School of Business | Doctoral Programs

Ph.D. Dissertation Defense

Candidate:	Kexin Gu
Degree:	Doctor of Philosophy
School/Department.:	School of Business / Business Administration
Date:	Tuesday, April 29, 2025
Time:	2 pm – 3:30 pm
Location:	Babbio 601
Title:	Three essays on how corporate innovation strategies, cultural bias, and AI bias influence investment decisions
Chairperson:	Dr. Alexander Rodivilov, Finance, School of Business
Committee Members:	Dr. Stefano Bonini, Finance, School of Business
	Dr. Anand Goel, Finance, School of Business
	Dr. Ye (Emma) Wang, Finance, School of Business
	Dr. Jose Tribo Gine, Management & Marketing, School of Business

Abstract

The three essays presented in my dissertation proposal explore biases and decision-making patterns in financial investments from various perspectives, showing how institutional preferences, artificial intelligence, and cultural dynamics influence investment behavior and outcomes.

The first essay, "*Innovation and Institutional Ownership: Exploitation versus Exploration*," examines the role of institutional investors in shaping corporate innovation. It demonstrates that institutional investors tend to favor companies focusing on exploitative innovation strategies over exploratory ones. This preference is driven by the short-term operational performance of such firms, leading investors—particularly transient and quasi-indexer investors—toward a myopic investment behavior. The paper highlights that portfolios skewed towards exploitative innovation yield superior future performance, indicating the presence of sophisticated investors who are adept at identifying these opportunities.

The second essay, *"Cultural Bias and Fund Investments,"* examines how cultural similarity influences fund managers' asset allocation decisions. We find that fund managers are more likely to allocate capital to firms led by executives who share a similar cultural background. This preference does not improve fund performance, indicating that it may reflect familiarity rather than informational advantage. Over time, cultural distance between managers and firms decreases, particularly as managers gain tenure. The effect is stronger in smaller funds, investments in larger firms, and among male managers. Additionally, cultural proximity has less influence when firms perform poorly.

The third essay, *"Who Invests, Who Gets Funded: Gender and Racial Bias in LLM-Generated Investment Advice,"* examines biases in financial recommendations produced by large language models. Using a two-sided experimental design, the study audits GPT-4 Turbo to assess whether investment advice differs across investor and fund manager demographics. On the investor side, LLMs select similar funds across demographic groups but recommend different investment amounts when names signal race or gender, despite identical age and income. On the fund manager side, LLMs allocate less capital to Black and female managers. Racial disparities remain even when race is explicitly disclosed, while gender bias appears primarily through name-based cues. Bias levels vary across models and are reduced when demographic information is made explicit.