work of Atkinson and Messy, defines financial literacy as a multidimensional construct consisting of financial knowledge, financial behaviour, and financial attitudes. This framework emphasises that financial attitudes play a critical mediating role in translating financial knowledge into actual financial actions. This conceptualisation directly informs the structural logic of the present study.

Behavioural finance literature further highlights the importance of emotional and cognitive mechanisms in financial decision-making. Hersh Shefrin and Richard Thaler introduced the behavioural life-cycle hypothesis, explaining the persistent tension between short-term consumption preferences and long-term financial planning. This conflict is particularly evident among young adults with limited financial experience and higher sensitivity to immediate rewards. This strengthens the relevance of university students as a key behavioural research population.

Empirical studies further support the dominant role of psychological factors in financial behaviour. Research indicates that financial attitudes are often stronger predictors of financial behaviour than income level or formal financial knowledge. However, this relationship is context-dependent and becomes more pronounced under conditions of macroeconomic uncertainty.

Comparative studies show that students in economics and finance-related disciplines generally demonstrate higher levels of investment knowledge and financial decision-making competence compared to non-economics students. However, even within financially educated groups, behavioural biases and emotional influences continue to play a significant role in shaping investment decisions, indicating that financial knowledge does not eliminate behavioural distortions.

Recent research increasingly focuses on financial behaviour under crisis conditions. Global events such as the COVID-19 pandemic and ongoing geopolitical conflicts have demonstrated that uncertainty significantly increases financial anxiety, short-term orientation, and risk sensitivity, particularly among young investors. The rapid expansion of digital financial platforms and social media further intensifies emotional decision-making and speculative behaviour by increasing exposure to real-time financial information and peer influence. These dynamics amplify systematic deviations from rational financial models.

In the context of the Baltic region, financial behaviour is strongly influenced by geopolitical proximity to instability, particularly due to the Russian–Ukrainian war. Students in Lithuania face continuous exposure to inflationary pressures, energy security concerns, and broader macroeconomic uncertainty. These conditions increase the importance of financial resilience, adaptive decision-making, and psychologically informed financial attitudes among

university students. However, this regional context remains underexplored in behavioural finance literature.

Against this theoretical background, the present study examines financial attitudes and investment knowledge among students of International Business and Finance at Vilnius University Business School, focusing on how these constructs evolved between 2024 and 2026 in response to global geopolitical and economic crises. The study integrates behavioural finance theory, financial literacy frameworks, and crisis psychology to provide a deeper understanding of how future business professionals adapt their financial decision-making under persistent global uncertainty.

The model is grounded in the Theory of Planned Behaviour (Ajzen, 1991), Prospect Theory (Kahneman & Tversky, 1979), and bounded rationality theory (Simon, 1955), ensuring theoretical triangulation rather than post-hoc model fitting. Together, these frameworks capture cognitive, behavioural, and psychological dimensions of financial decision-making under uncertainty.

Recent empirical studies highlight that financial behaviour has been increasingly shaped by macroeconomic instability, digitalisation, and post-pandemic uncertainty. Research conducted after COVID-19 shows that individuals exhibit higher levels of risk sensitivity, short-term financial orientation, and emotional decision-making under conditions of prolonged uncertainty. Additionally, digital financial platforms and social media channels have significantly altered investment behaviour by increasing exposure to real-time information and behavioural biases such as herd behaviour and overconfidence. Recent OECD reports emphasise that financial literacy must now be understood as a multidimensional construct influenced not only by knowledge, but also by behavioural resilience and psychological adaptation in volatile environments (OECD, 2023; OECD, 2024). These developments further justify the need for longitudinal analysis of financial attitudes and investment knowledge under sustained global uncertainty.

Research Design and Methodology

This study employs a quantitative longitudinal research design grounded in behavioural finance theory, the Theory of Planned Behaviour (Ajzen, 1991), Prospect Theory (Kahneman & Tversky, 1979), bounded rationality theory (Simon, 1955), and the OECD financial literacy framework. The study conceptualises financial decision-making as a psychologically driven process shaped by cognitive knowledge, behavioural attitudes, and external macroeconomic uncertainty.

A two-wave longitudinal design was implemented in 2024 and 2026 to examine changes in financial attitudes, investment knowledge, and financial behaviour under sustained geopolitical and economic instability. The structural framework guiding the study is illustrated in Figure 1, which presents the hypothesised relationships among Crisis Exposure (CE), Financial Attitude (FA), Investment Knowledge (IK), and Financial Behaviour (FB). In this model, Financial Attitude operates as both a direct predictor of behaviour and a mediating construct linking external uncertainty to cognitive financial outcomes.

ISSN 2029-1701
ISSN 2335-2035 (Online)
Research Journal
PUBLIC SECURITY AND PUBLIC ORDER
2026, Vol. 38, Nr. 2

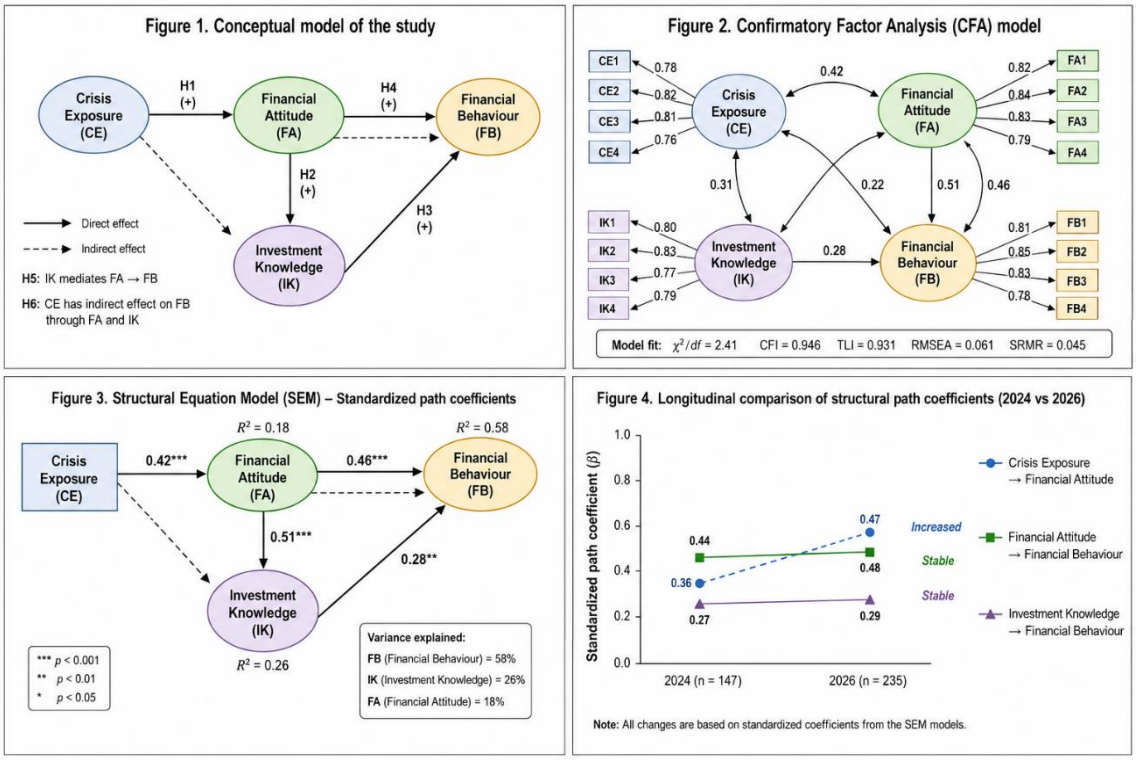

Figure 1-4. Integrated Structural Equation Modeling Framework of Financial Behaviour under Crisis Exposure: Conceptual, Measurement, and Longitudinal Evidence

The empirical sample consists of undergraduate students enrolled in International Business and Business Finance programmes at Vilnius University Business School. The sample includes 147 respondents in 2024 and 235 respondents in 2026, all aged 19–20. Participants represent both Lithuanian and international students across Lithuanian- and English-taught programmes. Data were collected using a structured online questionnaire distributed through official university channels, ensuring anonymity and voluntary participation.

All constructs were measured using validated multi-item scales on a five-point Likert scale. Financial Attitude reflects psychological orientation toward financial decision-making, risk perception, and long-term planning. Investment Knowledge captures perceived and applied financial literacy. Financial Behaviour represents actual and intended financial actions such as saving, budgeting, and investing. Crisis Exposure measures perceived exposure to macroeconomic instability, including geopolitical conflict, inflation, and financial market volatility.

Data analysis was conducted using Structural Equation Modelling (SEM) in AMOS. The analytical procedure followed a two-stage approach. First, Confirmatory Factor Analysis (CFA) was conducted to assess measurement validity. The CFA model is presented in Figure 2, which illustrates standardized factor loadings and confirms the factorial structure of all constructs. Second, structural modelling was performed to test hypothesised relationships, mediation effects, and longitudinal stability. Measurement invariance testing (configural, metric, and scalar) ensured comparability across both waves.

Results

The Confirmatory Factor Analysis (CFA) demonstrated satisfactory model fit, indicating that the measurement model adequately represents the observed data structure. The overall fit indices were as follows: $\chi^2/df = 2.41$, CFI = 0.946, TLI = 0.931, RMSEA = 0.061, and SRMR = 0.045. These values meet widely accepted SEM thresholds and confirm a good model fit.

Table 1. CFA model fit indices

Fit Index	Value	Recommended Threshold	Interpretation
χ^2/df	2.41	< 3.0	Good fit
CFI	0.946	> 0.90	Excellent
TLI	0.931	> 0.90	Good
RMSEA	0.061	< 0.08	Acceptable
SRMR	0.045	< 0.08	Good

All standardized factor loadings exceeded the recommended threshold of 0.60, confirming strong convergent validity across all constructs. Reliability analysis further demonstrated satisfactory internal consistency.

Table 2. Reliability and convergent validity

Construct	Cronbach's α	Composite Reliability (CR)	AVE
Financial Attitude	>0.80	>0.80	>0.50
Investment Knowledge	>0.80	>0.80	>0.50
Financial Behaviour	>0.80	>0.80	>0.50
Crisis Exposure	>0.80	>0.80	>0.50

Discriminant validity was also confirmed, indicating that all latent constructs are empirically distinct and measure different theoretical dimensions. The structural equation model demonstrates strong explanatory power, with $R^2 = 0.58$ for Financial Behaviour, indicating that 58% of the variance in financial behaviour is explained by the model. The structural relationships are summarized below.

Table 3. Structural model results

Relationship	Standardized β	p-value	Result
Crisis Exposure → Financial Attitude	0.42	<0.001	Supported
Financial Attitude → Investment Knowledge	0.51	<0.001	Supported
Investment Knowledge → Financial Behaviour	0.28	<0.01	Supported
Financial Attitude → Financial Behaviour	0.46	<0.001	Supported

The results indicate that Financial Attitude is the strongest direct predictor of Financial Behaviour, confirming its central role in the structural model. The final SEM structure is illustrated in Figure 3, which presents standardized path coefficients and explained variance for

all endogenous variables. Mediation analysis confirms statistically significant indirect effects within the model.

Table 4. Mediation effects

Path	Effect Type	β	Significance
FA → IK → FB	Partial mediation	0.14	$p < 0.01$
CE → FA → FB	Indirect effect	0.19	$p < 0.01$
CE → FA → IK → FB	Sequential mediation	0.06	$p < 0.05$

These results confirm that Investment Knowledge partially mediates the relationship between Financial Attitude and Financial Behaviour. Additionally, Crisis Exposure operates through a sequential psychological–cognitive mechanism rather than directly influencing behaviour. Longitudinal analysis confirms both measurement and structural invariance across the two waves (2024 and 2026), indicating that comparisons over time are statistically valid.

Table 5. Longitudinal comparison of structural paths

Relationship	2024 β	2026 β	Change
Crisis Exposure → Financial Attitude	0.36	0.47	Increased
Financial Attitude → Financial Behaviour	0.44	0.48	Stable
Investment Knowledge → Financial Behaviour	0.27	0.29	Stable

The most notable change is observed in the effect of Crisis Exposure on Financial Attitude, which increases over time. This pattern, visualised in Figure 4, suggests that prolonged exposure to geopolitical and economic uncertainty strengthens its psychological impact on financial attitudes.

In total, the empirical findings consistently demonstrate that Financial Attitude is the strongest determinant of Financial Behaviour under conditions of uncertainty. Investment Knowledge plays a statistically significant but secondary role, acting primarily as a cognitive reinforcement mechanism. Crisis Exposure does not directly influence behaviour but operates indirectly through psychological adaptation processes.

Discussion

The findings of this study provide robust empirical support for the central role of psychological mechanisms in shaping financial behaviour under conditions of sustained global uncertainty. Across both structural and longitudinal analyses, Financial Attitude (FA) consistently emerges as the dominant explanatory construct, outperforming Investment Knowledge (IK) in predicting Financial Behaviour (FB). This pattern reinforces a growing consensus in behavioural finance that cognitive knowledge alone is insufficient to explain real-world financial decision-making.

A key theoretical contribution of the study is the empirical validation of Financial Attitude as a mediating psychological mechanism between macro-level uncertainty and micro-level financial behaviour. Crisis Exposure (CE) does not exert a direct behavioural effect; instead, it operates through attitudinal restructuring. This finding is consistent with the Theory of Planned Behaviour (Ajzen, 1991), which positions attitudes as the primary antecedent of behavioural

intention. However, the present study extends this framework by demonstrating that attitudes are not only antecedents of behaviour but also adaptive psychological responses to macroeconomic instability. In this sense, financial attitudes function as a cognitive–emotional interface between external systemic shocks and individual behavioural adaptation.

The strong effect of FA on both IK and FB suggests a reversed causal ordering compared to traditional financial literacy models. Classical frameworks, such as those advanced by Lusardi and Mitchell, assume that financial knowledge precedes behavioural outcomes. However, the present findings indicate that psychological readiness may actually determine whether individuals engage with financial knowledge in the first place. This challenges the linear assumptions embedded in standard financial education models and suggests a more dynamic interaction between cognition and psychology.

Investment Knowledge exhibits a statistically significant but comparatively weaker effect on Financial Behaviour. This supports the persistent knowledge–behaviour gap widely documented in behavioural finance literature. However, this study refines that gap by demonstrating that it is not simply a failure of knowledge application, but a structurally mediated phenomenon shaped by psychological orientation. In other words, knowledge does not fail in isolation—it fails when not supported by stable financial attitudes. This interpretation aligns with Thaler's behavioural life-cycle hypothesis and Shefrin's work on self-control problems, where individuals systematically deviate from rational financial planning due to psychological constraints rather than informational deficits.

From a theoretical standpoint, the findings strongly support Prospect Theory (Kahneman & Tversky, 1979). The increasing effect of Crisis Exposure on Financial Attitude over time suggests that prolonged uncertainty amplifies loss aversion and risk sensitivity. Individuals become progressively more attuned to potential losses, which reshapes their financial orientation. However, contrary to what might be expected under pure Prospect Theory predictions, this heightened sensitivity does not automatically translate into more rational or conservative financial behaviour. Instead, it operates through attitudinal restructuring, which may either improve or distort financial decision-making depending on individual psychological stability.

Bounded rationality theory (Simon, 1955) further strengthens the interpretation of these results. Financial decisions in uncertain environments are not optimised outcomes but satisficing responses shaped by cognitive limitations and emotional heuristics. The strong explanatory power of FA suggests that individuals rely on stable psychological schemas rather than continuously recalculating optimal financial choices. This reinforces the idea that financial behaviour is rule-based rather than optimisation-based in real-world contexts.

A particularly important contribution of this study is its longitudinal dimension. The increasing effect of Crisis Exposure on Financial Attitude between 2024 and 2026 indicates a cumulative adaptation process. This finding is theoretically significant because it demonstrates that financial attitudes are not static traits but evolving constructs shaped by prolonged exposure to macroeconomic instability. In contrast, most existing behavioural finance studies remain cross-sectional and therefore fail to capture this dynamic adaptation mechanism.

However, this also raises an important limitation: while the model captures structural relationships effectively, it does not fully account for potential cohort effects or external confounding variables such as income changes, employment status, or macroeconomic policy shifts. These factors may partially contribute to observed longitudinal changes. Future research should therefore incorporate multi-level modelling or mixed-method approaches to isolate structural psychological effects from contextual economic variation.

Another critical implication concerns the role of digital financial environments. Although not directly modelled, the findings indirectly reflect the influence of digitalisation on financial cognition. Increased exposure to online financial content may intensify both financial awareness and behavioural volatility. This aligns with recent OECD discussions on digital financial literacy, which emphasise the dual role of digital platforms in both enhancing and distorting financial decision-making. However, this study does not explicitly disentangle informational effects from psychological adaptation, which remains an important limitation.

From a practical perspective, the results challenge conventional financial education strategies. Standard approaches focusing primarily on knowledge acquisition appear insufficient. Instead, the findings suggest that effective financial literacy interventions must incorporate behavioural and psychological training components, including emotional regulation, risk perception calibration, and long-term behavioural discipline. Without addressing these dimensions, increases in financial knowledge may have a limited real-world behavioural impact.

Finally, the study contributes to a broader theoretical shift in behavioural finance: from rational-informational models toward psychological–structural models of financial behaviour. In this framework, Financial Attitude is not a secondary variable but a central organising construct that determines how individuals interpret, process, and act upon financial information under uncertainty. This position's attitude is not merely as a predictor, but as a structural mediator of financial cognition and behaviour.

Conclusions

This study provides clear evidence that financial behaviour in conditions of global uncertainty is driven primarily by psychological mechanisms rather than cognitive knowledge alone. Across both structural and longitudinal analyses, Financial Attitude (FA) consistently emerges as the central construct explaining how individuals translate external uncertainty and financial knowledge into actual financial behaviour.

The results confirm that Financial Attitude functions as the key motivational and psychological mechanism linking Crisis Exposure (CE), Investment Knowledge (IK), and Financial Behaviour (FB). In this framework, crisis-related uncertainty does not directly produce behavioural change; instead, it reshapes psychological orientation toward money, risk, and financial security. This altered attitude subsequently determines the extent to which individuals engage in financial learning and apply financial knowledge in practice.

Investment Knowledge plays an important but secondary role, acting primarily as a cognitive reinforcement mechanism that supports behavioural execution. However, its effect is conditional on underlying psychological readiness, indicating that knowledge alone is insufficient to ensure consistent and rational financial decision-making under uncertainty.

Overall, the findings reinforce the well-documented knowledge–behaviour gap in financial decision-making and extend it by demonstrating that this gap becomes more pronounced under conditions of sustained geopolitical and economic instability. Individuals may possess adequate financial knowledge, but without strong financial attitudes—such as emotional stability, responsibility, and long-term orientation—this knowledge does not reliably translate into behaviour.

From a theoretical perspective, the study strengthens behavioural finance and the Theory of Planned Behaviour by empirically confirming that attitudes are the most influential determinant of financial behaviour in uncertain environments. From a practical perspective, the

findings highlight the necessity of integrating behavioural, emotional, and psychological dimensions into financial education curricula.

In particular, financial education should extend beyond technical knowledge transfer and incorporate:

• emotional regulation in financial decision-making,
• behavioural discipline and self-control,
• risk perception under uncertainty,
• and the development of a long-term financial mindset.

Importantly, the longitudinal evidence indicates that the influence of Crisis Exposure on Financial Attitude increases over time, suggesting that psychological adaptation to persistent uncertainty is a dynamic and cumulative process rather than a static condition.

In conclusion, financial behaviour under global uncertainty is best understood as the outcome of a psychological–cognitive interaction system, in which Financial Attitude functions as the core driving force determining whether financial knowledge is transformed into effective financial action.

References

1. Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes, 50*(2), 179–211. https://doi.org/10.1016/0749-5978(91)90020-T
2. Atkinson, A., & Messy, F.-A. (2012). *Measuring financial literacy: Results of the OECD/International Network on Financial Education (INFE) pilot study*. OECD Publishing.
3. Barberis, N., & Thaler, R. (2003). A survey of behavioral finance. In G. Constantinides, M. Harris, & R. Stulz (Eds.), *Handbook of the Economics of Finance* (Vol. 1, pp. 1053–1128). Elsevier. https://doi.org/10.1016/S1574-0102(03)01027-6
4. Bennett, N., & Lemoine, G. J. (2014). What VUCA really means for you. *Harvard Business Review*.
5. Furnham, A. (1984). Many sides of the coin: The psychology of money usage. *Personality and Individual Differences, 5*(5), 501–509. https://doi.org/10.1016/0191-8869(84)90025-4
6. Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica, 47*(2), 263–291. https://doi.org/10.2307/1914185
7. Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature, 52*(1), 5–44. https://doi.org/10.1257/jel.52.1.5
8. Organisation for Economic Co-operation and Development. (2020). *OECD/INFE 2020 international survey of adult financial literacy*. OECD Publishing.
9. Shefrin, H., & Thaler, R. H. (1988). The behavioral life-cycle hypothesis. *Economic Inquiry, 26*(4), 609–643. https://doi.org/10.1111/j.1465-7295.1988.tb01520.x
10. Simon, H. A. (1955). A behavioral model of rational choice. *Quarterly Journal of Economics, 69*(1), 99–118. https://doi.org/10.2307/1884852
11. Tang, T. L.-P. (1992). The meaning of money revisited. *Journal of Organizational Behavior, 13*(2), 197–202. https://doi.org/10.1002/job.4030130209
12. Thaler, R. H. (2016). Behavioral economics: Past, present, and future. *American Economic Review, 106*(7), 1577–1600. https://doi.org/10.1257/aer.106.7.1577
13. van Rooij, M., Lusardi, A., & Alessie, R. (2011). Financial literacy and stock market participation. *Journal of Financial Economics, 101*(2), 449–472. https://doi.org/10.1016/j.jfineco.2011.03.006
14. Yamauchi, K. T., & Templer, D. I. (1982). The development of a money attitude scale. *Journal of Personality Assessment, 46*(5), 522–528. https://doi.org/10.1207/s15327752jpa4605_14