Study Reveals How Risk Preferences Shape Online Trading Outcomes

July 2, 2024



A study co-authored by a researcher at Tulane University's A. B. Freeman School of Business has uncovered important insights into how individual investors' risk preferences influence their online trading behaviors and performance.

Yang Pan, assistant professor of management science, analyzed data from over 7,000 investor accounts at a major Chinese brokerage firm over a 44-month period from 2010 to 2013. She and her co-authors examined how investors' use of online trading channels, combined with their personal risk preferences, affected trading frequency, volume and returns.

"We found that increased use of online trading channels generally leads to higher trading frequency, larger trading volumes, and better investment performance,"

says Pan. "However, these effects are not evenly distributed across investors with different risk preferences."

The study revealed that both risk-seeking and risk-averse investors tend to trade more frequently online compared to risk-neutral investors. However, risk-seeking investors dramatically increase their trading volumes when using online channels, while risk-averse investors show only modest increases.

Most notably, risk-averse investors with higher online trading intensity significantly outperformed other investors in terms of risk-adjusted returns. For example, a 10% increase in online trading intensity was associated with 1.05% higher monthly risk-adjusted returns for risk-averse investors compared to risk-neutral investors.

"Our findings challenge the assumption that the benefits of online trading technologies are distributed evenly across all investors," Pan explains. "Risk-averse investors appear particularly well-positioned to leverage online channels for superior returns."

The researchers theorize that while online trading can foster overconfidence in many investors, leading to excessive trading and speculation, risk-averse investors might be naturally cautious, which counterbalances the effects of overconfidence. They can take advantage of lower transaction costs and easier portfolio monitoring without falling prey to overconfidence.

The paper’s findings have important implications for individual investors, financial services firms, and policymakers. Investors should consider how their personal risk preferences impact their online trading behaviors and outcomes. At the same time, regulators should be aware of how online platforms could encourage excessive trading and risk-taking among certain investor types.

"As online and mobile trading continues to grow globally, it's critical that we understand how different types of investors respond to these technologies," said Pan. "Our study provides an important step in that direction, but there is still much more to explore in this area."

The researchers call for further studies to examine how investor characteristics beyond risk preferences, such as personality traits or cultural values, may shape online trading behaviors. They also encourage more cross-country comparisons to tease out the role of cultural and market-specific factors.

As online and mobile trading platforms continue to evolve, this line of research promises to yield valuable insights to help investors, financial firms, and policymakers navigate the changing landscape of retail investing in the digital age.

“Do Risk Preferences Shape the Effect of Online Trading on Trading Frequency, Volume, and Portfolio Performance?,” co-authored by Yang Pan, Sunil Mithas, JJ Po-An Hsieh, and Che-Wei Liu, was published in 2023 in *Journal of Management Information Systems*.