# SIJIA FAN

Warren 442, Cornell University  $\diamond$  Ithaca, NY Email: sf395@cornell.edu Website: sijiafan.org

#### **EDUCATION**

Cornell University

Ph.D. in Applied Economics and Management, Concentration: Finance

Cornell University 2018 - 2019

M.Eng., Operations Research and Information Engineering

Skidmore College 2014 - 2018

B.A. in (Hons) Economics and Mathematics. Summa Cum Laude

Undergrad Thesis: "Stock Market Reactions to Industrial Disasters: Evidence from Incident Firms and Their Competitors"; 2018 Periclean Scholar Thesis Award

## RESEARCH PAPERS

#### Publication

Fan, Sijia, Qi Ge, Benjamin Ho, and Lirong Ma. "Sorry Doesn't Cut It, or Does It? Insights from Stock Market Responses to Corporate Apologies." *Journal of Economic Behavior & Organization* 205 (2023): 68-86.

· Featured in Business Scholarship Podcast.

#### Working Papers

# "Flooded but Thriving? The Uneven Economic Effects of Floods and Flood Risk" (JMP)

· Abstract: I study how floods and chronic flood risk affect U.S. establishments and firms by combining high-resolution remote sensing flood data, FEMA flood maps, and establishment-level data. After floods, I find that establishments show growth in employment and sales, with recovery supported by insurance payouts and federal aid. Using a triple-difference and spatial regression discontinuity design around regulatory boundaries, I provide novel causal evidence that flood insurance plays a critical role in enhancing recovery, particularly for establishments subject to the mandatory National Flood Insurance Program purchase requirement. Federal aid, notably SBA disaster loans, also strengthens recovery by supporting small businesses and generating local spillovers. In contrast, chronic flood risk is associated with persistent declines in employment and business diversity, likely driven by higher insurance expenses and increased business exits. At the firm level, these patterns persist and the dynamics aggregate: firms with greater flood risk disclose these risks more proactively and reduce investment in physical assets, while markets react more negatively to floods for firms lacking prior exposure or disclosure. Overall, my findings highlight how insurance and risk communication enhance resilience to climate shocks, while underscoring the need for policies that mitigate long-term vulnerability without encouraging unsustainable development.

#### "International ESG Equity Investing and Heterogeneous Asset Demand"

· Abstract: I study how sustainable investing impacts cross-sectional equity prices and valuation with institutional investors' heterogeneous demand and tastes internationally. To obtain a sustainability measure for companies around the world and to capture the ESG tilt in portfolios of institutional investors, I construct a reveal-preference sustainability measure for each firm instead of using a third-party ESG score. With Factset international institutional holding data from 2010

to 2021, I apply an equilibrium asset pricing framework to empirically estimate heterogeneous preference, allowing for investment portfolio choices within and across countries. I find that separately estimated investor demands are sensitive to the sustainability of firms. The demand of investors on average increases by 26% following a one standard deviation increase in the perceived greenness, but there exists huge investor heterogeneity across countries; for example, investors from mainland China would decrease their demand by 21%. With the estimated coefficients, I conduct counterfactual analyses that consider the implications when the ESG coefficient increases following realized climate risk and when a subset of ESG investors switch to holding a market-weighted portfolio to understand the significance of different groups of institutional investors.

· *Presentations*: NFA 2024; Cornell Sustainable Environment, Energy, and Resource Economics Seminar.

## "Biodiversity Risk Disclosure" with Miao Liu, Yao Lu, and David Ng

- · Abstract: Biodiversity risk is an emerging challenge for firms and a growing concern for investors. We develop a method to evaluate how companies disclose biodiversity risk exposure in their 10-K filings and how these disclosures shape investor perceptions. Using a two-step approach that combines natural language processing and large language models, we identify and classify voluntary disclosure of exposure to biodiversity risk as either direct (explicit acknowledgments of exposure) or indirect (implied exposure embedded in business discussions). We find that firms are more likely to disclose biodiversity risk exposure, particularly through direct disclosure, when institutional ownership is higher and when local stakeholder pressure intensifies, as proxied by Google search interest and biodiversity-related protests. While managers tend to issue direct disclosures in response to information demand, investors react more strongly to indirect disclosures, especially when these appear for the first time. This divergence underscores a tension in disclosure preferences for exposure to emerging and rapidly evolving risk such as biodiversity: managers prioritize "reliability" and disclose only when confident, whereas investors value "relevance" and respond more strongly to timely, even if less definitive, signals.
- · **Presentations**: CICF (China International Conference in Finance) 2025; SMU SOAR Accounting Symposium 2024\*; 2024 HKUST Conference Accounting Research Symposium\*; Cornell Accounting Brown bag\*.

"Do Donors of Donor-Advised Funds Respond to Natural Disasters?" with Yipiao Cai, David Ng, and Jie Ying (Under Review)

· Abstract: Donor Advised Funds (DAFs) have grown significantly over the past decade as a popular tool for charitable giving. Despite their popularity, concerns remain about their efficiency in meeting charitable goals, especially during times of increased need. These concerns stem from the government subsidizing the tax treatment of DAFs, which provides donors with favorable tax deductions. Using data from Form 990 e-filings, this study examines how DAFs respond to natural disasters, which typically encourage charitable donations. We find that contributions to DAFs rise significantly during years with frequent natural disasters compared to other nonprofits. However, DAFs do not proportionally increase their grant payouts following these events. This trend persists even when comparing DAFs to private foundations and focusing on local disasters. Although total grants remain limited, DAF donors show increased engagement in reallocating funds to health- and food-related organizations and nonprofits with greater media coverage after disasters. This selective distribution pattern indicates that while DAF donors respond to disasters, they are hesitant to significantly increase total grant payouts, possibly due to factors like mental accounting.

#### Work in Progress

"Investors and the City: The Role of Institutional Ownership in the Allocation of Climate Infrastructure" with Kelly Posenau and Ana-Maria Tenekedjieva

· Presentations: 2024 WAPFIN at Stern\*: 2024 Oxford Sustainable Private Markets Conference\*.

#### TEACHING EXPERIENCE

TA for Undergraduate Courses

AEM 4230/5230 Behavioral Finance (Lawrence Jin, Fall 2024 & Fall 2025)

AEM 4280 Valuation of Capital Investment (David Ng, Spring 2024)

AEM 4060/6061 Risk Simulation and Monte Carlo Methods (Calum Turvey, Spring 2022 & 2023)

AEM 2600 Managerial Economics (Ben Leyden, Fall 2022)

ORIE 4741 Learning with Big Messy Data (Madeleine Udell, Fall 2019)

TA for Graduate Courses

NBA 5980 Behavioral Finance (Lawrence Jin, Spring 2023)

NRE 5280 PhD Seminar in Empirical Asset Pricing (David Ng, Fall 2022)

AEM 6140 Behavioral Economics and Managerial Decisions (David Just, Fall 2021)

Average TA rating: 4.76/5 in student course evaluations for courses with TA sessions

## AWARDS, FELLOWSHIP, AND GRANTS

# **Cornell University**

Richard D. Aplin Teaching Excellence Fund, 2024 & 2025

NFA PhD Student Travel Grant, 2024

Morgenthau Henry & Marcelle Fellowship Award, 2021-2023

Cornell PhD TA/GRA Fellowship, 2020-2026

Silent Hoist and Crane Award, Third Place, 2019

## Skidmore College

Mathematical/Interdisciplinary Contest in Modeling, 2018

- · Outstanding Paper Award, INFORMS Award, and International COMAP Scholarship Award
- · Fan, Sijia, Ran Tao, and Kaifeng Yang. "How Does Climate Change Influence Regional Instability?", *UMAP (Undergraduate Mathematics and Its Application) Journal* Vol.39 Issue 2 (2018): p165-186
  - · Presentation: MAA MathFest 2018

William E. Weiss Memorial Award in Economics, 2018

Phi Beta Kappa, 2017

#### OTHER EMPLOYMENT

#### **Block Renovation**, NYC

Data Science Intern, February 2020 - July 2020

#### **OTHERS**

Programming Languages R, Python, Julia, Java, SQL

Passed PhD qualifying Exams Finance in Jan. 2023; Dyson Economics in June 2021. Languages Mandarin (native), English (fluent), Spanish (basic)