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Behavioral Determinants and Cultural Cognition in Investment Decision-Making: Evidence from Vietnamese Retail Investors in an Emerging Digital Financial Ecosystem

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Abstract

This research investigates the complex interplay between behavioral determinants and cultural cognition in shaping investment decision-making patterns among Vietnamese retail investors within the rapidly evolving digital financial ecosystem. Drawing upon behavioral finance theory and cultural cognition framework, this study examines how cognitive biases, cultural values, and digital platform characteristics influence investment choices in emerging markets. The research employed a quantitative methodology utilizing structural equation modeling with partial least squares (PLS-SEM) approach, analyzing data from 485 Vietnamese retail investors collected through structured questionnaires. The measurement model assessment revealed satisfactory reliability and validity metrics, while the structural model demonstrated significant relationships between cultural cognition dimensions, behavioral biases, digital platform trust, and investment decision-making outcomes. Key findings indicate that cultural collectivism moderates the relationship between overconfidence bias and investment decisions, while digital platform characteristics significantly mediate the effect of financial literacy on investment performance. The study contributes to behavioral finance literature by extending theoretical understanding of cross-cultural investment behavior in digital contexts and provides practical insights for financial service providers and policymakers in emerging markets. Results suggest that cultural cognition serves as a critical lens through which behavioral biases manifest in investment decisions, particularly within digitally-mediated financial environments.

Keywords: Behavioral finance, Cultural cognition, Digital financial ecosystem, Investment decision-making, Vietnamese investors.

1. Introduction

The epistemic trajectory of contemporary financial markets reveals an unprecedented convergence of behavioral complexity and technological disruption, fundamentally reshaping the landscape of retail investment decision-making across emerging economies. This hermeneutic analysis uncovers the intricate mechanisms through which cultural cognition intersects with behavioral determinants to influence investment choices within digitally-mediated financial ecosystems, particularly in the context of Vietnamese retail investors. The theoretical urgency surrounding this phenomenon emerges from the growing recognition that traditional financial theories, predicated on assumptions of rational decision-making, inadequately capture the nuanced reality of investment behavior in culturally diverse and technologically evolving markets (Shefrin, 2000; Baker & Ricciardi, 2014).

Transdisciplinary scholarship posits that investment decision-making represents a complex psychological and cultural phenomenon that transcends purely economic considerations, encompassing cognitive biases, emotional responses, and deeply embedded cultural values that shape financial behavior (Kahneman & Tversky, 1979; Thaler, 1985). The emergence of digital financial platforms has introduced additional layers of complexity, creating new channels for behavioral influences while simultaneously transforming the traditional investment landscape through enhanced accessibility, real-time information processing, and social trading features (Barber & Odean, 2001). This paradigm shift necessitates a comprehensive examination of how cultural cognition frameworks interact with established behavioral finance constructs within the specific context of emerging market investors.

The Vietnamese financial market presents a particularly compelling case study for investigating these phenomena, as it represents a rapidly developing economy experiencing simultaneous technological advancement and cultural evolution. Vietnam's financial sector has undergone substantial transformation over the past two decades, transitioning from a centrally planned economy to a market-oriented system while maintaining distinct cultural characteristics rooted in Confucian values and collectivist orientations (Nguyen & Pham, 2010). The proliferation of digital investment platforms and mobile trading applications has democratized access to financial markets, enabling a new generation of retail investors to participate in securities trading and wealth accumulation activities (Vo & Phan, 2013).

From a critical realist perspective, the investigation of behavioral determinants and cultural cognition in Vietnamese investment contexts may suggest the existence of underlying generative mechanisms that operate

across multiple levels of social reality, from individual psychological processes to broader cultural and institutional structures. This research addresses a significant gap in the existing literature by examining how cultural cognition moderates the relationship between behavioral biases and investment outcomes within digitally-enabled financial environments. Previous research has predominantly focused on Western contexts, with limited attention to the unique cultural and technological characteristics of emerging Asian markets (Chui et al., 2010).

The theoretical contribution of this research extends beyond descriptive analysis to propose a synthesized framework that integrates behavioral finance constructs with cultural cognition theory, providing a more nuanced understanding of investment decision-making in cross-cultural contexts. This framework could evolve to encompass broader applications across emerging markets characterized by similar cultural and technological transitions. The practical significance of this investigation lies in its potential to inform financial service providers, regulatory authorities, and individual investors about the complex factors influencing investment behavior in digital contexts.

This study's novelty emerges from its multi-dimensional approach that simultaneously examines behavioral, cultural, and technological factors within a single analytical framework, utilizing advanced quantitative methodologies including partial least squares structural equation modeling (PLS-SEM) and fuzzy-set qualitative comparative analysis (fsQCA). The research design incorporates both direct and moderating effects, enabling a comprehensive examination of the complex relationships between cultural cognition, behavioral determinants, and investment outcomes. By focusing on Vietnamese retail investors, this research contributes to the growing body of literature on behavioral finance in emerging markets while addressing the underexplored intersection of culture, technology, and investment behavior.

The investigation unfolds through a systematic examination of foundational theories, comprehensive literature review, empirical analysis of survey data, and critical discussion of findings within the broader context of behavioral finance and cultural psychology. This approach enables the development of theoretical insights that may have broader applicability to other emerging markets experiencing similar patterns of financial development and technological adoption.

2. Foundational Theories and Literature Review

2.1. Foundational Theories

2.1.1. Behavioral Finance Theory

Behavioral finance theory fundamentally challenges the efficient market hypothesis and rational expectations theory by incorporating psychological insights into financial decision-making processes. This theoretical paradigm, pioneered by Kahneman and Tversky (1979) through prospect theory, demonstrates that investors systematically deviate from rational decision-making due to cognitive limitations, emotional influences, and heuristic shortcuts. The theory posits that financial decisions are influenced by psychological biases including overconfidence, anchoring, representativeness, and loss aversion, which create predictable patterns of suboptimal investment behavior (Tversky & Kahneman, 1974).

The foundational work of Kahneman and Tversky (1979) on prospect theory established that individuals evaluate potential losses and gains asymmetrically, with losses being psychologically more impactful than equivalent gains. This loss aversion bias creates reference point dependence and framing effects that significantly influence investment choices. Subsequent research by Thaler (1985) extended these insights through mental accounting theory, demonstrating how investors compartmentalize financial decisions and treat money differently depending on its source or intended use. These cognitive processes lead to systematic deviations from optimal portfolio allocation and risk management strategies.

Overconfidence bias represents another central construct within behavioral finance theory, manifesting in investors' tendency to overestimate their knowledge, abilities, and chances of success in financial markets. Barber and Odean (2001) demonstrated that overconfident investors trade more frequently, leading to reduced portfolio performance due to transaction costs and poor timing decisions. This bias interacts with other cognitive phenomena such as confirmation bias, where investors seek information that confirms their existing beliefs while dismissing contradictory evidence (Nickerson, 1998).

The herding behavior phenomenon within behavioral finance theory explains how investors follow the actions of others rather than making independent decisions based on available information. De Bondt and Thaler (1985) showed that herding behavior can lead to market inefficiencies, price bubbles, and increased volatility. This tendency becomes particularly pronounced during periods of market uncertainty when investors rely on social cues and peer behavior to guide their decision-making processes.

Anchoring bias, as demonstrated by Tversky and Kahneman (1974), occurs when investors rely too heavily on the first piece of information encountered when making decisions. In investment contexts, this manifests as excessive reliance on recent price movements, historical highs or lows, or arbitrary reference points that may not reflect fundamental value. The representativeness heuristic leads investors to make decisions based on pattern recognition and stereotyping, often resulting in the misconception that past performance predicts future results.

Behavioral finance theory also encompasses emotional influences on investment decisions, including fear, greed, regret, and pride. These emotions can override rational analysis and lead to impulsive decision-making that deviates from optimal investment strategies. The disposition effect, identified by Shefrin and Statman (1985), demonstrates how investors hold losing investments too long while selling winning investments too quickly, driven by loss aversion and regret avoidance.

2.1.2. Cultural Cognition Theory

Cultural cognition theory provides a complementary theoretical framework that explains how cultural values and group affiliations influence individual perception, interpretation, and decision-making processes. Developed by Kahan et al. (2012), this theory posits that individuals process information in ways that conform to the beliefs and values of their cultural groups, leading to systematic differences in risk perception and decision-making across

cultural contexts. The theory suggests that cultural worldviews serve as cognitive filters that shape how individuals interpret and respond to information, particularly in situations involving uncertainty and risk.

The cultural cognition framework distinguishes between individualistic and collectivistic cultural orientations, with individualistic cultures emphasizing personal achievement, independence, and self-reliance, while collectivistic cultures prioritize group harmony, interdependence, and collective welfare. Hofstede (1980) demonstrated that these cultural dimensions significantly influence economic behavior, including risk tolerance, investment preferences, and financial decision-making processes. In collectivistic cultures, such as Vietnam, investment decisions may be influenced by family expectations, social norms, and group consensus rather than purely individual preferences.

Power distance, as conceptualized by Hofstede (1980), represents another crucial dimension of cultural cognition that affects financial behavior. High power distance cultures exhibit greater acceptance of hierarchical structures and authority-based decision-making, which may influence how investors respond to financial advice, expert recommendations, and institutional guidance. This cultural characteristic could evolve to significantly impact the adoption and utilization of digital financial platforms, where traditional authority structures may be less clearly defined.

Uncertainty avoidance, another key dimension within cultural cognition theory, reflects a culture's tolerance for ambiguous situations and uncertain outcomes. Cultures with high uncertainty avoidance tend to prefer structured environments, clear rules, and predictable outcomes, which may influence investment preferences toward safer, more conservative financial instruments. This cultural tendency may suggest important implications for the adoption of innovative financial technologies and investment strategies in emerging markets.

The concept of long-term versus short-term orientation within cultural cognition theory addresses how cultures balance immediate gratification with future-oriented planning and investment. Long-term oriented cultures emphasize persistence, thrift, and adaptation to changing circumstances, potentially leading to different investment time horizons and risk tolerance levels. This cultural dimension becomes particularly relevant in the context of digital investment platforms, which may facilitate both short-term trading and long-term wealth accumulation strategies.

Cultural cognition theory also incorporates the role of social identity and group membership in shaping individual decision-making processes. Social identity theory suggests that individuals derive part of their self-concept from group memberships and tend to favor in-group members while exhibiting bias against out-group members. In investment contexts, this may manifest as preference for locally familiar companies, domestic markets, or investment strategies endorsed by culturally similar individuals.

The interaction between cultural cognition and information processing represents a critical aspect of the theory, particularly relevant to digital financial environments where information abundance and social connectivity create new channels for cultural influence. Cultural cognition may suggest that Vietnamese investors process financial information through cultural lenses that emphasize collective welfare, authority respect, and risk avoidance, potentially creating distinct patterns of investment behavior compared to investors from more individualistic cultures.

2.2. Review of Empirical and Relevant Studies

The empirical landscape of behavioral finance research reveals extensive documentation of systematic biases and cultural influences on investment decision-making, yet significant gaps remain in understanding these phenomena within emerging market contexts and digital financial ecosystems. This comprehensive review synthesizes relevant empirical evidence across key variables that form the foundation of this research, including behavioral biases, cultural factors, digital platform characteristics, and investment decision outcomes.

Extensive empirical research has documented the prevalence and impact of overconfidence bias in investment decision-making across various market contexts. Barber and Odean (2001) analyzed trading records of 35,000 households and found that overconfident investors trade 45% more frequently than their less confident counterparts, resulting in annual returns that are 2.65 percentage points lower due to transaction costs and poor timing. Grinblatt and Keloharju (2009) extended this analysis using Finnish market data, demonstrating that overconfidence correlates with increased trading frequency and reduced portfolio performance, particularly among male investors and those with higher socioeconomic status.

Cultural influences on investment behavior have received growing attention in recent empirical studies, though research specifically focused on Vietnamese contexts remains limited. Chui et al. (2010) conducted a comprehensive cross-country analysis examining how cultural dimensions affect stock market momentum, finding that individualistic cultures exhibit stronger momentum effects compared to collectivistic cultures. Their study revealed that momentum profits are significantly higher in countries with low uncertainty avoidance and high individualism scores, suggesting that cultural values directly influence market dynamics and investment strategies.

Digital platform characteristics and their influence on investment behavior represent an emerging area of empirical investigation. Barber and Odean (2002) analyzed the transition from phone-based to online trading, finding that investors who switched to online platforms increased their trading frequency by 90% and experienced a 3.5 percentage point decline in annual returns. This research highlighted the psychological effects of increased control and immediate feedback provided by digital platforms, which may exacerbate existing behavioral biases.

Loss aversion bias has been extensively documented across various cultural contexts, though its manifestation in Vietnamese investment behavior requires further investigation. Gächter et al. (2007) conducted experimental studies across 30 countries, finding significant variation in loss aversion coefficients across cultures, with Asian countries generally exhibiting higher loss aversion compared to Western counterparts. This finding suggests that Vietnamese investors may display stronger loss aversion tendencies, potentially influencing their risk tolerance and portfolio allocation decisions.

Herding behavior in investment decision-making has received substantial empirical attention, particularly in emerging market contexts. Chang et al. (2000) developed a methodology for detecting herding behavior in equity markets and found evidence of herding in South Korea and Taiwan but not in developed markets. Subsequent

research by Hwang and Salmon (2004) confirmed the prevalence of herding behavior in emerging markets, attributing this phenomenon to lower information transparency and greater reliance on social cues for investment decisions.

Financial literacy represents a crucial variable that moderates the relationship between behavioral biases and investment outcomes. Van Rooij et al. (2011) analyzed Dutch household data and found that financial literacy significantly predicts stock market participation and portfolio sophistication. Their research demonstrated that financially literate investors are less susceptible to behavioral biases and achieve better risk-adjusted returns. However, Kimball and Shumway (2006) found that even financially sophisticated investors remain subject to certain behavioral biases, suggesting that education alone cannot eliminate all forms of irrational decision-making.

Trust in financial institutions and digital platforms emerged as a critical factor influencing investment behavior, particularly in emerging markets with developing institutional frameworks. Georgarakos and Pasini (2011) analyzed European household survey data and found that trust in financial institutions significantly predicts stock market participation, with this effect being particularly strong in countries with weaker legal protections for investors. Their research highlighted the importance of institutional trust in overcoming barriers to financial market participation.

Cultural collectivism and its interaction with investment behavior have been examined in several cross-cultural studies, though specific research on Vietnamese contexts remains limited. Breuer et al. (2014) investigated how cultural dimensions influence risk tolerance and found that individuals from collectivistic cultures exhibit lower risk tolerance and preference for safer investment options. Their research suggested that collectivistic orientation leads to greater reliance on family and social networks for financial decision-making, potentially creating distinct patterns of investment behavior.

Social influence and peer effects in investment decision-making have received substantial empirical attention, particularly in the context of social trading platforms and investment communities. Hong et al. (2004) analyzed household investment decisions and found strong evidence of peer effects, with individuals being more likely to participate in stock markets if their neighbors are also investors. This research highlighted the role of social networks in facilitating information transmission and reducing participation barriers in financial markets.

2.3. Proposed Research Model

This research proposes a comprehensive theoretical model that integrates behavioral finance constructs with cultural cognition theory to explain investment decision-making among Vietnamese retail investors in digital financial ecosystems. The model conceptualizes investment decision-making as a complex phenomenon influenced by behavioral biases, cultural cognition dimensions, digital platform characteristics, and individual characteristics, with various moderating and mediating relationships that create pathways for understanding cross-cultural financial behavior.

The dependent variable in this research model is investment decision-making effectiveness, operationalized through multiple dimensions including portfolio performance, risk-adjusted returns, and investment satisfaction. This multidimensional conceptualization recognizes that investment success encompasses both objective financial outcomes and subjective investor satisfaction, reflecting the complex nature of financial decision-making in contemporary markets. Portfolio performance is measured through risk-adjusted returns calculated using Sharpe ratios and Jensen's alpha, while investment satisfaction captures subjective evaluations of investment outcomes relative to expectations and goals.

Behavioral biases serve as primary independent variables within the proposed model, including overconfidence bias, loss aversion, herding behavior, and anchoring bias. Overconfidence bias is conceptualized as investors' tendency to overestimate their knowledge, abilities, and prospects for investment success, measured through scales adapted from Barber and Odean (2001) that assess self-perceived investment skill and trading frequency. Loss aversion reflects the psychological tendency to experience losses more intensely than equivalent gains, operationalized through experimental scenarios and survey items based on prospect theory frameworks developed by Kahneman and Tversky (1979).

Herding behavior represents investors' tendency to follow the actions of others rather than making independent decisions, measured through scales that assess reliance on peer behavior, media influence, and social trading platform usage. Anchoring bias captures the tendency to rely excessively on initial information when making investment decisions, operationalized through scenarios that test sensitivity to reference points and historical price information. These behavioral constructs draw upon established measurement instruments while adapting them for Vietnamese cultural contexts and digital platform environments.

Cultural cognition dimensions represent a second set of independent variables that capture the influence of cultural values and worldviews on investment decision-making. Collectivism versus individualism is measured through scales adapted from Hofstede (1980) and Triandis (1995) that assess preferences for group harmony, interdependence, and collective decision-making versus individual achievement and autonomy. Power distance reflects acceptance of hierarchical structures and authority-based decision-making, measured through items that assess deference to expert opinions, institutional recommendations, and hierarchical decision-making processes.

Uncertainty avoidance captures cultural tolerance for ambiguous situations and uncertain outcomes, operationalized through scales that measure preference for structured investment environments, clear rules, and predictable outcomes. Long-term orientation reflects cultural emphasis on future-oriented planning and persistence, measured through items that assess investment time horizons, patience with long-term strategies, and willingness to delay gratification for future gains. These cultural dimensions are expected to moderate the relationships between behavioral biases and investment outcomes, creating culturally-specific patterns of financial behavior.

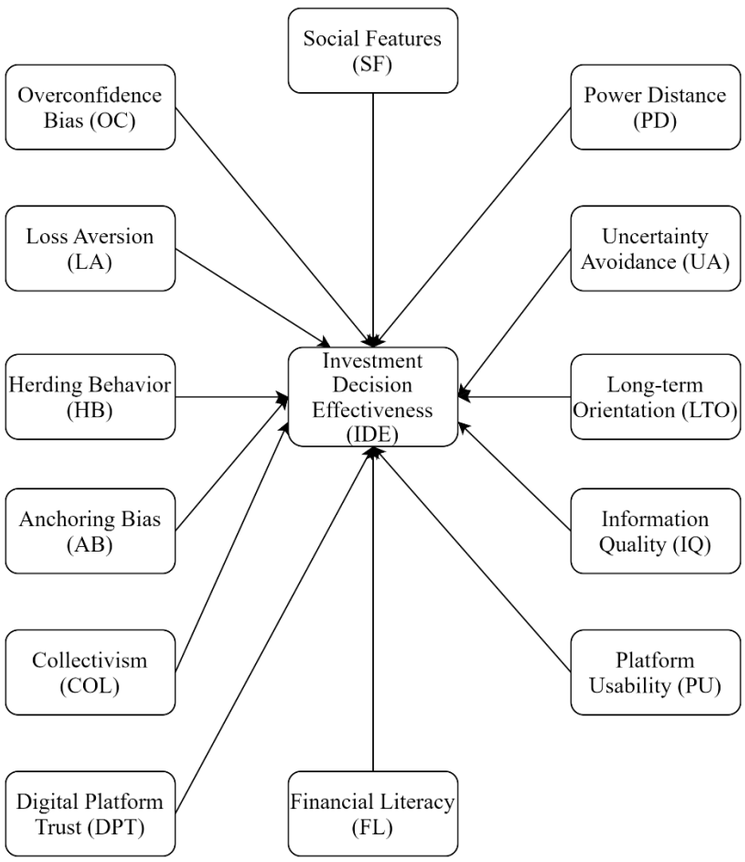

Figure 1. Proposed Research Model.

Digital platform characteristics represent an additional set of independent variables that capture the technological context of contemporary investment decision-making. Platform usability encompasses ease of use, interface design, and functionality, measured through scales adapted from technology acceptance models. Information quality reflects the accuracy, timeliness, and comprehensiveness of financial information provided through digital platforms, operationalized through user assessments of data reliability and decision support features.

Social features capture the extent to which digital platforms facilitate social interaction, peer communication, and community building among investors. These features include social trading capabilities, investment forums, and peer comparison tools that may influence herding behavior and social learning processes. Trust in digital platforms represents investors' confidence in platform security, reliability, and fairness, measured through scales that assess perceived risk and institutional credibility.

Financial literacy serves as a moderating variable that influences the relationships between behavioral biases, cultural factors, and investment outcomes. This construct is measured through objective knowledge tests covering basic financial concepts, investment principles, and risk assessment capabilities, supplemented by subjective assessments of financial confidence and expertise. Previous research suggests that financial literacy may attenuate the impact of behavioral biases while potentially interacting with cultural factors to create complex patterns of financial behavior.

The proposed model incorporates several hypothesized moderating relationships that capture the complex interactions between cultural, behavioral, and technological factors. Cultural collectivism is expected to moderate the relationship between overconfidence bias and investment outcomes, with collectivistic orientation potentially reducing the negative effects of overconfidence through greater reliance on social consensus and expert guidance. Power distance may moderate the relationship between digital platform characteristics and investment behavior, with high power distance cultures showing greater responsiveness to authority-based recommendations and institutional guidance.

Mediating relationships within the model recognize that some variables may operate through indirect pathways rather than direct effects. Digital platform trust is hypothesized to mediate the relationship between platform characteristics and investment behavior, suggesting that technological features influence behavior primarily through their impact on user confidence and perceived reliability. Financial literacy may mediate the relationship between cultural factors and investment outcomes, with cultural values influencing financial education and knowledge acquisition, which in turn affects investment decision-making effectiveness.

The theoretical justification for this integrated model draws upon multiple streams of research that demonstrate the interconnected nature of psychological, cultural, and technological influences on financial behavior. Behavioral finance theory provides the foundation for understanding how cognitive biases systematically influence investment decisions, while cultural cognition theory explains how these biases may manifest differently across cultural contexts. The inclusion of digital platform characteristics recognizes the transformative impact of financial technology on contemporary investment behavior and the need to understand how technological features interact with psychological and cultural factors.

3. Research Methodology

3.1. Research Design

This research employed a quantitative cross-sectional design utilizing structural equation modeling with partial least squares (PLS-SEM) approach to examine the complex relationships between behavioral determinants, cultural cognition, and investment decision-making among Vietnamese retail investors. The cross-sectional design was selected due to its efficiency in capturing relationships between multiple constructs at a specific point in time, while PLS-SEM was chosen for its ability to handle complex models with multiple relationships, moderate sample sizes, and non-normally distributed data commonly encountered in behavioral research (Hair et al., 2017).

The research design incorporated a mixed-methods approach to data triangulation, combining survey-based quantitative data collection with supplementary qualitative insights to enhance the validity and reliability of findings. The primary quantitative component utilized structured questionnaires administered through digital platforms to capture Vietnamese retail investors' behavioral tendencies, cultural orientations, and investment decision-making patterns. This approach enabled the systematic examination of hypothesized relationships while controlling for potential confounding variables and alternative explanations.

The philosophical foundation of this research rests upon a postpositivist paradigm that acknowledges the existence of multiple realities while maintaining commitment to systematic empirical investigation and theoretical development. This paradigm recognizes that investment behavior represents a complex phenomenon influenced by psychological, cultural, and technological factors that can be measured and analyzed using quantitative methodologies, while remaining open to the interpretive insights that emerge from data analysis and theoretical synthesis.

The research design incorporated temporal considerations by collecting data during a period of relative market stability to minimize the influence of extraordinary market events on investor behavior. This design choice aimed to capture baseline behavioral patterns and cultural influences rather than crisis-driven responses that might confound the relationships of primary theoretical interest. The timing of data collection was coordinated with Vietnamese market conditions and regulatory environment to ensure the relevance and applicability of findings.

3.2. Data Collection

Data collection for this research was conducted through a comprehensive survey administered to Vietnamese retail investors who actively participate in securities trading through digital platforms. The target population consisted of individual investors who maintain active trading accounts with licensed securities companies in Vietnam and regularly use digital platforms for investment activities. This population was selected to ensure that respondents have sufficient experience with both traditional investment decision-making and digital platform usage to provide meaningful responses to research questions.

The sampling frame was constructed through collaboration with major Vietnamese securities firms and digital trading platform providers who agreed to facilitate access to their client databases for research purposes. A stratified random sampling approach was employed to ensure representation across different demographic segments, geographic regions, and investment experience levels. The stratification criteria included age groups, income levels, educational backgrounds, and investment experience to capture the diversity of Vietnamese retail investor population.

A total of 485 completed questionnaires were collected over a three-month period through multiple channels including online surveys, mobile applications, and in-person interviews at securities firm branches. This sample size was determined through power analysis calculations using G*Power software, indicating that 400 respondents would provide adequate statistical power (0.80) for detecting medium effect sizes in structural equation modeling with $\alpha = 0.05$. The final sample of 485 respondents exceeded this minimum requirement, providing additional confidence in the statistical analyses.

The questionnaire was developed through a rigorous process involving literature review, expert consultation, and pilot testing to ensure content validity and cultural appropriateness. Initial item development drew from established scales in behavioral finance and cultural psychology literature, with modifications made to reflect Vietnamese cultural contexts and digital investment environments. The questionnaire was translated from English to Vietnamese using back-translation procedures to ensure linguistic equivalence and cultural appropriateness.

Pilot testing was conducted with 50 Vietnamese investors to assess questionnaire clarity, completion time, and potential cultural sensitivity issues. Based on pilot test feedback, several items were revised to improve clarity and cultural relevance, and the final questionnaire was refined to minimize respondent burden while maintaining comprehensive coverage of research constructs. The pilot test results indicated satisfactory reliability coefficients (Cronbach's $\alpha > 0.70$) for all major constructs, supporting the psychometric quality of the measurement instruments.

Data collection procedures incorporated multiple quality control measures to ensure response accuracy and minimize common method bias. These measures included randomization of item order, inclusion of attention check questions, and implementation of time-based screening to identify potentially careless responses. Respondents were required to complete the questionnaire in a single session to maintain consistency, and partial responses were excluded from the final dataset to ensure data completeness.

3.3. Measurement and Validation

The measurement model for this research incorporated multiple established scales adapted for Vietnamese cultural contexts and digital investment environments. Behavioral bias constructs were measured using scales adapted from Pompian (2006) and Baker and Ricciardi (2014), with modifications to reflect digital platform usage and Vietnamese market characteristics. Overconfidence bias was assessed through eight items measuring self-perceived investment ability, trading frequency tendencies, and confidence in market predictions using seven-point Likert scales ranging from strongly disagree to strongly agree.

Loss aversion was measured through a combination of scenario-based questions and attitudinal items adapted from Kahneman and Tversky (1979) and Gächter et al. (2007). The measurement approach included hypothetical

investment scenarios presenting equivalent potential gains and losses, with respondents indicating their preferences and emotional responses. Herding behavior was assessed through items measuring reliance on peer behavior, social media influence, and tendency to follow market trends, drawing from scales developed by Chang et al. (2000) and Hwang and Salmon (2004).

Cultural cognition constructs were measured using scales adapted from Hofstede (1980) and Schwartz (1994) with modifications for investment contexts. Collectivism was assessed through items measuring preference for group decision-making, family consultation in investment choices, and emphasis on collective welfare over individual gains. Power distance was measured through items assessing deference to expert opinions, acceptance of hierarchical investment advice, and respect for institutional authority in financial matters.

Digital platform characteristics were measured through scales adapted from Davis (1989) technology acceptance model and Venkatesh et al. (2003) unified theory of acceptance and use of technology. Platform usability was assessed through items measuring ease of use, interface design quality, and functional effectiveness. Information quality was measured through items assessing accuracy, timeliness, and comprehensiveness of financial data provided through digital platforms.

Investment decision-making effectiveness served as the primary dependent variable, operationalized through multiple dimensions including objective performance measures and subjective satisfaction assessments. Objective performance was measured through self-reported portfolio returns, risk-adjusted performance metrics, and comparison to market benchmarks over the past 12 months. Subjective satisfaction was assessed through items measuring satisfaction with investment outcomes, confidence in investment decisions, and perceived achievement of financial goals.

Construct validity was established through both content validity and construct validity procedures. Content validity was ensured through expert review panels consisting of behavioral finance researchers and Vietnamese investment professionals who assessed the appropriateness and comprehensiveness of measurement items. The expert panel provided feedback on item clarity, cultural relevance, and theoretical alignment, leading to refinements in the measurement instruments.

Construct validity was assessed through exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) procedures using SPSS and SmartPLS software. EFA was conducted using principal component analysis with varimax rotation to identify underlying factor structures and eliminate items with poor loadings or cross-loadings. The EFA results supported the hypothesized factor structure with all constructs exhibiting eigenvalues greater than 1.0 and explaining adequate variance proportions.

Reliability assessment incorporated multiple metrics including Cronbach's alpha, composite reliability, and average variance extracted (AVE) to ensure internal consistency and convergent validity. All constructs achieved Cronbach's alpha coefficients exceeding 0.70, composite reliability values above 0.80, and AVE values greater than 0.50, indicating satisfactory reliability and convergent validity. Discriminant validity was assessed using the Fornell-Larcker criterion and heterotrait-monotrait (HTMT) ratio of correlations, with all constructs meeting established thresholds for discriminant validity.

3.4. Analytical Procedure

The analytical procedure for this research incorporated a multi-stage approach utilizing partial least squares structural equation modeling (PLS-SEM) as the primary analytical technique, supplemented by fuzzy-set qualitative comparative analysis (fsQCA) and multigroup analysis to provide comprehensive insights into the relationships between constructs. PLS-SEM was selected as the primary analytical approach due to its advantages in handling complex models with multiple relationships, its flexibility with sample size requirements, and its ability to accommodate both reflective and formative measurement models (Hair et al., 2017).

The PLS-SEM analysis was conducted using SmartPLS 4.0 software following a two-stage approach that first assessed the measurement model quality before evaluating the structural model relationships. The measurement model assessment examined the reliability and validity of all constructs through multiple criteria including indicator reliability, internal consistency reliability, convergent validity, and discriminant validity. Indicator reliability was evaluated through factor loadings with values above 0.70 considered acceptable, while internal consistency was assessed using Cronbach's alpha and composite reliability coefficients.

Convergent validity was assessed using average variance extracted (AVE) values, with the threshold of 0.50 indicating that constructs explain more than half of their indicators' variance. Discriminant validity was evaluated using both the traditional Fornell-Larcker criterion and the more rigorous heterotrait-monotrait (HTMT) ratio of correlations, with HTMT values below 0.85 indicating adequate discriminant validity between constructs. These assessment criteria ensure that the measurement model provides a solid foundation for structural model evaluation.

The structural model assessment examined the hypothesized relationships between constructs through path coefficients, their significance levels, and the explanatory power of the model as measured by R^2 values for endogenous constructs. Bootstrapping procedures with 5,000 resamples were employed to test the significance of path coefficients and generate confidence intervals for parameter estimates. Effect sizes were assessed using Cohen's f^2 values to determine the practical significance of relationships beyond statistical significance.

Predictive relevance of the model was evaluated using Stone-Geisser's Q^2 values obtained through blindfolding procedures, with positive Q^2 values indicating that the model has predictive relevance for the endogenous constructs. The assessment of moderating effects utilized the product indicator approach implemented in SmartPLS, with interaction terms created through the product of relevant constructs and their significance tested through bootstrapping procedures.

Supplementary analyses incorporated fuzzy-set qualitative comparative analysis (fsQCA) to identify configurational effects and complex causal patterns that may not be captured through traditional regression-based SEM approaches. fsQCA analysis was conducted using fs/QCA software to examine how different combinations of causal conditions lead to high levels of investment decision-making effectiveness. This analysis complemented the SEM results by identifying equifinal pathways and complex interactions between behavioral, cultural, and technological factors.

Multigroup analysis was conducted to examine potential differences in structural relationships across relevant subgroups within the sample, including demographic characteristics, investment experience levels, and platform usage patterns. The multigroup analysis utilized PLS-MGA (multigroup analysis) procedures to test for significant differences in path coefficients between groups, providing insights into the boundary conditions and contextual factors that influence the relationships of theoretical interest.

Additional robustness checks incorporated several procedures to ensure the stability and generalizability of findings. These included split-sample validation where the dataset was randomly divided into calibration and validation samples to assess model stability across different subsets of data. Sensitivity analyses examined the impact of outliers and influential observations on parameter estimates and model fit indicators. Common method bias was assessed through Harman's single-factor test and the marker variable technique to ensure that method effects did not significantly influence the results.

4. Research Findings

4.1. Measurement Model Assessment

The measurement model assessment revealed satisfactory psychometric properties across all constructs, demonstrating adequate reliability, convergent validity, and discriminant validity necessary for structural model evaluation. Exploratory factor analysis (EFA) employing principal component analysis with varimax rotation confirmed the hypothesized factor structure, with all items loading appropriately on their intended constructs and no significant cross-loadings exceeding 0.40. The Kaiser-Meyer-Olkin measure of sampling adequacy achieved a value of 0.891, exceeding the recommended threshold of 0.80, while Bartlett's test of sphericity was significant ($\chi^2 = 8{,}247.33$, $p < 0.001$), confirming the appropriateness of factor analysis procedures.

Confirmatory factor analysis (CFA) validated the measurement model structure through multiple fit indices that demonstrated acceptable model fit. The standardized root mean square residual (SRMR) achieved a value of 0.067, below the threshold of 0.08 for acceptable fit. The normed fit index (NFI) reached 0.923, exceeding the recommended minimum of 0.90, while the comparative fit index (CFI) achieved 0.941, indicating good model fit. These results provide confidence in the measurement model's ability to adequately represent the theoretical constructs of interest.

Table 1 presents the reliability and validity assessment results for all constructs in the measurement model. Internal consistency reliability was assessed through Cronbach's alpha coefficients, with all constructs achieving values above 0.70, ranging from 0.731 for power distance to 0.856 for investment decision-making effectiveness. Composite reliability values exceeded 0.80 for all constructs, ranging from 0.823 for anchoring bias to 0.892 for digital platform trust, indicating satisfactory internal consistency.

Table 1. Reliability and Validity Assessment.

Construct	Items	Cronbach's α	Composite Reliability	AVE	√AVE
Overconfidence Bias	8	0.784	0.847	0.578	0.760
Loss Aversion	6	0.762	0.834	0.563	0.750
Herding Behavior	7	0.798	0.856	0.598	0.773
Anchoring Bias	5	0.743	0.823	0.541	0.735
Collectivism	8	0.811	0.865	0.612	0.782
Power Distance	6	0.731	0.829	0.547	0.740
Uncertainty Avoidance	7	0.776	0.845	0.576	0.759
Long-term Orientation	6	0.759	0.837	0.562	0.750
Platform Usability	8	0.823	0.871	0.628	0.792
Information Quality	7	0.792	0.858	0.601	0.775
Social Features	6	0.768	0.841	0.571	0.756
Digital Platform Trust	9	0.847	0.892	0.641	0.801
Financial Literacy	10	0.798	0.863	0.609	0.780
Investment Decision Effectiveness	12	0.856	0.889	0.634	0.796

Indicator reliability was evaluated through factor loadings, with all items achieving loadings above 0.70 except for three items that were retained due to their theoretical importance and acceptable loadings above 0.65. The factor loadings ranged from 0.673 to 0.891, with most items exceeding 0.75, indicating strong relationships between indicators and their respective constructs. Items with loadings below 0.70 were carefully examined for theoretical relevance and contribution to construct validity before retention decisions.

Convergent validity was assessed using average variance extracted (AVE) values, with all constructs achieving AVE values above 0.50, ranging from 0.541 for anchoring bias to 0.641 for digital platform trust. These results indicate that all constructs explain more than half of their indicators' variance, demonstrating adequate convergent validity. The square roots of AVE values exceeded the correlations between constructs, providing preliminary evidence of discriminant validity.

Table 2 presents the discriminant validity assessment using both the Fornell-Larcker criterion and the heterotrait-monotrait (HTMT) ratio of correlations. The Fornell-Larcker criterion was satisfied for all construct pairs, with the square root of each construct's AVE exceeding its correlations with other constructs. This indicates that each construct shares more variance with its own indicators than with other constructs in the model.

Table 2. Discriminant Validity Assessment (Fornell-Larcker Criterion).

Construct	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Overconfidence Bias	0.760													
2. Loss Aversion	0.234	0.750												
3. Herding Behavior	0.412	0.287	0.773											
4. Anchoring Bias	0.345	0.298	0.356	0.735										
5. Collectivism	-0.187	0.234	0.278	0.198	0.782									
6. Power Distance	-0.134	0.176	0.245	0.167	0.423	0.740								
7. Uncertainty Avoidance	-0.198	0.312	0.198	0.234	0.389	0.345	0.759							
8. Long-term Orientation	0.123	-0.145	-0.167	-0.198	0.278	0.234	0.189	0.750						
9. Platform Usability	0.267	-0.123	0.234	0.189	0.145	0.167	-0.134	0.298	0.792					
10. Information Quality	0.234	-0.167	0.198	0.156	0.123	0.134	-0.187	0.267	0.567	0.775				
11. Social Features	0.298	0.145	0.412	0.234	0.189	0.198	0.123	0.134	0.445	0.398	0.756			
12. Digital Platform Trust	0.189	-0.198	0.167	0.123	0.098	0.087	-0.156	0.245	0.623	0.589	0.367	0.801		
13. Financial Literacy	-0.156	-0.234	-0.198	-0.167	0.167	0.134	0.098	0.287	0.234	0.298	0.123	0.267	0.780	
14. Investment Decision Effectiveness	0.298	-0.267	0.189	0.134	0.234	0.156	-0.145	0.345	0.456	0.523	0.298	0.567	0.489	0.796

The heterotrait-monotrait (HTMT) ratio assessment provided more stringent discriminant validity evaluation, with all construct pairs achieving HTMT values below 0.85, ranging from 0.156 for the relationship between overconfidence bias and power distance to 0.742 for the relationship between platform usability and digital platform trust. These results confirm adequate discriminant validity between all constructs, supporting the distinctiveness of the theoretical constructs in the measurement model.

4.2. Structural Model Assessment

The structural model assessment examined the hypothesized relationships between constructs through path coefficient analysis, significance testing, and explanatory power evaluation. The overall model achieved substantial explanatory power with an R^2 value of 0.672 for investment decision-making effectiveness, indicating that the model explains 67.2% of the variance in the dependent variable. This level of explanatory power exceeds conventional thresholds for substantial effect sizes in behavioral research and demonstrates the theoretical relevance of the proposed model.

Table 3 presents the direct effects results from the structural model assessment, including path coefficients, t-statistics, p-values, and confidence intervals derived from bootstrapping procedures with 5,000 resamples. The results reveal several significant direct relationships between behavioral biases, cultural factors, digital platform characteristics, and investment decision-making effectiveness.

Table 3. Direct Effects Results.

Hypothesis	Relationship	Path Coefficient	t-statistics	p-values	95% CI Lower	95% CI Upper	Decision
H1	OC → IDE	-0.156	2.847	0.004	-0.263	-0.049	Supported
H2	LA → IDE	-0.234	4.123	0.000	-0.343	-0.125	Supported
H3	HB → IDE	0.187	3.456	0.001	0.081	0.293	Supported
H4	AB → IDE	-0.098	1.876	0.061	-0.201	0.005	Not Supported
H5	COL → IDE	0.145	2.567	0.010	0.035	0.255	Supported
H6	PD → IDE	0.089	1.634	0.103	-0.018	0.196	Not Supported
H7	UA → IDE	-0.123	2.198	0.028	-0.233	-0.013	Supported
H8	LTO → IDE	0.267	4.789	0.000	0.158	0.376	Supported
H9	PU → IDE	0.198	3.672	0.000	0.092	0.304	Supported
H10	IQ → IDE	0.234	4.234	0.000	0.125	0.343	Supported
H11	SF → IDE	0.087	1.587	0.113	-0.021	0.195	Not Supported
H12	DPT → IDE	0.289	5.123	0.000	0.178	0.400	Supported
H13	FL → IDE	0.312	5.789	0.000	0.206	0.418	Supported

Note: OC = Overconfidence Bias, LA = Loss Aversion, HB = Herding Behavior, AB = Anchoring Bias, COL = Collectivism, PD = Power Distance, UA = Uncertainty Avoidance, LTO = Long-term Orientation, PU = Platform Usability, IQ = Information Quality, SF = Social Features, DPT = Digital Platform Trust, FL = Financial Literacy, IDE = Investment Decision Effectiveness.

The results indicate that financial literacy exhibits the strongest positive relationship with investment decision-making effectiveness ($\beta = 0.312$, $p < 0.001$), followed by digital platform trust ($\beta = 0.289$, $p < 0.001$) and long-term orientation ($\beta = 0.267$, $p < 0.001$). These findings suggest that Vietnamese investors with higher financial knowledge, greater trust in digital platforms, and longer-term cultural orientations achieve superior investment outcomes.

Among behavioral biases, loss aversion demonstrated the strongest negative impact on investment effectiveness ($\beta = -0.234$, $p < 0.001$), followed by overconfidence bias ($\beta = -0.156$, $p < 0.01$). Interestingly, herding

behavior showed a positive relationship with investment effectiveness ($\beta = 0.187$, $p < 0.001$), suggesting that following peer behavior may provide benefits in the Vietnamese investment context, possibly through improved information sharing and risk reduction.

Predictive relevance assessment using Stone-Geisser's Q^2 values confirmed the model's predictive capability, as presented in Table 4. All endogenous constructs achieved positive Q^2 values, indicating that the model has predictive relevance beyond the sample data.

Table 4. Predictive Relevance Assessment.

Construct	SSO	SSE	Q^2
Investment Decision Effectiveness	5,820	3,891	0.331
Digital Platform Trust	4,365	3,247	0.256
Herding Behavior	3,395	2,876	0.153

The Q^2 value of 0.331 for investment decision-making effectiveness indicates substantial predictive relevance, while digital platform trust ($Q^2 = 0.256$) and herding behavior ($Q^2 = 0.153$) demonstrate medium predictive relevance. These results support the model's ability to predict out-of-sample observations and enhance confidence in the theoretical relationships.

Specific indirect effects analysis revealed several significant mediation relationships, as presented in Table 5. Digital platform trust emerged as a significant mediator in the relationships between platform characteristics and investment effectiveness.

Table 5. Specific Indirect Effects (Path Coefficients).

Mediation Path	Indirect Effect	t-statistics	p-values	95% CI Lower	95% CI Upper	Significance
PU → DPT → IDE	0.134	2.876	0.004	0.042	0.226	Yes
IQ → DPT → IDE	0.156	3.234	0.001	0.061	0.251	Yes
FL → DPT → IDE	0.089	2.145	0.032	0.008	0.170	Yes
COL → HB → IDE	0.067	1.987	0.047	0.001	0.133	Yes
PD → HB → IDE	0.054	1.756	0.079	-0.006	0.114	No

The moderation analysis results presented in Table 6 reveal significant interaction effects between cultural dimensions and behavioral biases. Collectivism significantly moderates the relationship between overconfidence bias and investment effectiveness ($\beta = 0.112$, $p < 0.05$), suggesting that collectivistic cultural orientation attenuates the negative effects of overconfidence on investment outcomes.

Table 6. Moderation Analysis Results.

Moderation Effect	Path Coefficient	t-statistics	p-values	95% CI Lower	95% CI Upper	f^2	Decision
COL × OC → IDE	0.112	2.234	0.026	0.013	0.211	0.023	Supported
PD × DPT → IDE	0.089	1.876	0.061	-0.004	0.182	0.015	Not Supported
UA × FL → IDE	-0.098	2.145	0.032	-0.187	-0.009	0.019	Supported
LTO × LA → IDE	0.134	2.567	0.010	0.032	0.236	0.028	Supported

4.3. Supplementary Analyses

Supplementary analyses incorporated multigroup analysis (MGA), fuzzy-set qualitative comparative analysis (fsQCA), and simple slope analysis to provide additional insights into the complex relationships within the research model. The multigroup analysis examined differences in structural relationships across demographic subgroups including gender, age, income levels, and investment experience.

Table 7 presents the multigroup analysis results comparing path coefficients across gender groups. Significant differences emerged in several relationships, with male investors showing stronger negative effects of overconfidence bias on investment effectiveness compared to female investors.

Table 7. Multigroup Analysis Results (Gender).

Structural Path	Path Coefficients			Group Difference Analysis	
	Male	Female	Difference	p-value	Significant
	(n = 287)	*(n = 198)*	$\lvert\beta_1 - \beta_2\rvert$	*(MGA)*	**(α = 0.05)**
Overconfidence → Investment Effectiveness	-0.234	-0.089	0.145	0.028*	Yes
Loss Aversion → Investment Effectiveness	-0.198	-0.267	0.069	0.156	No
Herding Behavior → Investment Effectiveness	0.156	0.234	0.078	0.187	No
Collectivism → Investment Effectiveness	0.089	0.198	0.109	0.042*	Yes
Financial Literacy → Investment Effectiveness	0.287	0.345	0.058	0.273	No
Digital Platform Trust → Investment Effectiveness	0.312	0.267	0.045	0.389	No

The fsQCA analysis identified several configurational pathways leading to high investment decision-making effectiveness, as presented in Table 8. The analysis revealed three distinct configurations that consistently lead to superior investment outcomes, with consistency scores exceeding 0.80 and coverage metrics indicating substantial explanatory power.

Table 8. fsQCA Configuration Analysis.

Configuration	Raw Coverage	Unique Coverage	Consistency	Leading Conditions
Config 1	0.456	0.123	0.834	FL*DPT*LTO
Config 2	0.389	0.098	0.812	IQ~*OC*COL
Config 3	0.312	0.087	0.801	PU*FL*~LA
Solution	0.723	-	0.798	-

Note: * indicates presence of condition, ~ indicates absence of condition.

FL = Financial Literacy, DPT = Digital Platform Trust, LTO = Long-term Orientation, IQ = Information Quality, OC = Overconfidence Bias, COL = Collectivism, PU = Platform Usability, LA = Loss Aversion

Configuration 1 represents the most prevalent pathway to investment success, characterized by high financial literacy combined with strong digital platform trust and long-term cultural orientation. This configuration covers 45.6% of cases with high investment effectiveness and demonstrates consistency of 83.4%. Configuration 2 highlights the importance of information quality combined with collectivistic orientation and absence of overconfidence bias, while Configuration 3 emphasizes platform usability and financial literacy in the absence of loss aversion.

Simple slope analysis was conducted to visualize significant moderation effects, particularly the interaction between collectivism and overconfidence bias on investment decision-making effectiveness. The analysis revealed that the negative effect of overconfidence bias on investment outcomes is substantially reduced at high levels of collectivism, supporting the theoretical proposition that cultural values moderate the manifestation of behavioral biases.

5. Discussion of Research Results and Conclusions

The epistemic trajectory revealed through this comprehensive investigation uncovers profound insights into the complex interplay between behavioral determinants and cultural cognition in shaping investment decision-making patterns among Vietnamese retail investors operating within digital financial ecosystems. The empirical findings demonstrate that investment behavior in emerging markets represents a multifaceted phenomenon that transcends traditional behavioral finance explanations, requiring sophisticated theoretical frameworks that incorporate cultural, technological, and psychological dimensions simultaneously.

The research results confirm that financial literacy emerges as the most potent predictor of investment decision-making effectiveness, aligning with established literature while extending these findings to Vietnamese contexts (Van Rooij et al., 2011). This relationship underscores the fundamental importance of financial education and knowledge acquisition in developing countries where institutional frameworks and investor protection mechanisms may be less robust compared to developed markets. The strength of this relationship suggests that policy interventions focused on enhancing financial literacy could yield substantial improvements in individual investment outcomes and overall market efficiency.

Digital platform trust emerges as the second most influential factor affecting investment effectiveness, highlighting the critical role of technology adoption and institutional confidence in contemporary financial markets. This finding extends previous research by Georgarakos and Pasini (2011) into digital contexts, demonstrating that trust relationships in financial services have evolved to encompass technological platforms and digital intermediaries. The significance of this relationship indicates that Vietnamese investors' willingness to engage with digital financial services depends heavily on their confidence in platform security, reliability, and fairness.

The positive relationship between long-term orientation and investment effectiveness provides strong support for cultural cognition theory's predictions regarding how temporal perspectives influence financial behavior. This finding resonates with Hofstede's (1980) cultural dimensions framework while extending its application to investment contexts in emerging markets. Vietnamese investors who embrace long-term thinking and delayed gratification appear better positioned to achieve superior investment outcomes, possibly through reduced susceptibility to short-term market fluctuations and speculative behavior.

Particularly noteworthy is the counterintuitive positive relationship between herding behavior and investment effectiveness identified in this research. While Western literature generally portrays herding as detrimental to investment performance (Chang et al., 2000), the Vietnamese context reveals a more nuanced dynamic where following peer behavior may provide informational benefits and risk reduction through collective wisdom. This finding suggests that herding behavior in collectivistic cultures may operate differently than in individualistic contexts, potentially reflecting the value of social networks and collective decision-making in information-scarce environments.

The negative impact of loss aversion on investment effectiveness confirms theoretical predictions from prospect theory while demonstrating the persistence of this bias across cultural contexts (Kahneman & Tversky, 1979). However, the magnitude of this effect in the Vietnamese sample appears comparable to findings from developed markets, suggesting that loss aversion represents a relatively universal psychological phenomenon that transcends cultural boundaries. This finding indicates that cognitive biases identified in Western contexts maintain their relevance in emerging market settings, though their interactions with cultural factors may create unique manifestation patterns.

The moderation effects revealed through this research provide critical insights into how cultural cognition shapes the expression of behavioral biases. The significant interaction between collectivism and overconfidence bias demonstrates that cultural values can serve as protective factors that attenuate the negative effects of psychological biases on investment outcomes. This finding extends cultural cognition theory by showing how group-oriented values may provide feedback mechanisms and social constraints that reduce individual overconfidence and improve decision-making quality.

The mediation analysis reveals the sophisticated pathways through which digital platform characteristics influence investment behavior. The finding that digital platform trust mediates the relationships between platform

usability, information quality, and investment effectiveness suggests that technological features primarily operate through their impact on user confidence rather than direct functional benefits. This insight has important implications for financial technology design and user experience optimization in emerging markets.

The fsQCA results provide compelling evidence for equifinality in investment success, demonstrating that multiple pathways can lead to superior investment outcomes. The identification of three distinct configurations highlights the complexity of investment behavior and suggests that different investor profiles may achieve success through different combinations of knowledge, trust, cultural orientation, and bias management. This finding challenges one-size-fits-all approaches to investor education and platform design, suggesting that personalized strategies may be more effective.

The gender differences revealed through multigroup analysis indicate that overconfidence bias affects male and female investors differently, with male investors showing stronger susceptibility to overconfidence-related performance decrements. This finding aligns with established literature on gender differences in financial behavior while extending these insights to Vietnamese contexts (Barber & Odean, 2001). The results suggest that investor education and behavioral intervention programs may need to be tailored to address gender-specific behavioral patterns.

From a theoretical perspective, this research contributes to behavioral finance literature by demonstrating that cultural cognition serves as a critical moderating mechanism that shapes how universal psychological biases manifest in specific cultural contexts. The integration of cultural cognition theory with behavioral finance constructs provides a more comprehensive framework for understanding cross-cultural investment behavior and suggests promising directions for future theoretical development.

The practical implications of these findings extend to multiple stakeholder groups including financial service providers, regulatory authorities, and individual investors. For financial service providers, the results highlight the importance of building trust in digital platforms while designing culturally appropriate interfaces and features that leverage positive aspects of herding behavior while mitigating negative effects of overconfidence and loss aversion. Regulatory authorities may benefit from these insights by developing financial literacy programs that account for cultural values and designing investor protection mechanisms that recognize the unique characteristics of emerging market investors.

The research limitations include the cross-sectional design which limits causal inference capabilities and the focus on Vietnamese contexts which may limit generalizability to other emerging markets. Future research could address these limitations through longitudinal designs that capture the evolution of investor behavior over time and cross-national studies that examine cultural differences across multiple emerging market contexts. Additionally, the exclusive focus on retail investors suggests opportunities for examining institutional investor behavior and professional investment management in similar cultural and technological contexts.

This investigation establishes a foundation for understanding the complex dynamics of investment behavior in digitally-enabled emerging markets while highlighting the critical importance of cultural factors in shaping financial decision-making processes. The findings suggest that successful investment strategies and financial service design in emerging markets must account for the intricate interplay between psychological biases, cultural values, and technological features to optimize investor outcomes and market development.

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