



Determinants of Investment Participation: A Gender-Based Analysis of Behavioral and Structural Factors

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Abstract

This study examines the determinants of investment participation with a focus on gender-based differences using primary survey data from 71 respondents in the United States. A cross-sectional quantitative research design is employed to analyze the role of behavioral factors, including financial confidence, risk perception, and early financial exposure, alongside structural variables, particularly income. Descriptive statistics are used to summarize demographic characteristics, investment behavior, and asset allocation patterns. A chi-square test of independence is conducted to assess the association between gender and investment participation. To identify predictors of participation, linear regression models are estimated. A baseline model examines the effect of gender on investment behavior, while an extended model incorporates financial confidence, risk-taking, risk-awareness, and income as explanatory variables. An interaction term between gender and financial confidence is also included to test for moderating effects. The results indicate a statistically significant association between gender and investment participation. Regression analysis shows that gender is significant in the baseline model; however, in the extended specification, income emerges as the only statistically significant determinant. Behavioral variables, including financial confidence and risk-related measures, are not statistically significant, and the interaction effect is also insignificant. Overall, the study provides empirical evidence on the relative importance of structural and behavioral factors in explaining variation in investment participation across gender.

Keywords: *Behavioral Finance, Gender Gap, Investment Participation, Financial Confidence, Regression Analysis*

1. Introduction

The democratization of financial markets through digital investing platforms has expanded access to investment opportunities for millions of individuals worldwide. Despite these advances, participation in investment activities remains markedly uneven, with persistent disparities across demographic groups, particularly gender. Empirical evidence consistently demonstrates that women participate in equity

markets at substantially lower rates than men, with participation rates of 17.6% for women compared to 32.3% for men in recent large-scale studies (Wagner & Walstad, 2022). This participation gap extends beyond simple market entry; women also utilize fewer financial products overall, particularly equity-based instruments, which has significant implications for long-term wealth accumulation and retirement security.

Prior research has identified several key behavioral factors that influence investment decisions: risk perception and tolerance, financial confidence and self-efficacy, and early exposure to financial concepts through family socialization. Men consistently report higher financial risk tolerance than women across multiple contexts and cultures, which aligns with observed differences in asset allocation and product selection (Charness & Gneezy, 2012). Beyond risk preferences, financial confidence emerges as a critical determinant of investment behavior. Women are significantly more likely to experience stress about investment decisions and less likely to report confidence in portfolio management and financial knowledge; survey analyses reveal that women are 21.2% more likely to report investment-related stress and 18.5% less likely to express confidence in their financial capabilities compared to men (Lusardi & Mitchell, 2014). These psychological factors interact with practical barriers: when asked about obstacles to market participation, men cite motivations such as short-term gains and the thrill of investing, while women identify unfamiliarity with stocks and fear of potential losses as primary deterrents. The psychological barriers to women's investment participation are reinforced by cultural and social factors (Brooks et al., 2019). Gendered perceptions of financial competence, culturally mediated family roles, and social norms around risk-taking create an environment in which women may internalize lower expectations for their financial capabilities. These external social constraints interact with internal psychological states, fear of loss, unfamiliarity, and stress, to produce systematic differences in investment behavior. The result is a multi-layered barrier structure that combines individual psychology, social context, and market experience.

Given the documented disparities and their consequences, financial education has been widely promoted as a policy intervention to increase investment participation and reduce gender gaps. Multiple studies recommend targeted or tailored financial education programs and services designed to address women's specific barriers and concerns. However, there is limited rigorous empirical evidence evaluating whether financial education interventions can effectively overcome the underlying psychological and cultural barriers to women's investment participation. While educational programs may enhance financial literacy, the knowledge component, it remains unclear whether they adequately address the confidence deficits, risk perceptions, affective responses, and socialized beliefs that appear to drive behavioral differences.

This study aims to address these gaps by examining how risk perception, confidence, and early financial exposure jointly shape investment behavior and by exploring the perceived barriers and potential interventions that may increase participation, with explicit attention to gender-based differences. By investigating the interaction among these behavioral factors rather than treating them as independent predictors, this research seeks to provide a more nuanced understanding of the mechanisms underlying investment disparities. Additionally, by examining both barriers and potential interventions from the perspective of potential and current investors, the study aims to inform the design of more effective policy and educational strategies that address not only knowledge deficits but also the psychological and cultural factors that sustain unequal participation in financial markets.

The findings from this research have direct policy relevance for promoting more inclusive engagement in financial markets. As financial markets continue to evolve and digital platforms further reduce transactional barriers to entry, understanding and addressing the behavioral and cultural barriers that remain will be crucial for ensuring that the benefits of market participation are shared equitably across all demographic groups.

2. Literature Review

An extensive review of literature has been conducted to understand the gender differences in financial decision-making and behavior. A study by Powell and Ansic (1997) aimed to find whether gender differences exist in risk behavior within financial decision-making contexts through experimental analysis. It utilized controlled laboratory experiments involving investment decision tasks where participants made choices under varying levels of risk and ambiguity. The findings suggest that women consistently demonstrated more risk-averse behavior than men across different financial decision-making scenarios, with these differences being particularly pronounced in ambiguous situations where outcome probabilities were unclear. The study also revealed that gender differences in risk-taking were more evident in financial contexts compared to other domains, indicating that the nature of the decision context significantly influences the magnitude of observed gender differences (Powell & Ansic, 1997).

Another study by Hira and Loibl (2008) aimed to understand investment behavior differences between men and women, and aimed to find the significant personal and environmental factors that influence investment behavior and to specify the investment decision-making process, particularly with respect to female investors. It utilized survey methodology combined with analysis of investment portfolio data to examine patterns of investment involvement, learning preferences, and portfolio diversification strategies. The findings suggest that women and men differ significantly in their investment decision-making processes, with women showing lower levels of investment involvement and different learning preferences compared to men. Women were found to have less diversified portfolios and demonstrated different patterns in seeking financial information and advice. The study also identified that socio-economic factors and behavioral characteristics explained substantial portions of gender differences in specific investment behaviors, particularly in portfolio diversification decisions (Hira & Loibl, 2008).

A study by Xie and Page (2017) in Australia aimed to find how time pressure affects gender differences in financial risk-taking behavior. It utilized a laboratory experiment with 108 participants who completed a series of financial decision-making tasks under both time pressure and no time pressure conditions, combined with physiological measurements and cognitive assessments. The findings suggest that time pressure significantly amplifies gender differences in financial risk-taking, with women becoming substantially more risk-averse under time constraints while men's risk preferences remained relatively stable. The study revealed that under time pressure, women took 15-20% less financial risk compared to relaxed conditions, whereas men showed minimal changes in their risk-taking behavior. Additionally, the research found that these gender differences under time pressure could not be fully explained by differences in cognitive abilities, financial literacy, or mathematical skills, suggesting that psychological and emotional responses to time constraints play a crucial role (Xie & Page, 2017).

Another study by Wagner and Walstad (2022) in the United States aimed to find gender differences in financial decision-making and behaviors in both single and joint households and their effects on financial preparedness. It utilized data from the 2018 National Financial Capability Study, a large nationally representative survey of 27,091 adults, employing regression analysis to examine four key financial behaviors: paying credit cards in full monthly, maintaining a 3-month emergency fund, having non-retirement investments, and having non-employer retirement accounts. The findings suggest that single females were significantly less likely to engage in any of the four financial behaviors compared to single males, with differences ranging from 10-15 percentage points. In joint households, females who were primary financial decision-makers were also significantly less likely to engage in these behaviors compared to males. These results remained robust when the sample was split by age groups, financial literacy levels, and when using data from the 2015 survey wave, indicating persistent gender gaps in financial preparedness that could have adverse consequences for managing current finances and building future wealth (Wagner & Walstad, 2022).

A study by Giannikos and Korkou (2025) aimed to find whether gender differences in financial relative risk aversion persist in contemporary data using refined methodological approaches. It utilized the 2022 U.S. Federal Reserve Board's Survey of Consumer Finances with enhanced computation of wealth categories including 401(k) accounts and thrift savings, focusing exclusively on single-headed (never-married) households to eliminate ambiguity about financial decision-makers, and employed regression analysis to estimate relative risk aversion coefficients. The findings suggest that, contrary to earlier research from 1998, there were no significant gender differences in financial relative risk aversion in 2022 among single-headed households. The study documented that education levels strongly influenced risk-taking behavior, with higher education associated with lower relative risk aversion for both genders. The research revealed a continuing pattern of decreasing relative risk aversion over time, but the convergence of gender differences indicates that women's financial risk-taking behavior has evolved substantially over the past two decades, potentially reflecting changes in financial education, labor market participation, and societal attitudes toward women's financial independence (Giannikos & Korkou, 2025).

Another study by Charness and Gneezy (2012) across multiple countries aimed to find robust evidence for gender differences in financial risk-taking by assembling data from diverse experimental settings. It utilized data from 15 sets of experiments conducted by different researchers in different countries, all employing the same basic investment game structure but with varying instructions, durations, payment schemes, and subject pools, creating a comprehensive meta-analysis of 1,800+ participants. The findings suggest that women consistently invested less than men across all experimental settings, demonstrating strong and robust evidence that women are more financially risk-averse than men. The consistency of results across different countries, cultures, experimental designs, and research teams provides compelling evidence that gender differences in financial risk-taking are not artifacts of specific experimental conditions or cultural contexts. The effect sizes were moderate but highly consistent, with women investing approximately 10-15% less than men on average across all studies, suggesting that gender differences in financial risk preferences are a robust phenomenon that transcends specific contextual factors (Charness & Gneezy, 2012).

A study by Brooks, Sangiorgi, Hillenbrand, and Money (2019) in the United Kingdom aimed to find why men are more tolerant of investment risk than women and to examine the outcomes when men and women interact in financial decision-making processes. It utilized a very large database of over 13,000 questionnaires completed by individuals in the context of real investment decisions with financial advisors, combined with analysis of actual investment product selections and demographic information. The findings suggest that men are significantly more financially risk-tolerant than women, but this difference cannot be explained by age, employment patterns, or work status differences. However, previous investment experience plays a significant explanatory role in gender differences. The study revealed that following discussions with financial advisors, women's investment product selections were modified to a greater extent from their revealed risk preferences compared to men. In joint decision-making by couples, when wives and husbands had different risk tolerances, the husband's preferences had a stronger effect on the final product selection, particularly when the wife was more risk-tolerant, had a lower-status job, or had less financial experience, highlighting power dynamics in household financial decision-making (Brooks et al., 2019).

On the basis of review of literature, it has been identified that there is a dearth of studies on the intersection of gender differences in financial decision-making with contextual factors such as cultural background, socioeconomic status, and life stage transitions, particularly in diverse international settings. While existing research has established that gender differences exist in financial risk-taking and investment behavior, most studies have been conducted in Western developed countries, leaving significant gaps in understanding how these differences manifest in emerging economies and different cultural contexts. Furthermore, there is limited research examining how gender differences in financial decision-making evolve across the lifespan and how interventions targeting financial self-efficacy and experience can effectively reduce these gaps. This study attempts to address these gaps by examining

gender differences in financial decision-making across diverse demographic groups, investigating the mediating role of financial literacy and self-efficacy, and exploring how contextual and cultural factors moderate the relationship between gender and financial behavior, with the ultimate goal of informing targeted financial education programs and policy interventions that can promote gender equity in financial outcomes.

3. Methodology

This section elaborates on the methodological approach that guided the collection, sampling, and analysis of data for this study. Grounded in a structured empirical framework, the methodology was designed to systematically examine how risk perception, financial confidence, and early exposure to finance jointly shape investment behavior, with a particular focus on identifying gender-based differences. The procedures described below reflect deliberate choices made to ensure validity, representativeness, and ethical integrity throughout the research process.

3.1 Research Design

This study employed a quantitative, exploratory research design using a cross-sectional survey methodology. A quantitative approach was selected given the study's objective of identifying measurable patterns and statistically comparable differences across demographic groups, particularly by gender, in financial attitudes and investment behavior. The cross-sectional design allowed data to be collected from a diverse sample at a single point in time, enabling meaningful comparisons across participants without the resource demands of a longitudinal study. The study is empirical in nature, relying on primary data gathered directly from respondents rather than on pre-existing datasets or secondary sources.

3.2 Sample and Sampling Population

The study utilized nonprobability sampling, specifically purposive sampling, to recruit participants. This sampling strategy was deemed appropriate given the exploratory nature of the research and the need to target individuals with sufficient awareness of or engagement with financial concepts. Data were collected from respondents primarily based in the United States, with particular outreach within communities accessible to the researcher. The sample was intentionally designed to be representative of two gender identities, male and female, to facilitate direct gender-based comparisons in line with the study's central research objectives. Participants spanned a range of age groups, educational backgrounds, and income statuses, including both students and working adults, which allowed for an examination of how demographic and socioeconomic factors interact with gender in shaping financial behavior.

3.3 Data Collection

Data collection was conducted over a period of approximately two to three months, during which the survey was administered and responses were gathered. The survey was distributed exclusively through online mediums, leveraging digital platforms and social networks to reach a geographically and demographically diverse set of respondents. This online mode of data collection was advantageous for its accessibility, efficiency, and ability to reach participants across different locations without geographic constraint. Respondents were recruited through purposive outreach via personal networks, educational communities, and online platforms relevant to finance and investing. The use of an online survey format also supported anonymity, which was expected to encourage more candid responses, particularly on topics such as financial confidence, investment stress, and perceived barriers to participation.

3.4 Survey Instrument

The survey instrument was structured into six sections, each targeting a distinct dimension of the research framework. Section 1 served as an introductory overview, providing informed consent information and outlining the purpose and voluntary nature of participation. Section 2 collected demographic and early exposure data, including gender identity, age group, education level, field of study, income status, and age of first exposure to finance or investing concepts. Section 3 assessed risk perception, financial confidence, and current investment behavior using a five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree) across five attitudinal statements, along with a binary question on current investment activity. Section 4 gathered data on investment details from active investors, including the percentage of income invested, asset types held, and sources of investment advice. Section 5 explored barriers to investment participation through a multi-select question identifying structural, psychological, and informational obstacles. Section 6 examined perceived barriers and potential interventions related to female participation in financial markets, using a second Likert-scale battery addressing gendered attitudes, social norms, and the perceived effectiveness of targeted educational or policy interventions.

3.5 Ethical Considerations

Several ethical principles guided the design and execution of this study. Participation was entirely voluntary, and respondents were informed at the outset that they could withdraw at any time without consequence. All responses were collected anonymously, with no personally identifiable information gathered, ensuring the confidentiality of participants. The survey introduction clearly stated that data would be used solely for academic research purposes. Respondents were also assured that there were no right or wrong answers, which was intended to reduce social desirability bias and encourage genuine self-reporting. The survey did not involve any deception, and participants were not exposed to any foreseeable harm or undue burden as a result of their involvement. These measures are consistent with standard ethical guidelines for social science research involving human subjects.

3.6 Analytical Framework

Data collected through the survey will be analyzed using descriptive and inferential statistical techniques. Descriptive statistics will be used to characterize the sample and summarize responses across key variables. Cross-tabulations and mean comparisons will be employed to examine differences in financial attitudes, confidence, risk perception, and investment behavior by gender. In addition, multivariate regression analysis will be used to identify the determinants of investment participation and to assess the relative influence of gender, financial confidence, risk-related attitudes, and income. This multi-method analytical approach is designed to provide both a descriptive portrait of investment behavior across the sample and a more nuanced understanding of the mechanisms through which gender, psychological factors, and socialization experiences interact to shape financial decision-making.

4. Results and Findings

This section presents the key findings from the analysis of survey data, including descriptive statistics and inferential results examining gender differences and the determinants of investment participation.

4.1 Demographic Profile of the Respondents

A total of 71 respondents completed the survey, distributed nearly evenly between males (49.3%) and females (50.7%), which showcases direct gender-based comparisons aligned with the study's objectives. The age distribution skews toward younger and working-age adults, with the largest cohort falling in the 35-44 bracket (25.4%), followed by 25-34 (21.1%) and 18-24 (18.3%). The inclusion of a notable under-18 segment (15.5%) reflects deliberate outreach into educational communities. Educationally, the sample is relatively well-credentialed: just over $\frac{2}{3}$ of respondents hold at least an undergraduate degree. The majority (69.0%) are full-time income earners. With respect to first exposure to financial or investing concepts, the most common channel was family, relatives, or mentors (39.4%), suggesting that financial socialization within the household remains a dominant pathway into financial awareness. Formal schooling and self-directed learning were equally represented (21.1% each), while competitions and programs such as FBLA or DECA accounted for 15.5%. Only two respondents (2.8%) reported having never been exposed to finance or investing.

Table 1: Demographic Profile of the Respondents

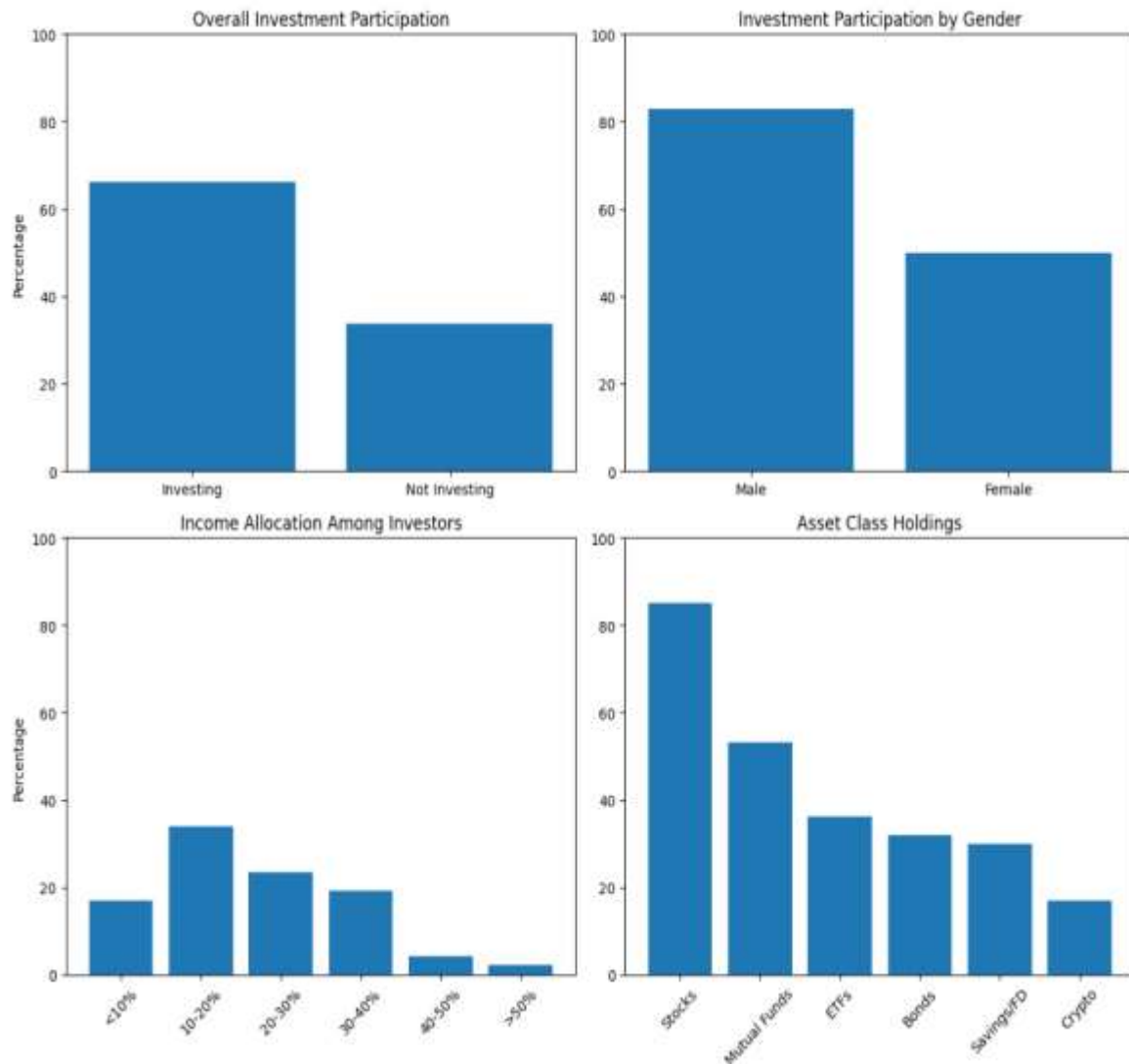
Variable	N	Percentage
Gender		
Male	35	49.3%
Female	36	50.7%
Age Group		
Under 18	11	15.5%
18-24	13	18.3%
25-34	15	21.1%
35-44	18	25.4%
45-54	12	16.9%
55 and above	2	2.8%
Education Level		
High School	27	38.0%
Undergrad	21	29.6%
Graduate	20	28.2%

Postgraduate/Ph.D	2	2.8%
Middle School	1	1.4%
Employment/Income Status		
Full-Time	49	69.0%
Not Employed/Student	17	23.9%
Part-Time	5	7.0%
First Exposure to Finance		
Family, relatives, or mentors	28	39.4%
Self-learning	15	21.1%
School or college courses	15	21.1%
Competition or programs	11	15.5%
Never been exposed	2	2.8%

4.2 Descriptive Statistics

Of the 71 respondents, 47 (66.2%) reported that they currently invest their own money, while 24 (33.8%) do not. This overall participation rate is substantially higher than population-level benchmarks from prior research, consistent with the study's purposive sampling approach targeting individuals with awareness of or engagement in financial concepts. A pronounced gender gap in investment participation emerged as one of the most striking findings of the study. Among male respondents, 82.9% reported currently investing, compared to just 50.0% of female respondents, a 32.9 percentage-point gap directionally consistent with, and larger than, disparities documented in large-scale national studies. Among active investors, the most commonly reported investment allocation bracket was 10-20% of income (34.0%), followed by 20-30% (23.4%), 30-40% (19.1%), less than 10% (17.0%), and 40-50% (4.3%). Only one respondent reported investing more than 50% of income, indicating that most investors maintain relatively conservative allocation levels. In terms of asset classes, stocks were by far the most widely held asset, reported by 85.1% of active investors, followed by mutual funds (53.2%), ETFs (36.2%), bonds (31.9%), fixed deposits or savings accounts (29.8%), and cryptocurrency (17.0%). The data is represented in Figure 1 below.

Figure 1: Investment Behavior: Participation Rates and Portfolio Characteristics



The following tables extend the descriptive analysis by examining respondents' financial attitudes, exposure to financial learning, and perceived barriers to investment participation. Specifically, they present summary statistics on risk perception and financial confidence, the relationship between initial exposure to financial concepts and investment behavior, and the distribution of self-reported constraints affecting participation. Where relevant, results are disaggregated by gender to highlight observable differences across these dimensions.

Table 2: Investment Behavior: Participation Rates and Portfolio Characteristics

Asset Class	Total %	Male %	Female %
Stocks	85.1	65.7	47.2
Mutual Funds	53.2	51.4	19.4
ETFs	36.2	37.1	11.1
Bonds	31.9	28.6	13.9
Fixed Deposit	29.8	34.3	5.6
Crypto Currency	17.0	20.0	2.8
Property/Gola	2.8	2.9	0.0

Table 3: Risk Perception and Confidence

Construct	Overall Mean	Male Mean	Female
Total Score	17.92	18.20	17.44
Financial Confidence	3.54	3.67	3.40
Risk Tolerance	3.38	3.43	3.32
Risk Consideration	4.01	4.06	3.97
Confidence (Active Investors)	3.69	3.76	3.61
Conscience (Non-investors)	3.22	3.25	3.19

Table 4: Exposure in Shaping Investment Behavior

First Exposure	N	Invest Rate	Average Confidence
Family, friends, or mentors	28	75.0%	3.68
Self-Learning (online, books, podcasts)	15	73.3%	3.27
School or college courses	15	66.7%	3.77
Competitions or programs	11	45.5%	3.68
Never been exposed	2	0.0%	1.00

Table 5: Barriers to Participation

Barrier	All	Male	Female
Fear of losing money	52.1%	45.7%	58.3%
Lack of knowledge or confidence	40.8%	37.1%	44.4%
Lack of access to investment opportunities	32.4%	28.6%	36.1%
Too risky	29.6%	37.1%	22.2%
Male-dominated environment	7.0%	0.0%	13.9%

4.3 Inferential Statistics

To formally examine the patterns observed in Section 4.2, inferential analyses were conducted to test the significance of gender differences in investment behavior and to identify predictors of participation.

4.3.1 Gender Differences in Investment Behavior and Predictors of Participation

Table 6: Investment Participation by Gender

Gender	No (%)	Yes (%)
Female	50.0	50.0
Male	17.1	82.9

Note: $\chi^2(1) = 8.562, p = 0.003$

To examine whether gender is associated with investment behavior, a chi-square test of independence was conducted between gender and current investment participation. The results indicate a statistically significant association, $\chi^2(1, N = 71) = 8.562, p = 0.003$, suggesting that male respondents are more likely to invest than female respondents

Independent-samples t-tests were performed to compare male and female respondents on financial confidence, risk-taking, and risk-awareness indices. No differences reached conventional levels of statistical significance ($p > 0.05$), although a marginal trend was observed for financial confidence ($p = 0.093$).

Table 7: Regression of Investment Participation on Gender

Predictor	Coefficient (β)	SE	t	p
Gender	0.329	0.107	3.08	0.003
Constant	1.171	0.168	6.97	0.000

Note: $N = 71, R^2 = 0.121$

To assess the predictive role of gender while controlling for financial and demographic factors, linear regression models were estimated. The baseline model, regressing investment participation on gender alone, demonstrated that being male significantly increases the likelihood of investing ($\beta = 0.329, SE = 0.107, p = 0.003$), accounting for approximately 12% of the variance in investment behavior ($R^2 = 0.121$)

Table 8: Extended Regression Model Predicting Investment Participation

Predictor	Coefficient (β)	SE	t	p
Gender	0.236	0.089	2.65	0.010
Confidence	0.041	0.074	0.55	0.587
Risk-taking	0.005	0.077	0.07	0.945
Risk-awareness	0.022	0.056	0.40	0.688
Income	0.494	0.088	5.64	0.000
Constant	0.154	0.271	0.57	0.571

Note: $N = 71, R^2 = 0.454$

An interaction term between gender and financial confidence was introduced to examine potential moderating effects. Results indicate no significant interaction ($\beta_{\text{female} \times \text{confidence}} = -0.048, p = 0.664$), suggesting that the influence of confidence on investment participation does not differ by gender. Income remained the most influential predictor in this model

Table 9: Regression Model with Gender $\times$ Confidence Interaction

Predictor	Coefficient (β)	SE	t	p
Gender	0.064	0.404	0.16	0.875
Confidence	0.068	0.097	0.70	0.489

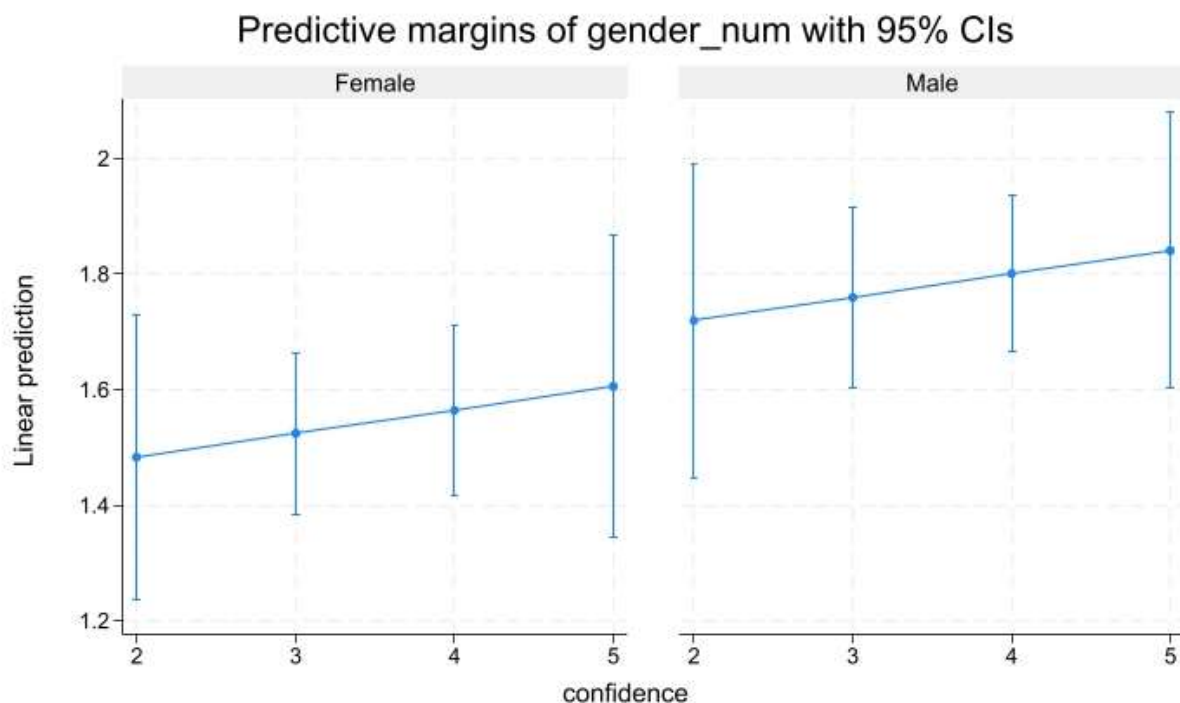
Female × Confidence	-0.048	0.110	-0.44	0.664
Risk-taking	0.006	0.077	0.08	0.937
Risk-awareness	0.016	0.058	0.27	0.790
Income	0.499	0.089	5.61	0.000
Constant	0.414	0.655	0.63	0.529

Note: $N = 71$, $R^2 = 0.455$

To explore potential interactions between gender and financial confidence, an interaction term was introduced. Results indicate that the effect of confidence on investment participation does not differ significantly by gender ($\beta_{\text{female_confidence}} = -0.048$, $p = 0.664$), suggesting that gender differences are not moderated by confidence levels. Income continues to be the primary determinant of investment engagement in this model.

Predicted probabilities were calculated to illustrate investment participation across levels of financial confidence for males and females. While higher confidence slightly increases the likelihood of investment for both genders, males consistently exhibit higher predicted participation at all confidence levels. The gap is most pronounced at lower confidence levels, indicating that low confidence disproportionately affects female participation.

Figure 2: Predicted Investment Participation by Gender Across Confidence Levels



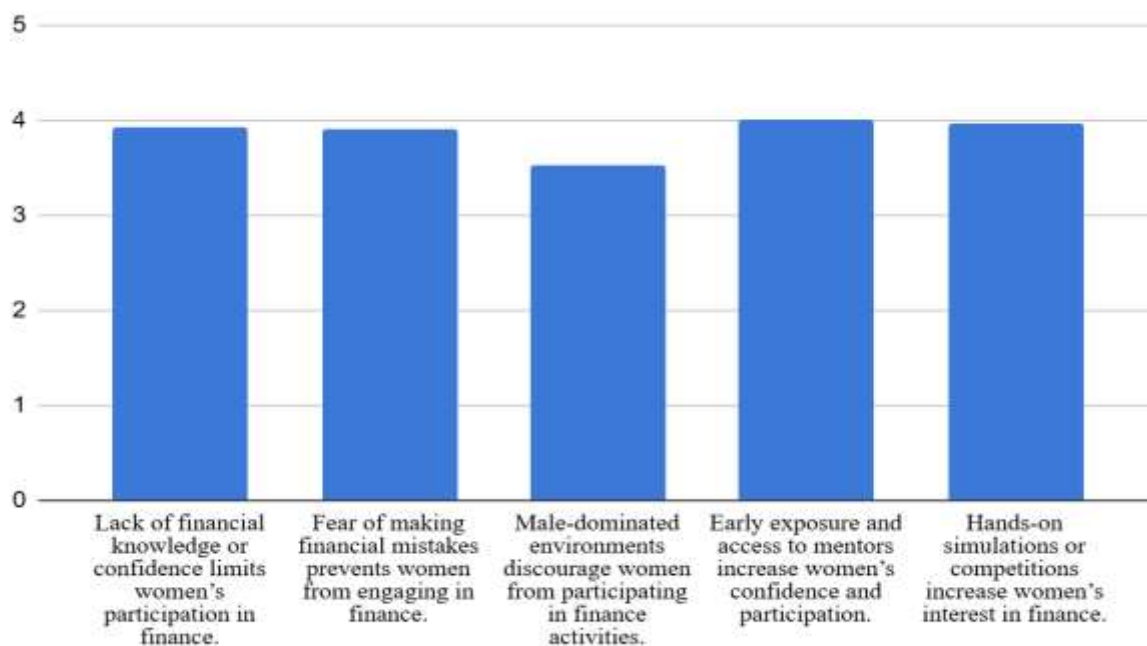
The above figure illustrates the relationship between confidence and investment participation for males and females. For both genders, higher financial confidence is associated with higher predicted investment participation. However, at every confidence level, males consistently exhibit higher predicted participation rates than females. The gap is most pronounced at lower confidence levels, indicating that low confidence disproportionately affects female investment participation. As confidence increases, the participation rates of both genders rise, but the relative difference narrows slightly, suggesting that confidence partially mitigates the gender gap.

Overall, the analysis indicates that gender is a significant predictor of investment participation, with males more likely to invest than females. Income emerges as the most robust predictor, while financial confidence, risk-taking, and risk-awareness do not have independent significant effects. Interaction analysis suggests that confidence does not differentially influence investment behavior across genders. These findings highlight structural determinants of participation disparities rather than solely psychological factors.

4.4 Gender Attitudes and Perceived Barriers to Participation

To better understand the factors influencing women's participation in finance, the figure below presents respondents' perceptions of gender-specific factors influencing women's participation in finance.

Figure 3: Average Agreement with Gender Participation Statements



Analysis of responses across five key statements highlights both barriers and enablers shaping women's engagement in financial activities. Among the perceived barriers, lack of financial knowledge or confidence emerged as the most prominent constraint (Mean = 3.93). Fear of making financial mistakes was also significant (Mean = 3.92), suggesting that apprehension around decision-making strongly affects women's participation. While male-dominated environments were recognized as a potential barrier, this factor scored lower (Mean = 3.55), indicating that structural aspects may be less influential than personal or psychological factors. Regarding enablers, early exposure to finance and access to mentors were strongly endorsed (Mean = 4.01), underscoring the importance of guidance and support in fostering confidence and engagement. Hands-on simulations and competitions were also viewed as effective in

increasing women's interest in financial activities (Mean = 3.97), highlighting the role of experiential learning opportunities. Overall, these findings suggest that interventions focused on building confidence, providing mentorship, and offering practical learning experiences are likely to have the greatest impact on improving women's participation in finance. Respondents generally perceive enablers as more influential than structural barriers, emphasizing the continued importance of psychological and educational factors.

5. Discussion

The findings of this study offer meaningful insights into the behavioral, psychological, and structural factors that shape investment participation, with particular attention to gender-based disparities. Taken together, the results paint a picture in which gender remains a significant determinant of investment engagement, while income emerges as the most powerful structural predictor, and psychological factors such as confidence and risk tolerance play a more nuanced role than prior literature might suggest.

The most striking finding is the 32.9 percentage-point gender gap in investment participation, with 82.9% of male respondents reporting active investment compared to 50.0% of females. This disparity persisted even after controlling for confidence, risk tolerance, and risk awareness in the regression models, with gender retaining independent predictive value ($\beta = 0.236$, $p = 0.010$). These results align closely with Wagner and Walstad (2022), who found that single females were significantly less likely to hold non-retirement investments than single males, with differences of 10-15 percentage points in a nationally representative sample. The present study's larger gap may partly reflect sample composition, given the purposive sampling strategy, but the directional consistency is notable. Similarly, Hira and Loibl (2008) documented lower investment involvement among women and found that socioeconomic and behavioral characteristics explained substantial portions of gender differences in investment behavior, a pattern mirrored here, where income proved to be the dominant predictor ($\beta = 0.494$, $p < 0.001$), underscoring that financial capacity remains a foundational structural barrier.

Interestingly, the gender differences in financial confidence and risk tolerance observed descriptively did not reach statistical significance in inferential testing, nor did the gender-confidence interaction term prove significant. This finding partially contrasts with Charness and Gneezy (2012), whose cross-cultural meta-analysis of over 1,800 participants found that women consistently invested less than men, with the effect partially attributable to risk preferences. One plausible interpretation is that the present sample, being relatively educated and financially aware, may exhibit attenuated psychological differences compared to general population samples. This reading finds some support in Giannikos and Korkou (2025), who found no significant gender differences in financial relative risk aversion among single-headed households in 2022, suggesting that the gap in risk preferences may be narrowing as women's financial education and labor market participation improve. That income, rather than psychological constructs, emerged as the primary driver here is consistent with this convergence narrative and points toward structural inequality as a more immediate obstacle than attitudinal differences alone.

The barrier data further enrich this interpretation. Fear of losing money was the most commonly cited obstacle overall (52.1%), with women reporting it at a higher rate than men (58.3% vs. 45.7%). Lack of knowledge or confidence was the second most common barrier among women (44.4%). These findings align with Brooks et al. (2019), who found that prior investment experience was a significant explanatory factor in gender differences in risk tolerance, and that women's investment choices were more heavily modified following advisor interactions, suggesting that lack of familiarity and confidence actively shapes women's market engagement. The perceived barriers section further reinforced that psychological factors, particularly lack of confidence (Mean = 3.93) and fear of making mistakes (Mean = 3.92), were perceived as more influential than structural factors like male-dominated environments (Mean = 3.55). This suggests that internal, self-directed barriers may be more salient to women than external systemic ones, at least as perceived by respondents.

On the enabling side, early financial exposure through family or mentors was associated with both the highest investment participation rate (75.0%) and strong average confidence scores (3.68), reinforcing the socialization literature that positions household financial modeling as a critical pathway into market participation. This aligns with the broader research framework and prior studies emphasizing that financial self-efficacy is cultivated through early and sustained exposure rather than formal education alone. From a policy standpoint, these findings suggest that interventions targeting women's investment participation should prioritize income support and access mechanisms alongside confidence-building and experiential learning opportunities. The strong endorsement of mentorship and hands-on simulations as enablers (Means of 4.01 and 3.97, respectively) suggests that peer-based and experiential educational models may be more effective than traditional instruction in reducing the psychological barriers that persist even among relatively educated populations. Given that income, rather than psychological factors, emerged as the dominant predictor of participation, financial education alone is unlikely to be sufficient; structural interventions that expand women's economic autonomy are equally necessary for achieving equitable market engagement.

6. Conclusion

This study examined gender differences in investment behavior and the determinants of investment participation using primary survey data from 71 respondents in the United States. The analysis shows that male respondents are more likely to participate in investment activities compared to female respondents and exhibit higher levels of portfolio diversification. A chi-square test confirms a statistically significant association between gender and investment participation, while regression results indicate that gender is a significant predictor in the baseline specification. However, in the extended regression model, income emerges as the only statistically significant determinant of investment participation, while financial confidence, risk-taking, and risk-awareness do not show statistically significant effects. This suggests that structural factors play a more dominant role than behavioral variables in explaining variation in investment participation within the sample. Descriptive findings indicate that psychological factors such as fear of financial loss and lack of knowledge are more frequently reported barriers among respondents, particularly among women. Early financial exposure through family, mentors, or educational experiences is associated with higher participation rates and greater confidence levels, highlighting the relevance of financial socialization. Overall, the findings suggest that gender differences in investment participation are present primarily in participation rates rather than in statistically significant differences in behavioral traits. The results underscore the importance of structural determinants, particularly income, while also highlighting the perceived relevance of confidence-building and experiential learning pathways. Limitations include the small, non-random sample and reliance on self-reported data, which restrict generalizability. Future research may employ larger representative datasets and longitudinal designs to further examine how structural and behavioral factors interact over time.

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