

Article

Confidence, Risk Tolerance, and the Dual Role of Peer Influence in the Investment Decisions of Employed Women: A Structural Equation Model from Urban India

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Abstract

Although employed women represent one of the fastest-growing segments of the investor population in emerging economies, their investment decision-making is still largely modelled through fragmented, single-determinant frameworks that treat women as a homogeneous group. This study develops and tests an integrated structural model of financial-goal-directed investment orientation among employed women, drawing together Behavioural Finance Theory, the Theory of Planned Behaviour, and the Life-Cycle Hypothesis. Primary data were collected through a structured questionnaire from 951 employed women across the four administrative zones of Bengaluru, India, using stratified random sampling. The measurement model was validated through exploratory and confirmatory factor analysis, and four competing structural specifications were estimated by maximum likelihood; the best-fitting model was selected on the basis of the corrected Akaike Information Criterion and approximate fit indices. The results indicate that risk tolerance is the strongest direct correlate of financial-goal-directed investment orientation, that confidence and self-efficacy operates as the pivotal psychological mediator linking macroeconomic perception to risk-taking, and that market sentiments are the strongest external correlate of investor confidence. Peer influence shows a theoretically important dual association, positively related to risk tolerance while negatively related to confidence. A serial mediation pathway running from market sentiments through confidence and risk tolerance to financial goals is supported. Because the design is cross-sectional, the associations are interpreted as structural relationships consistent with the proposed theoretical framework rather than as established causal effects. This study is exploratory and hypothesis-generating in character. The findings reframe financial-inclusion interventions for employed women around confidence-building rather than information provision, with implications for product design, advisory practice, and policy.



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1. Introduction

The economic participation of women has become one of the defining structural shifts of the twenty-first century, and it is increasingly recognised not merely as a matter of social equity but as a driver of sustainable economic growth (United Nations, 2020; Duflo, 2012). In India, the female labour-force participation rate rose from 23.3 per cent in 2017–2018 to 41.7 per cent by 2023–2024, with urban knowledge-economy centres accounting for much of the increase (Ministry of Labour and Employment, 2024). Yet, earning an income is not the same as exercising financial agency. True financial independence requires the capacity to evaluate investment alternatives; accept measured risk; and make informed, independent allocation decisions over time. A persistent gap therefore remains between women's growing economic participation and their active engagement in formal investment markets.

This gap is well documented. Across both international and Indian settings, women display greater caution toward risk, lower equity-market participation, a stronger preference for capital-protecting instruments, and lower self-reported financial confidence than men, even at comparable levels of education and income (Barber & Odean, 2001; Jianakoplos & Bernasek, 1998; Croson & Gneezy, 2009; Bucher-Koenen et al., 2017). These patterns do not reflect differences in cognitive ability. They are adaptive responses to gendered financial socialisation, unequal access to information, the disproportionate domestic and caregiving burden carried by employed women, and the historical design of financial markets (Furreboe & Nyhus, 2022; Buddhapriya, 2009). The classical assumptions of rational, gender-neutral decision-making cannot capture this reality (Deb & Chavali, 2009).

Two limitations characterise the existing literature on women's investment behaviour, particularly in the Indian context. First, most studies treat women as a single, undifferentiated group, obscuring the distinctive position of employed women, who sit at the intersection of professional income, workplace financial exposure, dual-role time pressure, and socio-cultural expectation. Second, the literature is methodologically fragmented: demographic, psychological, financial, and social determinants are typically examined one or two at a time using descriptive or bivariate techniques, rather than within a unified structural framework capable of modelling the mediation and multi-directional mechanisms that link them (Kumar & Goyal, 2015; Dash & Mishra, 2024). As a result, the field can describe that employed women invest differently, but it cannot adequately explain how the determinants of their investment decisions interrelate or which factors are the genuine causal levers.

This study addresses both limitations. It develops and empirically tests an integrated structural model of investment decision-making among employed women, grounded in three complementary theoretical traditions, Behavioural Finance Theory (Kahneman & Tversky, 1979), the Theory of Planned Behaviour (Ajzen, 1991), and the Life-Cycle Hypothesis (Modigliani & Brumberg, 1954), and estimated on a large sample of 951 employed women in Bengaluru, India's leading technology and knowledge-economy hub. Rather than cataloguing isolated associations, this study models the directional pathways through which macroeconomic perception, psychological mediators, and social influence translate into financial-goal-directed investment behaviour.

Three contributions follow. Theoretically, this study integrates three previously separate traditions into a single validated structural model for employed women investors and, in doing so, isolates confidence and self-efficacy as the pivotal psychological mediator and uncovers a dual-pathway mechanism for peer influence that reconciles conflicting prior evidence. Empirically, it provides one of the larger structural equation investigations of this population in an emerging-market setting, with a validated measurement instrument that is directly reusable elsewhere. Practically, it reframes financial-inclusion strategy for employed women around the building of investment confidence rather than the provision of information—a distinction with concrete implications for product design, advisory com-

munication, and policy. The remainder of this paper develops the theoretical framework and hypotheses (Section 2), describes the data and methods (Section 3), reports the results (Section 4), discusses their implications (Section 5), and concludes (Section 6).

2. Theoretical Framework and Hypothesis Development

The conceptual model rests on three theoretical pillars that, taken together, span the psychological, intentional, and life-stage dimensions of investment behaviour. Behavioural Finance Theory, developed through Prospect Theory (Kahneman & Tversky, 1979) and Mental Accounting (Thaler, 1985), explains how loss aversion, reference dependence, and the segregation of financial resources produce systematic departures from the predictions of rational models. For employed women, these tendencies are amplified by lower baseline financial confidence and greater reliance on informal social advice. The Theory of Planned Behaviour (Ajzen, 1991) models intention and action as the joint product of attitudes, subjective norms, and perceived behavioural control, the last of which closely corresponds to financial self-efficacy and provides the mechanism linking social and psychological constructs to investment behaviour. The Life-Cycle Hypothesis (Modigliani & Brumberg, 1954) situates these decisions within a temporal arc shaped by career stage, caregiving obligations, longer female life expectancy, and retirement horizon. The three frameworks operate at complementary levels of analysis rather than as competing accounts. Behavioural Finance Theory specifies the cognitive-affective inputs (risk attitudes, confidence, and loss aversion) that shape the subjective valuation of investment alternatives; the Theory of Planned Behaviour specifies the intentional-volitional structure (attitudes, subjective norms, and perceived behavioural control) through which those inputs are translated into purposive action; and the Life-Cycle Hypothesis specifies the temporal-resource context (age-stage, income trajectory, dependency burden, and retirement horizon) within which the cognitive and intentional processes are deployed. In the present model, life-cycle considerations are operationalised through the financial goals construct, which captures longer-horizon objectives such as retirement provision, education funding, home acquisition, emergency reserves, and wealth accumulation and through the demographic covariates of age, marital status, dependency status, and income, which condition the structural relationships rather than entering them as latent constructs. This stratified integration, applied specifically to employed women investors, is the conceptual core of this study.

2.1. Risk Tolerance and Investment Decision-Making

Risk tolerance, the degree of financial uncertainty an investor is willing to accept in pursuit of returns, is among the most consistently documented proximal determinant of investment behaviour (Grable, 2000; Croson & Gneezy, 2009). Prospect Theory establishes that decision-making under uncertainty is governed primarily by the subjective valuation of risk and potential loss rather than by objective return calculations alone (Kahneman & Tversky, 1979). Where willingness to bear volatility is higher, investors pursue more ambitious and diversified financial goals; where it is lower, they concentrate on capital-preserving instruments. This study operationalises investment decision-making through the financial goals construct, the nature, ambition, and orientation of the goals that direct portfolio choice and hypothesises that risk tolerance is its strongest direct antecedent.

H1. *Risk tolerance positively influences financial-goal-directed investment decision-making among employed women investors.*

2.2. Confidence and Self-Efficacy as the Psychological Gateway

Financial self-efficacy, an investor's belief in her own capacity to evaluate information and make sound investment decisions, is the perceived-behavioural-control component

of the Theory of Planned Behaviour (Ajzen, 1991) and a direct application of Bandura's (1986) self-efficacy theory to the financial domain. A substantial amount of the literature documents a persistent gender confidence gap that depresses women's market participation independently of objective knowledge (Bucher-Koenen et al., 2017; Furreboe & Nyhus, 2022). The present model positions confidence and self-efficacy not as direct determinants of goals but as the mediating channel through which external and social influences are converted into risk-taking willingness. Confidence is therefore expected to drive risk tolerance.

H2. *Confidence and self-efficacy positively influence risk tolerance among employed women investors.*

2.3. Market Sentiments and Economic Conditions

Macroeconomic conditions and prevailing market sentiment are not merely a contextual backdrop; they actively shape investors' psychological capital. Favourable growth expectations, strong equity performance, and manageable inflation enhance investors' confidence in their ability to engage with markets (Charness & Gneezy, 2012; Lusardi, 2012). For time-constrained employed women who monitor markets episodically rather than continuously, the salient effect of the macro-environment is expected to operate through confidence rather than through direct recalibration of risk preferences.

H3. *Market sentiments positively influence confidence and self-efficacy among employed women investors.*

2.4. Economic and Financial Events

Discrete macro-level events, policy changes, technological shifts, market shocks, and geopolitical developments influence investment behaviour through both a psychological pathway and a more direct effect on risk appetite (Lusardi, 2012; Yue et al., 2020). The model therefore allows economic and financial events to influence both confidence and risk tolerance directly.

H4. *Economic and financial events positively influence (a) confidence and self-efficacy, and (b) risk tolerance among employed women investors.*

2.5. The Dual Pathway of Peer Influence

The role of peer networks in investment behaviour is theoretically contested. One stream emphasises social normalisation, in which peer engagement legitimises and encourages risk-taking (Lim et al., 2003); another emphasises dependence, in which heavy reliance on peer guidance substitutes for, and ultimately erodes, the development of independent analytical confidence (Deci & Ryan, 2000; Sivaramakrishnan et al., 2017). Rather than treating these as competing hypotheses, the present model proposes that both operate simultaneously through distinct pathways: peer influence raises risk tolerance directly while suppressing confidence and self-efficacy. This dual-pathway specification is a central theoretical proposition of this study.

H5. *Peer influence (a) positively influences risk tolerance and (b) negatively influences confidence and self-efficacy among employed women investors.*

2.6. The Serial Mediation Mechanism

Integrating the preceding hypotheses yields a serial mechanism: the perceived macro-environment shapes confidence, confidence shapes risk tolerance, and risk tolerance shapes the ambition of financial goals. If confidence is indeed the psychological gateway, the influence of market sentiments on investment decisions should be transmitted indirectly through confidence and risk tolerance rather than operating directly.

H6. *Confidence and self-efficacy, followed by risk tolerance, serially mediate the relationship between market sentiments and financial-goal-directed investment decision-making among employed women investors.*

3. Materials and Methods

3.1. Research Design

This study adopts a quantitative, descriptive-causal design with a cross-sectional time horizon. The deductive approach proceeds from the established theoretical framework to testable hypotheses, which are examined using primary data collected through a structured, self-administered survey. A cross-sectional design is appropriate to the objective of mapping the contemporaneous structure of investment determinants and their interrelationships rather than tracking change over time (Chawla & Sondhi, 2016). Consistent with this objective, this study is positioned as an exploratory, single-sample investigation: it is designed to identify and order candidate structural pathways and to generate the hypotheses that subsequent stages of the research programme, categorical re-estimation of the measurement model, replication in other settings, and longitudinal extension are intended to test confirmatorily.

3.2. Population, Sampling, and Sample Size

The target population comprised employed women residing and working in Bengaluru, Karnataka, who participate, wholly or partly, in personal or household investment decisions. As India's technology and knowledge-economy capital, Bengaluru has one of the highest concentrations of formally educated, professionally employed women in the country and a correspondingly diverse occupational base, making it the most informative single-city setting for the research question. Drawing on Periodic Labour Force Survey estimates (Ministry of Labour and Employment, 2024) and Bruhat Bengaluru Mahanagara Palike (BBMP) workforce projections, the population of formally employed women in Bengaluru is conservatively estimated at above one million individuals. Because no exhaustive single-source register of this population exists, a probability-proportional, multi-frame approach was adopted to approximate a stratified random design. The city's four BBMP administrative zones (North, South, East, and West) served as strata, each representing a meaningfully distinct mix of residential, commercial, and industrial activity. Within each stratum, the operational sampling frame combined three sources: (i) employer-supplied contact lists from organisations in information technology, financial services, healthcare, education, biotechnology, and public administration; (ii) institutional and professional-association referrals (e.g., women's professional networks and alumni registries); and (iii) snowball nominations from initial respondents, capped at two referral generations to limit homophily. Within each composite stratum frame, respondents were selected through systematic random sampling using a randomised start and a fixed sampling interval calibrated to the zone's target quota. Inclusion criteria were (a) currently employed in formal or semi-formal employment in Bengaluru; (b) involvement, at least partially, in personal or household investment decision-making; and (c) age 21 years or above with at least one year of employment experience. Respondents who self-nominated outside the frames or who did not meet all three inclusion criteria were excluded prior to analysis. We acknowledge that a residual element of self-selection is unavoidable in survey-based investor research of this kind and treat this explicitly as a limitation in Section 5.2.

Although the [Krejcie and Morgan \(1970\)](#) formula indicates a minimum of 384 respondents for a population of this size, structural equation modelling with multiple latent constructs requires substantially larger samples for stable estimation ([Hair et al., 2019](#); [Kline, 2016](#)). A target of at least 950 usable responses was therefore set. Of 1250 questionnaires distributed, 971 were returned (a response rate of 77.7 per cent, well above the conventional benchmark for organisational survey research; [Baruch & Holtom, 2008](#)). After screening for excessive missing data and invalid response patterns, 20 cases were removed, yielding a final sample of 951 valid responses.

3.3. Instrument and Measures

Data were collected using a structured questionnaire developed from validated scales in the prior literature and refined through expert content review and a pilot study. Investment-related constructs were measured on five-point Likert scales. Risk tolerance items were adapted from [Grable \(2000\)](#); confidence and self-efficacy items from instruments grounded in [Bandura \(1986\)](#) and [Bucher-Koenen et al. \(2017\)](#); peer influence items from [Lim et al. \(2003\)](#) and [Sivaramakrishnan et al. \(2017\)](#); financial goals items from [Xiao \(1996\)](#); and the economic conditions and economic and financial events items from constructs used by [Lusardi \(2012\)](#) and [Yue et al. \(2020\)](#). The dependent construct, financial-goal-directed investment orientation, was operationalised through the financial goals construct, which captures the nature, ambition, and orientation of the goal-directing portfolio choice. Internal consistency for the constructs entering the structural model was satisfactory to excellent (Cronbach's $\alpha = 0.73\text{--}0.90$), comfortably exceeding the 0.70 threshold ([Nunnally, 1978](#)).

The initial instrument comprised 83 Likert-scale items spanning fifteen theoretically specified constructs, designed to support both the broader determinant analysis reported elsewhere and the structural equation analysis presented in this paper. From this larger pool, the present study uses the six constructs that anchor the structural model—risk tolerance, confidence and self-efficacy, peer influence, financial goals, market sentiments, and economic and financial events—together with their constituent items. Items were selected and retained through a transparent four-stage filter. First, a panel comprising academic researchers in behavioural finance, senior practitioners in retail investment, and women financial professionals reviewed every item for clarity, conceptual coverage, and cultural appropriateness; items judged ambiguous, doubled, or culturally mistranslated were reworded or dropped. Second, a two-stage pilot study ($n = 100$ for qualitative feedback; $n = 71$ for psychometric estimation) was used to refine wording and assess construct-level Cronbach's α ; only items contributing to $\alpha \geq 0.70$ at the construct level were retained. Third, at the EFA stage on the main sample ($n = 951$), items were retained only if they recorded a primary-factor loading of at least 0.40 and a cross-loading on any second factor below 0.40 ([Hair et al., 2019](#)), yielding 26 items across six factors out of the larger pool. Fourth, two items that re-emerged with non-trivial cross-loadings during CFA model identification—one market sentiments item ("Stock market performance strongly influences my investment decisions") that loaded jointly on confidence/self-efficacy and peer influence, and one economic conditions item that loaded jointly on confidence/self-efficacy and market sentiments—were excluded from the measurement model to protect discriminant validity. The CFA measurement model was therefore estimated on 24 manifest indicators, fully consistent with the EFA retention rule and reported as such in Section 4.4. The complete list of the 24 retained items, organised by construct, is provided in Appendix A. The 26-item EFA structure and the 24-item CFA structure are therefore not in conflict: the difference reflects two items dropped at the CFA stage on substantive discriminant-validity grounds, with the rationale stated above.

3.4. Analytical Strategy

Analysis proceeded in stages. Distributional properties were assessed using the Kolmogorov–Smirnov and Shapiro–Wilk tests. The latent structure was identified through exploratory factor analysis (EFA) with varimax rotation, following confirmation of sampling adequacy via the Kaiser–Meyer–Olkin (KMO) measure and Bartlett’s test of sphericity. The measurement model was then validated through confirmatory factor analysis (CFA), assessing convergent validity (standardised loadings, average variance extracted [AVE], and McDonald’s omega composite reliability), discriminant validity (Fornell–Larcker criterion and heterotrait–monotrait [HTMT] ratio), and model fit. Finally, four competing structural specifications (SEM1–SEM4) were estimated by maximum likelihood (ML), which yields consistent estimates under moderate non-normality in large samples (Kline, 2016). Models were compared using the chi-square difference test, the comparative fit index (CFI), the root mean square error of approximation (RMSEA), the standardised root mean square residual (SRMR), and the corrected Akaike Information Criterion (AICc). Indirect and serial mediation effects were estimated by bias-corrected bootstrapping with 5000 resamples and 95 per cent confidence intervals (Preacher & Hayes, 2008). All analyses were conducted using IBM SPSS Statistics 27 for descriptive, normality, reliability, and exploratory factor analysis, and JMP 17 (SAS Institute) for confirmatory factor analysis and structural equation modelling, including model comparison and bootstrap mediation. Standardised coefficients, fit indices, and bootstrap confidence intervals were extracted from the JMP estimation output; full syntax and output files supporting the reported analyses are available from the corresponding author on reasonable request. Common method variance (CMV) was managed both procedurally and statistically (Podsakoff et al., 2003). Procedurally, the questionnaire (i) physically separated predictor and outcome items into structurally distinct sections; (ii) varied scale anchors and item phrasing to disrupt response sets; (iii) provided explicit anonymity and confidentiality assurances to reduce social desirability and evaluation apprehension; and (iv) used clear, neutrally worded items vetted by the expert panel. The statistical CMV assessment, including Harman’s single-factor test, is reported in Section 4.4.

4. Results

4.1. Sample Profile and Descriptive Statistics

The sample was predominantly aged 35–44 (33.3 per cent), postgraduate-qualified (40.5 per cent), and in full-time employment (86.4 per cent). The largest income band was ₹50,000–74,999 per month (31.8 per cent); most respondents were married (69.6 per cent) and reported moderate rather than low risk tolerance (74.3 per cent). All fifteen originally measured construct composites recorded means above 3.00 on the five-point scale, with financial goals the highest-endorsed ($M = 3.82$, $SD = 0.65$) and cultural and societal norms the lowest ($M = 3.33$, $SD = 0.74$). All composites were mildly left-skewed.

4.2. Normality and Suitability for Factor Analysis

Both the Kolmogorov–Smirnov and Shapiro–Wilk tests rejected normality for every construct (all $p < 0.001$), justifying non-parametric treatment of bivariate associations and ML estimation with large-sample robustness for the structural model. Sampling adequacy for factor analysis was confirmed (KMO = 0.852, “meritorious”; Kaiser, 1974), and Bartlett’s test of sphericity was significant ($\chi^2 = 16,550.81$, $df = 325$, $p < 0.001$), establishing that the correlation matrix was suitable for factor extraction.

4.3. Exploratory Factor Analysis

EFA extracted a clean six-factor structure on the eigenvalue-greater-than-one criterion, accounting for 60.1 per cent of total variance across 26 retained items—an adequate level for behavioural research (Hair et al., 2019). Items were retained at the EFA stage only if they recorded (a) a primary-factor loading of at least 0.40 and (b) a cross-loading on any second factor below 0.40, in line with the conservative recommendation of Hair et al. (2019). Of the 83 items in the broader instrument, 26 met both criteria and clustered on the six factors anchoring the structural model; the remaining items either belonged to constructs not used in the structural model (for example, family responsibilities, work–life balance, cultural and societal norms, and investment constraints), failed the loading thresholds, or did not contribute to internal consistency at the construct level. Confidence and self-efficacy emerged as the dominant latent dimension, explaining 16.0 per cent of variance, foreshadowing its mediating role in the structural model. The six factors and their key properties are reported in Table 1. The full rotated factor loading matrix for the retained items, including cross-loadings on every non-primary factor, is provided in Appendix B; the matrix also displays the loading patterns of the two items subsequently excluded at the CFA stage, making the discriminant-validity rationale for their exclusion directly inspectable.

Table 1. Exploratory factor analysis: extracted factors, variance explained, and loading ranges (n = 951).

Factor	Construct	Eigenvalue	% Variance	Cumulative %	Loading Range
1	Confidence and self-efficacy	4.156	15.99	15.99	0.56–0.83
2	Peer influence	2.960	11.38	27.37	0.49–0.70
3	Financial goals	2.590	9.96	37.33	0.50–0.80
4	Economic and financial events	2.533	9.74	47.07	0.43–0.66
5	Risk tolerance	1.783	6.86	53.93	0.60–0.73
6	Market sentiments	1.604	6.17	60.10	0.54–0.88

Note. Extraction by principal axis factoring with varimax rotation. Loadings reported are primary-factor loadings ≥ 0.40 . Source: primary data.

4.4. Common Method Variance Assessment

Because predictor and outcome variables in this study were measured through a single self-administered questionnaire, the potential for common method variance (CMV) to inflate observed relationships was assessed both procedurally (Section 3.4) and statistically. Harman’s single-factor test was conducted on the 24 retained items by submitting them to an unrotated principal-axis extraction with the number of factors constrained to one (Podsakoff et al., 2003). The single forced factor accounted for 15.99 per cent of the total variance, far below the 50 per cent threshold conventionally taken as indicative of a substantial CMV problem. As a complementary check, the EFA reported in Section 4.3 extracted six factors, with the dominant factor explaining 15.99 per cent of variance and the second factor an additional 11.38 per cent, again inconsistent with the pattern expected when a single method factor dominates the response variance. We further note that the constructs were physically separated in the questionnaire, scale anchors were varied, and respondent anonymity was assured (Section 3.4). On the combined procedural and statistical evidence, CMV is unlikely to have meaningfully distorted the structural estimates reported below. We nevertheless acknowledge that self-report instruments cannot fully eliminate the possibility of common-source bias and treat this as a limitation in Section 5.2.

4.5. Confirmatory Factor Analysis: Measurement Model

The six-factor measurement model was estimated on 24 manifest indicators—that is, the 26 items retained at EFA minus the two items dropped at the CFA stage on substantive discriminant-validity grounds, as set out in Section 3.3. Composite reliability was

satisfactory to strong across all constructs (McDonald's $\omega = 0.75\text{--}0.90$). Average variance extracted exceeded 0.50 for four constructs; risk tolerance (AVE = 0.50, at the threshold) and peer influence (AVE = 0.47, marginally below it) satisfied the composite-reliability-greater-than-AVE condition, a commonly accepted outcome for multi-dimensional behavioural constructs (Table 2). Standardised factor loadings for all 24 indicators are reported in Table 3 and ranged from 0.49 to 0.88, with every loading statistically significant ($p < 0.001$) and all but one exceeding the 0.50 convergent-validity benchmark (Hair et al., 2019). The single sub-0.50 loading (Peer Influence: PI4 = 0.49) was retained because the construct otherwise satisfied composite reliability ($\omega = 0.82$) and item-content review judged it substantively essential for coverage of the peer-engagement dimension. The fit profile of the CFA measurement model was mixed: SRMR = 0.080 met the conventional 0.08 threshold; CFI = 0.744 fell below the conventional 0.90 benchmark; and RMSEA = 0.128 exceeded the conventional 0.08 benchmark (Hu & Bentler, 1999). We do not characterise this profile as a strong validation of the model. Rather, we retain the measurement model for substantive interpretation on five explicit grounds, and report the under-fit transparently as a limitation in Section 5.2. First, the model is theoretically pre-specified rather than data-driven, and the EFA structure recovered the six hypothesised factors cleanly. Second, the chi-square statistic is mechanically sensitive to large samples and rejects even well-specified models when n approaches 1000 (Bentler & Bonett, 1980; Marsh et al., 2004); the observed χ^2 is therefore consistent with adequate structural representation. Third, every construct satisfies the CR > AVE condition with composite reliability of 0.75 or higher. Fourth, discriminant validity is supported by both the Fornell–Larcker and HTMT criteria (Tables 4 and 5). Fifth, SRMR—the index least sensitive to model complexity and sample size—meets the conventional cut-off, indicating that the average standardised residual is acceptable. Taken together, these results support the model as an adequate, parsimonious approximation of the six-factor structure for substantive interpretation, while the CFI and RMSEA values are explicitly acknowledged as below conventional thresholds and warrant cautious interpretation of the structural estimates.

Table 2. Composite reliability and convergent validity of the measurement model ($n = 951$).

Latent Construct	McDonald's ω	AVE	CR > AVE	Assessment
Confidence and self-efficacy	0.90	0.60	Yes	Strong
Market sentiments	0.88	0.79	Yes	Strong
Economic and financial events	0.84	0.55	Yes	Adequate
Financial goals	0.81	0.53	Yes	Adequate
Peer influence	0.82	0.47	Yes	Marginal–acceptable
Risk tolerance	0.75	0.50	Yes	Marginal–acceptable

Note. ω = McDonald's omega composite reliability; AVE = average variance extracted. Source: CFA estimation output.

Table 3. Standardised factor loadings of CFA measurement model indicators ($n = 951$).

Construct	Indicator (Abbreviated)	λ	p
CSE	I trust my judgment when investing	0.83	<0.001
CSE	I can assess and manage investment risks	0.79	<0.001
CSE	I have confidence in making sound investment decisions	0.76	<0.001
CSE	I prefer decisions based on my own research and analysis	0.67	<0.001
CSE	I can conduct thorough investment research	0.66	<0.001
CSE	I have solid financial knowledge	0.56	<0.001
PI	I engage in discussions with peers	0.70	<0.001

Table 3. Cont.

Construct	Indicator (Abbreviated)	λ	p
PI	I am open to group investment decisions	0.68	<0.001
PI	Learning from others' experience is beneficial	0.66	<0.001
PI	I decide based on own analysis regardless of peers	0.49	<0.001
PI	I consider recommendations from friends or colleagues	0.61	<0.001
FG	Building wealth and financial security	0.80	<0.001
FG	Emergency fund is crucial	0.79	<0.001
FG	Retirement planning is a priority	0.62	<0.001
FG	Buying a home is a major goal	0.50	<0.001
EFE	Technological advancements shape investment	0.66	<0.001
EFE	I monitor my investment portfolio	0.62	<0.001
EFE	Natural disasters impact markets	0.51	<0.001
EFE	Political and policy changes affect choices	0.43	<0.001
RT	I can tolerate market volatility	0.73	<0.001
RT	Long-term horizon withstands fluctuations	0.67	<0.001
RT	Willing to take higher risk for higher returns	0.60	<0.001
MS	I consider investor sentiment	0.88	<0.001
MS	Economic growth outlook influences me	0.54	<0.001

Note. CSE = Confidence and Self-Efficacy; PI = Peer Influence; FG = Financial Goals; EFE = Economic and Financial Events; RT = Risk Tolerance; MS = Market Sentiments. λ = standardised factor loading. Full item wording is provided in Appendix A. Source: CFA estimation output.

Table 4. Discriminant validity: Fornell–Larcker matrix (n = 951).

Construct	CSE	MS	EFE	FG	PI	RT
CSE	0.78	—	—	—	—	—
MS	0.41	0.89	—	—	—	—
EFE	0.40	0.39	0.74	—	—	—
FG	0.30	0.28	0.36	0.73	—	—
PI	0.25	0.21	0.38	0.32	0.68	—
RT	0.34	0.23	0.29	0.45	0.27	0.71

Note. Diagonal values in bold are the square roots of AVE; off-diagonal values are inter-construct correlations. The square root of AVE exceeds the corresponding inter-construct correlations in every row and column, satisfying the Fornell–Larcker discriminant validity criterion. Source: CFA estimation output.

Table 5. Discriminant validity: Heterotrait–monotrait (HTMT) ratios (n = 951).

Construct	CSE	MS	EFE	FG	PI
MS	0.47	—	—	—	—
EFE	0.49	0.45	—	—	—
FG	0.36	0.34	0.44	—	—
PI	0.30	0.26	0.46	0.39	—
RT	0.41	0.27	0.35	0.55	0.34

Note. All HTMT ratios fall below the conservative 0.85 threshold (Henseler et al., 2015) and the more liberal 0.90 threshold, supporting discriminant validity for every pair of constructs. Source: CFA inter-construct correlation matrix.

Two further methodological considerations bear directly on how these fit values should be read. First, all indicators are five-point Likert items estimated here by maximum likelihood, which treats ordinal responses as continuous. Simulation evidence shows that, under these conditions, CFI is systematically deflated and RMSEA systematically inflated relative to estimators designed for ordered-categorical data such as diagonally weighted least squares (WLSMV) (Rhemtulla et al., 2012; Xia & Yang, 2019). Part of the apparent misfit is therefore attributable to the estimation method rather than to the hypothesised factor structure alone. Re-estimation of the measurement and structural models with a categorical estimator is identified as a priority robustness analysis for the next stage of this research programme. Second, fixed universal cut-offs ($CFI \geq 0.90$ or 0.95 ; $RMSEA \leq 0.08$) derive from simulations under specific conditions and do not generalise to all model types, sizes, and data characteristics; recent methodological work recommends interpreting fit relative to the properties of the model at hand rather than against a single fixed benchmark (Marsh et al., 2004; McNeish & Wolf, 2023). Neither consideration converts the present fit profile into a good one, and we do not claim that it does. They do, however, justify treating the estimated loadings and paths as interpretable descriptive associations supported by the clean EFA structure, the reliability and discriminant-validity evidence, and the bootstrap confidence intervals for the mediation effects while withholding any claim that the model is a well-fitting representation of the population covariance structure.

The composition of the measurement model also warrants explicit comment. Two constructs are measured with few indicators: market sentiments with two items and risk tolerance with three. Two-indicator factors are identified within a multi-factor model provided the factor covaries with the other latent variables, a condition satisfied here (Kline, 2016), and the market sentiments construct records the strongest convergent evidence in the model ($\omega = 0.88$; $AVE = 0.79$). The trade-off is breadth: a two-indicator factor samples a narrower slice of the construct domain, so the market sentiments results should be read as capturing sentiment awareness specifically rather than the full space of sentiment-related cognition. Similarly, the single loading below 0.50 ($PI4 = 0.49$) was retained because deleting it would narrow the peer influence construct to purely receptive behaviours and remove its only self-anchored item, while construct-level reliability ($\omega = 0.82$) remains satisfactory with the item included. The consequence—a peer influence AVE marginally below 0.50—is reported transparently in Table 2 and revisited as a measurement limitation in Section 5.2.

4.6. Structural Model Selection and Estimation

Four competing structural specifications were estimated. SEM2—which added direct paths from peer influence, and economic and financial events to risk tolerance—achieved the best balance of fit and parsimony, recording the lowest AICc (61,032.29), the highest CFI (0.729), and the lowest RMSEA (0.130) and SRMR (0.081). The chi-square difference test confirmed that SEM2 was statistically superior to the more restricted SEM1 ($\Delta\chi^2 = 71.52$, $\Delta df = 2$, $p < 0.001$) and dominated SEM3 and SEM4 (all $p < 0.001$). SEM2 was therefore retained for interpretation and hypothesis testing. The four specifications, in order of increasing constraint, were SEM2, the retained partial mediation model in which peer influence, and economic and financial events relate to risk tolerance both directly and through confidence (82 free parameters); SEM1, the fully mediated serial baseline in which the external constructs reach risk tolerance only through confidence (80 parameters); SEM4, an alternative arrangement of equal complexity to SEM1 that reorders the mediating sequence (80 parameters); and SEM3, the most restricted specification (78 parameters). The complete comparative fit statistics for all four specifications are reported in Table 6. For full transparency, we note that the structural model fit is marginally lower than the measurement model fit, which is expected because structural specifications impose additional directional

constraints beyond the unconstrained covariances of the measurement model. The fit indices for the retained SEM2 (CFI = 0.729; RMSEA = 0.130) fall below the conventional 0.90/0.08 thresholds, and the same caveats articulated for the measurement model apply here: the structural estimates should be interpreted as the most defensible relative ordering of pathways among the specifications considered, not as established population parameters. The retained model is reported visually in Figure 1, and the standardised path estimates are reported in Table 7.

Table 6. Comparative fit statistics for the four alternative structural specifications (n = 951).

Model	Par.	−2LL	AICc	χ^2	df	CFI	RMSEA	SRMR
SEM1 (fully mediated baseline)	80	60,924.12	61,099.02	4226.77	244	0.724	0.131	0.082
SEM2 (retained partial mediation)	82	60,852.60	61,032.29	4155.25	242	0.729	0.130	0.081
SEM3 (restricted)	78	61,297.43	61,467.56	4600.08	246	0.698	0.136	0.085
SEM4 (alternative ordering)	80	61,254.51	61,429.41	4557.16	244	0.701	0.136	0.084

Note. Par. = free parameters; −2LL = −2 log-likelihood; AICc = corrected Akaike Information Criterion. All models estimated by maximum likelihood on the same 24-indicator measurement model. Chi-square difference tests: SEM2 vs. SEM1, $\Delta\chi^2 = 71.52$, $\Delta df = 2$, $p < 0.001$; SEM2 superior to SEM3 and SEM4 at $p < 0.001$. Source: SEM estimation output.

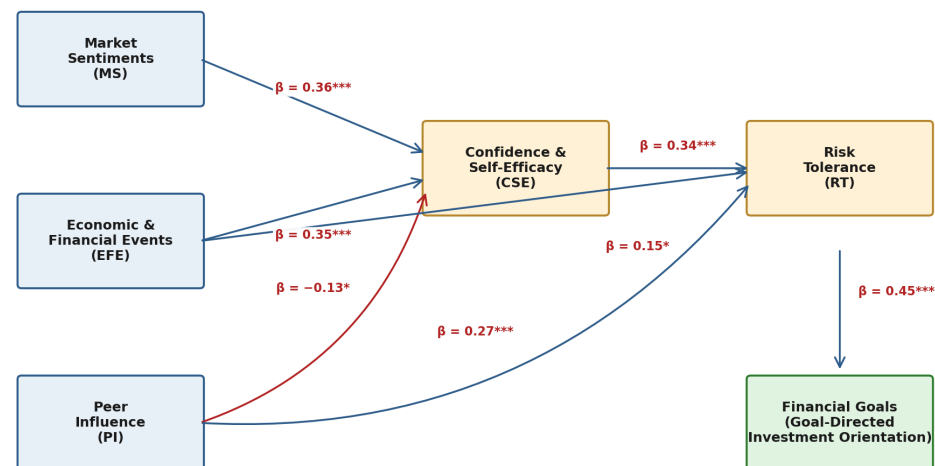


Figure 1. Structural equation model (SEM2): standardised path coefficients (n = 951). Note. *** $p < 0.001$, * $p < 0.05$. Negative path coefficient shown in red. CFI = 0.729; RMSEA = 0.130; SRMR = 0.081; AICc = 61,032.29. Investment decision-making is operationalised through the financial goals construct.

Table 7. Standardised structural path estimates for the retained model (SEM2; n = 951).

Structural Path	β	p	Hypothesis	Decision
Risk tolerance → Financial goals	0.45	<0.001	H1	Supported
Confidence/self-efficacy → Risk tolerance	0.34	<0.001	H2	Supported
Market sentiments → Confidence/self-efficacy	0.36	<0.001	H3	Supported
Economic and financial events → Confidence	0.35	<0.001	H4a	Supported
Economic and financial events → Risk tolerance	0.15	0.024	H4b	Supported
Peer influence → Risk tolerance	0.27	<0.001	H5a	Supported
Peer influence → Confidence/self-efficacy	−0.13	0.020	H5b	Supported

Note. β = standardised regression coefficient. Investment decision-making is operationalised through the financial goals construct. Source: SEM2 estimation output.

Table 6 also clarifies why no structural rearrangement of these six constructs can, by itself, bring the global fit indices to conventional thresholds. Every structural specification is nested within the CFA measurement model, whose freely correlated factors place an

upper bound on attainable fit; with the measurement model at CFI = 0.744, the best possible structural model cannot exceed that ceiling, and the retained SEM2 (CFI = 0.729) already recovers all but 0.015 of it. The remaining global misfit is therefore located almost entirely at the measurement level, where Section 4.5 attributes a material share of it to the application of a continuous-data estimator to five-point ordinal indicators. Two further remedies were considered and deliberately not pursued: freeing residual covariances or deleting items on the basis of modification indices would improve the indices only by capitalising on chance characteristics of this sample (MacCallum et al., 1992), and re-estimation with an ordered-categorical estimator (WLSMV), identified in Sections 4.5 and 5.2 as the appropriate remedy, requires a new estimation cycle on the raw data and is committed to as the immediate next step of this research programme. Within these constraints, Table 6 documents that the structural conclusions rest on the best-fitting of the theoretically defensible alternatives rather than on a single untested specification.

The estimated structure is coherent and theoretically interpretable. Market sentiments show the strongest external association with confidence ($\beta = 0.36, p < 0.001$), with economic and financial events contributing comparably ($\beta = 0.35, p < 0.001$). Confidence in turn is positively associated with risk tolerance ($\beta = 0.34, p < 0.001$), which is the strongest single direct correlate of financial-goal-directed investment orientation ($\beta = 0.45, p < 0.001$). Peer influence displays the hypothesised dual pattern: a positive direct association with risk tolerance ($\beta = 0.27, p < 0.001$) alongside a significant negative association with confidence ($\beta = -0.13, p = 0.020$). Hypotheses H1 through H5 are therefore supported.

4.7. Serial Mediation

Bias-corrected bootstrapping confirmed the serial pathway from market sentiments through confidence and risk tolerance. The indirect effect of market sentiments on risk tolerance via confidence was significant ($\beta = 0.12, p < 0.001$), and the full serial effect on financial goals was significant ($\beta = 0.06, p < 0.001$), with confidence intervals excluding zero. Confidence and risk tolerance thus jointly transmit the influence of the perceived macro-environment onto investment decisions, supporting H6 and confirming confidence and self-efficacy as the psychological gateway of the model.

4.8. Supporting Evidence on Enabling Conditions

Two further results contextualise the structural findings. First, among demographic characteristics, gross monthly income recorded by far the strongest association with the full set of investment constructs ($\chi^2 = 941.19, p < 0.001$), identifying income as the foundational material enabler of investment engagement even though it operates upstream of the structural pathways rather than within them. Second, income was significantly associated with risk tolerance level ($\chi^2 = 12.67, df = 4, p = 0.013$): the share of respondents reporting low risk tolerance fell from 32.5 per cent in the lowest-income band to 16.2 per cent in the highest, consistent with the interpretation that financial slack enables the moderate risk-taking that the structural model identifies as the proximal driver of investment goals.

5. Discussion

The model offers an integrated account of how employed women arrive at investment decisions, and several findings carry implications that extend beyond the immediate setting. Four points warrant emphasis.

Risk tolerance as the proximal gateway. That risk tolerance is the strongest direct correlate of financial-goal ambition ($\beta = 0.45$) is consistent with, in a structural framework and for a population that is not the usual subject of such modelling, the central insight of Prospect Theory: decisions under uncertainty turn on the subjective valuation of risk and

loss (Kahneman & Tversky, 1979). It also offers a candidate mechanism for the documented gender gap in market participation—women’s lower propensity for risk is statistically associated with, and may therefore be one proximal route to, the gap (Barber & Odean, 2001). With 74.3 per cent of the sample reporting moderate rather than low risk tolerance, the population is better characterised as deliberately measured than as risk-averse, a distinction with direct product-design consequences.

Confidence as the psychological gateway. The finding that confidence and self-efficacy is both the dominant latent factor and the strongest structural mediator in the estimated paths ($\beta = 0.34$) is the study’s most consequential structural pattern. Within the proposed model, external conditions and social influence are not associated with risk-taking directly; their association operates indirectly via the investor’s belief in her own competence. This pattern is consistent with Bandura’s (1986) self-efficacy theory applied to the investment domain and provides correlational support for the perceived-behavioural-control proposition of the Theory of Planned Behaviour (Ajzen, 1991). If the structural pattern reflects an underlying causal mechanism—a hypothesis that would require longitudinal or experimental evidence to establish—the practical implication is that interventions which supply more product information without building experiential confidence would be unlikely to change behaviour.

The macro-environment as a psychological force. Market sentiments show the strongest external association with confidence ($\beta = 0.36$), and their association with investment decisions is consistent with a pattern of transmission through the serial confidence–risk-tolerance pathway. This pattern suggests that, for time-constrained employed women, the macro-environment matters less through continuous portfolio recalibration than through its association with psychological readiness to engage—consistent with evidence that economic sentiment relates to investor confidence and not merely investable surplus (Charness & Gneezy, 2012; Lusardi, 2012).

The dual face of peer influence. The simultaneous positive association of peer influence with risk tolerance ($\beta = 0.27$) and negative association with confidence ($\beta = -0.13$) helps reconcile a long-standing tension in the literature. The same social network that normalises and encourages risk-taking can, when relied upon as a substitute for independent judgement, be associated with reduced intrinsic financial confidence (Lim et al., 2003; Deci & Ryan, 2000). Several non-mutually-exclusive alternative mechanisms are consistent with this dual-association pattern, and the data here cannot adjudicate between them. First, a social comparison mechanism (Festinger, 1954; Bursztyn et al., 2014) would predict that observing peers’ investment activity raises an individual’s subjective benchmark for acceptable risk while simultaneously eroding her relative self-assessment when peers appear more competent or active, producing precisely the dual sign observed here. Second, an information-asymmetry or advice-substitution mechanism (Bucher-Koenen et al., 2017; Sivaramakrishnan et al., 2017) would predict that women who rely on peers as the primary information source acquire risk-tolerant attitudes vicariously, while delegating analytical effort weakens the experiential basis for self-efficacy. Third, a normalisation–dependency duality grounded in self-determination theory (Deci & Ryan, 2000) would predict that peer encouragement supports risk-taking through autonomous internalisation of investment norms, while heavy reliance on peer guidance undermines competence development. Although the present design cannot separate these mechanisms, they generate divergent and testable predictions that future research can exploit. The social comparison account predicts that the confidence-suppression pathway should be strongest among women whose reference peers are perceived as more competent or more active investors and should vary with individual differences in comparison orientation (Gibbons & Buunk, 1999). The advice-substitution account predicts that suppression should concentrate among women

whose primary information source is their peer network rather than independent research or professional advice and should attenuate as financial literacy rises. The normalisation-dependency account predicts that the positive risk-tolerance pathway should be strongest where workplace or family peer norms favour market participation, independent of any confidence effect. Measuring comparison orientation, classifying primary information sources, and separating descriptive from injunctive peer norms would allow these accounts to be adjudicated directly, a design we regard as the highest-priority follow-up to this study, given that the dual pathway is its most novel structural finding. Peer influence is therefore neither straightforwardly beneficial nor harmful; its sign depends on the outcome considered. This nuance has been obscured in studies that model peer influence as a single undirected effect, and it has clear design implications for peer-based financial education programmes, which should be structured to capture the social encouragement benefit while channelling participants toward analytical competence rather than dependence.

Together, these findings reposition the financial inclusion strategy for employed women. The supporting evidence that income is the dominant enabling condition ($\chi^2 = 941.19$) confirms that material capacity remains foundational, but the structural model shows that, conditional on access, the active levers are psychological. Wage equity and income growth expand the pool of potential participants, while confidence-building converts potential into action.

5.1. Implications for Practice and Policy

The implications below should be read as working hypotheses conditional on the associational evidence of this study; they indicate where interventions are most plausibly targeted, not effects whose magnitudes have been causally established. For financial institutions and advisers, the results are consistent with the case for confidence-centred rather than product-centred engagement: scenario-based practice, relatable role models drawn from women's own occupational contexts, and graduated portfolio-building that generates positive experiential reinforcement. Because the modal investor is moderate rather than low in risk tolerance, there is a clear opportunity for instruments calibrated to moderate-risk profiles, systematic investment plans with adjustable exposure, capital-protection products with partial equity participation, and hybrid structures, communicated through plain-language, scenario-based risk illustration rather than statistical volatility measures. For employers, professionally moderated workplace investment communities can harness the positive peer pathway while mitigating the confidence-suppression effect. For policymakers and regulators, the evidence is directionally consistent with a shift from generic financial-literacy campaigns toward income-sensitive, confidence-building, and norm-aware programme designs, and it reinforces the standing case for wage equity and occupational mobility as instruments of financial inclusion; pilot evaluation with experimental or longitudinal designs should precede any large-scale reallocation of programme resources on the basis of these associations.

5.2. Limitations and Future Research

Several limitations materially qualify the findings, and the language throughout the paper has been chosen to reflect them. First, the cross-sectional, observational design rules out direct causal inference. The structural estimates describe directional associations consistent with the theoretical framework but do not establish that one construct produces change in another. Temporal precedence, exogenous variation, and counterfactual comparison are absent, and the standard threats, reverse causation, simultaneity, and unobserved third variables apply to every estimated path. Causal language has therefore been replaced with associational language throughout (e.g., "is associated with" rather than "drives" and "is

consistent with transmission via” rather than “is transmitted through”), and the practical implication arguments in Section 5.1 should be read as conditional on the structural pattern reflecting an underlying causal mechanism, a hypothesis that longitudinal panels, natural experiments, or randomised field trials would be required to test. Second, the measurement model achieved CFI = 0.744 and RMSEA = 0.128, both below conventional benchmarks (Hu & Bentler, 1999); SRMR = 0.080 met the threshold, every construct satisfied composite reliability of 0.75 or higher, and discriminant validity held under both the Fornell–Larcker and HTMT criteria, but the sub-threshold CFI and RMSEA values warrant explicit acknowledgement. Refined instruments with fewer cross-loading items, alternative scaling approaches, or partial-least-squares estimation may produce stronger fit on the same constructs; in particular, because all indicators are five-point ordinal items estimated by maximum likelihood, re-estimation with an ordered-categorical estimator such as WLSMV is the immediate robustness priority (Rhemtulla et al., 2012; Xia & Yang, 2019). Relatedly, two constructs carry few indicators (market sentiments: two; risk tolerance: three) and one peer-influence loading falls below 0.50, so the corresponding constructs sample their domains narrowly and their estimates should be generalised with corresponding caution. The rotated EFA loading matrix, including cross-loadings for the retained items, is reported in Appendix B; the complete 26-item matrix from the source analysis is available from the corresponding author. Third, the single-city setting, chosen for analytical depth and population homogeneity, bounds external validity to a metropolitan, technology-oriented, comparatively financially literate context. Replication across other Indian cities (including Tier 2 and Tier 3 urban centres), other emerging markets, and rural settings is needed before the dual peer-influence pattern and the serial mediation can be claimed as features of a broader population of employed women investors. Fourth, all measures are self-reported through a single questionnaire and therefore susceptible to social-desirability bias, recall bias for retrospective items, and common-source bias. Procedural remedies (Section 3.4) and Harman’s test (Section 4.4) suggest that CMV is unlikely to have meaningfully distorted the estimates but cannot rule it out altogether. Fifth, the dependent construct is operationalised as financial-goal-directed investment orientation rather than realised portfolio behaviour. Reported goals capture intentions and orientation but not asset allocation, product selection, transaction frequency, or realised returns. Linking the present structural framework to transaction-level or holdings data is a valuable next step. Sixth, the operational sampling frame combined employer lists, institutional referrals, and capped snowball nominations within BBMP strata; while systematic random selection was applied within frames, a residual element of self-selection is unavoidable and respondents with stronger digital connectivity may be over-represented. Seventh, although our integrated framework draws on Behavioural Finance Theory, the Theory of Planned Behaviour, and the Life-Cycle Hypothesis, life-cycle considerations are captured indirectly through the financial goals construct and demographic covariates rather than through age-stage interactions in the structural model itself. A model that explicitly estimates age-cohort or life-stage moderation effects would more directly test the Life-Cycle Hypothesis component and is recommended for future work. Taken together, these limitations locate the present study at the exploratory, first stage of a planned research programme. Its estimates are offered as the best-supported ordering of candidate pathways from a single sample, and the stages outlined above, ordered-categorical re-estimation of the measurement model with methodological consultation, replication across other cities and settings, and longitudinal extension constitute the confirmatory sequel against which the present findings should ultimately be judged.

6. Conclusions

This study set out to move beyond fragmented, single-determinant accounts of women's investment behaviour by developing and testing an integrated structural model of financial-goal-directed investment orientation among employed women in urban India. Estimated on 951 respondents and selected from competing specifications, the model indicates that risk tolerance is the strongest correlate of financial-goal-directed investment, that confidence and self-efficacy operates as a structural mediator linking macroeconomic perception and social influence to risk-taking, and that market sentiments are the strongest external correlate of confidence. The dual-pathway association for peer influence—positively related to risk tolerance while negatively related to confidence—helps reconcile conflicting prior evidence, and the supported serial mediation from market sentiments through confidence and risk tolerance to financial goals identifies a candidate mechanism through which external conditions are associated with investment behaviour. Because the design is cross-sectional, all of these findings should be read as structural associations consistent with the proposed framework rather than as established causal effects, and the limitations set out in Section 5.2—particularly the cross-sectional design, single-city setting, self-report measurement, and below-threshold CFI and RMSEA values—qualify the strength of any practical or policy claim that can be made from this evidence alone. The central tentative message for theory and practice alike is that, conditional on income access, the binding constraint on employed women's investment engagement appears to be psychological rather than informational. If subsequent longitudinal and experimental evidence corroborates this pattern, interventions, products, and policies built around the building of investment confidence are likely to be more effective than those built around the provision of information alone. Until such corroborating evidence is available, the model presented here is best understood as a theoretically grounded, empirically disciplined map of where those interventions are most plausibly aimed, a hypothesis-generating contribution rather than a settled causal account.

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Institutional Review Board Statement: This study was conducted in accordance with the ethical principles of the Declaration of Helsinki. Ethical review and approval were waived for this study because it was a non-interventional, questionnaire-based survey of adult volunteers in which participation was voluntary; informed consent was obtained prior to participation; all responses were anonymised at the point of collection; and no identifiable personal data, biomedical information, or sensitive health information were collected.

Informed Consent Statement: Informed consent was obtained from all respondents involved in this study, and participation was voluntary and anonymous.

Data Availability Statement: The data presented in this study are available from the corresponding author upon reasonable request. The data are not publicly available due to participant privacy and ethical restrictions.

Conflicts of Interest: The authors declare no conflicts of interest.

Appendix A. Retained CFA Measurement Items (24 Indicators Across Six Constructs)

All items were measured on a five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). Items were retained through a four-stage filter described in Section 3.3.

Confidence and Self-Efficacy (CSE)—6 items

CSE1. I believe I have a solid foundation of financial knowledge to make informed investment decisions.

CSE2. I have confidence in my ability to make sound investment decisions.

CSE3. I trust my judgment and instincts when it comes to making investment decisions.

CSE4. I believe I have the capacity to assess and manage investment risks effectively.

CSE5. I have confidence in my ability to conduct thorough research and analysis of potential investments.

CSE6. I prefer making investment decisions on my own, based on my own analysis and research.

Peer Influence (PI)—5 items

PI1. I consider recommendations from friends or colleagues when making investment decisions.

PI2. I engage in discussions and share investment experiences with peers.

PI3. I believe that learning from others' investment experiences is beneficial.

PI4. I am open to participating in group investment decisions.

PI5. I make investment decisions based on my own analysis, regardless of peer choices.

Financial Goals (FG)—4 items

FG1. Retirement planning is a priority, and I invest with long-term financial security in mind.

FG2. Building wealth and financial security is a top priority in my investment strategy.

FG3. Having an emergency fund is crucial for me, and I prioritize saving for unexpected expenses.

FG4. Buying a home is a major financial goal that influences my investment choices.

Economic and Financial Events (EFE)—4 items

EFE1. I agree that political and policy changes affect my investment choices.

EFE2. I consider natural disasters and their impact on markets when making investment decisions.

EFE3. I consider technological advancements shaping investment opportunities when making investment decisions.

EFE4. I actively review and monitor my investment portfolio to ensure it meets my objectives.

Risk Tolerance (RT)—3 items

RT1. I am willing to take on higher financial risks in pursuit of higher potential returns.

RT2. I strongly agree that I can tolerate market volatility.

RT3. I have a long-term investment horizon and can withstand short-term market fluctuations.

Market Sentiments (MS)—2 items

MS1. I consider investor sentiment in shaping my investment strategies.

MS2. I consider the economic growth outlook when making investment decisions.

Appendix B. Rotated Factor Loading Matrix (Varimax Rotation), Including Cross-Loadings

Loadings for the retained EFA items on all six extracted factors are reported to two decimal places. Asterisks mark primary loadings ≥ 0.40 . The final row reports the excluded market-sentiments item, whose simultaneous loadings on F1 (0.45), F2 (0.44), and F6 (0.54) illustrate the cross-loading pattern that motivated its exclusion, together with one economic conditions item, at the CFA stage (Section 3.3).

Item (Abbreviated)	F1 CSE	F2 PI	F3 FG	F4 EFE	F5 RT	F6 MS
CSE: I trust my judgment when investing	0.83 *	0.27	0.08	−0.05	0.07	0.04
CSE: I can assess and manage investment risks	0.79 *	0.22	−0.09	0.27	0.12	0.10
CSE: I have confidence in making sound decisions	0.76 *	0.09	0.17	0.13	0.16	0.17
CSE: I prefer decisions based on my own research	0.67 *	−0.06	−0.06	0.47	0.22	0.21
CSE: I can conduct thorough investment research	0.66 *	0.13	0.18	0.17	0.12	0.19
CSE: I have solid financial knowledge	0.56 *	0.05	0.23	0.26	0.28	−0.01
PI: I engage in discussions with peers	0.11	0.70 *	0.09	0.07	0.15	0.15
PI: I am open to group investment decisions	0.13	0.68 *	0.18	0.24	0.03	0.05
PI: Learning from others' experience is beneficial	0.14	0.66 *	0.25	0.23	0.17	0.05
PI: I decide based on own analysis regardless of peers	0.15	0.49 *	0.02	0.20	0.09	0.15
FG: Building wealth and financial security	−0.07	0.17	0.80 *	0.20	0.13	0.18
FG: Having an emergency fund is crucial	0.02	0.03	0.79 *	0.19	0.06	0.04
FG: Retirement planning is a priority	0.33	0.17	0.62 *	0.13	0.02	0.02
FG: Buying a home is a major financial goal	0.26	0.31	0.50 *	0.09	0.04	0.00
EFE: Technological advancements shape investment	0.16	0.36	0.23	0.66 *	0.08	0.19
EFE: I actively monitor my investment portfolio	0.31	0.24	0.14	0.62 *	0.02	0.25
EFE: Natural disasters impact markets	0.22	0.25	0.28	0.51 *	0.08	−0.09
EFE: Political and policy changes affect my choices	0.24	0.38	0.14	0.43 *	0.19	0.19
RT: I can tolerate market volatility	0.18	0.07	0.05	0.32	0.73 *	−0.06
RT: Long-term horizon withstands short-term fluctuations	0.17	0.20	0.22	−0.12	0.67 *	−0.02
RT: Willing to take higher risks for higher returns	0.22	0.19	−0.04	0.18	0.60 *	0.27
MS: I consider investor sentiment	0.41	0.33	0.28	0.21	0.24	0.34
MS: I consider the economic growth outlook	0.30	0.29	0.15	0.18	0.07	0.88 *
Excluded: Stock market performance influences me	0.45	0.44	0.10	0.18	−0.02	0.54 *

Note. F1 = Confidence and Self-Efficacy (CSE); F2 = Peer Influence (PI); F3 = Financial Goals (FG); F4 = Economic and Financial Events (EFE); F5 = Risk Tolerance (RT); F6 = Market Sentiments (MS). Extraction: principal component analysis; rotation: varimax. One CSE item records a secondary loading of 0.47 (F4); it was retained because its primary loading (0.67) exceeded the secondary loading by a clear margin, and construct-level discriminant validity was subsequently confirmed under both the Fornell–Larcker and HTMT criteria (Tables 4 and 5). The complete 26-item matrix from the source analysis is available from the corresponding author. Source: EFA estimation output.

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