

PATHWAYS LINKING MOBILE TRADING TO HIGH-RISK INVESTMENTS: EVIDENCE FROM U.S. RETAIL INVESTORS

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Abstract: Trading through mobile apps has grown rapidly and has been shown to influence investor behavior. This study uses data from the 2021 and 2024 waves of the National Financial Capability Study (NFCS) and examines the relationship between mobile trading and high-risk investments, including cryptocurrency, meme stocks, and options. It also investigates whether short-term investment motivation and reliance on app-displayed popular investments explain this relationship. The Karlson–Holm–Breen (KHB) method is used to estimate direct and indirect associations. The results show that mobile trading is positively associated with all three high-risk investments. The KHB analysis reveals a significant combined indirect association through these two mechanisms, but reliance on app-displayed popular investments plays a larger role. When examined separately, both mechanisms also have significant indirect associations. These findings highlight the importance of the information environment of mobile trading apps in shaping retail investors' investment decisions.

Keywords: Mobile trading, cryptocurrency, meme stocks, options, mediation

Introduction

The rapid growth of mobile trading has transformed the way retail investors participate in financial markets. Previous studies find that mobile trading app adoption increases investor attention and trading activity and makes investors more sensitive to short-term fund returns and market sentiment (Cen, 2024). Other studies show that smartphone trading encourages investors to purchase riskier and lottery-type assets (Kalda et al., 2021; Wu et al., 2024). Additionally, the way information is displayed on mobile trading platforms can influence investors' trading decisions (Barber et al., 2022).

However, existing studies provide limited evidence on whether mobile trading is associated with specific high-risk investments, such as cryptocurrency, meme stocks, and options. The mechanisms underlying this relationship are also largely unexplored. This study addresses these gaps by first examining the association between mobile trading and high-risk investments. It then investigates whether short-term investment motivation and reliance on app-displayed popular investments explain this relationship.

Data and Methodology

This study uses data from the 2021 and 2024 waves of the National Financial Capability Study (NFCS). The survey includes questions on mobile trading frequency, short-term investment motivation, and reliance on app-displayed popular investments. Each variable is measured using an ordinal three-category response scale. Participation in high-risk investments, including cryptocurrency, meme stocks, and options, is measured using binary (Yes/No) questions. The analysis also controls for overconfidence, risk tolerance, portfolio size, demographic characteristics, and survey year.

First, binary logistic regression models are estimated for each high-risk investment, including cryptocurrency, meme stocks, and options. Next, parallel mediation models are estimated to examine two potential mechanisms: (1) short-term investment motivation and (2) reliance on app-displayed popular investments (app reliance), as shown in Figure 1. The Karlson–Holm–Breen (KHB) decomposition method is used to separate the total association between mobile trading and each investment into direct and indirect associations. The KHB method is appropriate because it allows mediation analysis in logistic regression models with binary outcomes. As a robustness check, the app-reliance pathway is tested again among

mobile-app users because these investors are more likely to be exposed to investment advice displayed in trading apps.

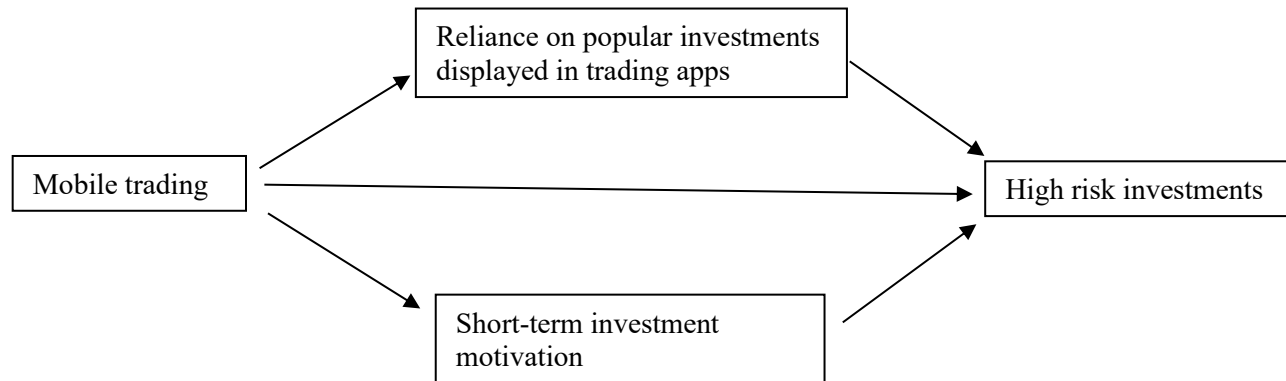


Figure 1. Mediation Analysis

Findings

The results show that mobile trading is significantly associated with cryptocurrency, meme stocks, and options. These findings remain statistically significant after including the control variables. The KHB mediation analysis indicates a statistically significant combined indirect association through reliance on app-displayed popular investments and short-term investment motivation. Reliance on app-displayed popular investments accounts for most of the mediated component. Separate KHB analyses indicate that both pathways have statistically significant indirect associations. When the app-reliance pathway is tested again among mobile-app users as a robustness check, it remains statistically significant across all three investment outcomes.

Conclusion

This study shows that mobile trading is significantly associated with participation in cryptocurrency, meme stocks, and options. It also provides evidence that reliance on app-displayed popular investments is an important pathway linking mobile trading to these high-risk investments. Short-term investment motivation also plays a role, but its contribution is smaller. One limitation is that the NFCS data are cross-sectional. Therefore, causal relationships cannot be established. Future research could use longitudinal or experimental data to further examine these mechanisms. The findings suggest that the information environment of mobile trading apps may be particularly important in understanding the association between mobile trading and high-risk investments.

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