

SIJIA FAN

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EDUCATION

Cornell University Ph.D. in Applied Economics and Management, Concentration: Finance	2020 - 2026
Cornell University M.Eng., Operations Research and Information Engineering	2018 - 2019
Skidmore College B.A. in (Hons) Economics and Mathematics. <i>Summa Cum Laude</i> Undergrad Thesis: "Stock Market Reactions to Industrial Disasters: Evidence from Incident Firms and Their Competitors"; 2018 Periclean Scholar Thesis Award	2014 - 2018

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 Impact of Floods and Flood Risk" (JMP)

- **Abstract:** *I examine the effects of floods and flood risk on US establishments and firms by combining establishment-level data with FEMA flood maps and high-resolution remote sensing. I document significant increases in employment and sales at flooded establishments. Using event study and spatial regression discontinuity around regulatory boundaries, I provide novel evidence that federal flood insurance helps post-disaster recovery. I also find suggestive evidence of positive regional spillovers from federal spending. In contrast, establishments located in high-risk flood zones tend to reduce employment, potentially due to disincentive effects of elevated insurance costs and reduced local economic diversity. At the firm level, I use large language models to classify voluntary flood risk disclosures in 10-K filings and earnings calls. Firms with higher flood exposure are more likely to disclose relevant risks and adjust their operations by reducing their inventories and tangible assets. Meanwhile, I find significant negative stock market reactions to floods, particularly for firms that lack prior flood risk disclosures, have no establishments in high-risk areas, or have not previously experienced major flooding. Overall, my study underscores the role of insurance and risk disclosures in post-disaster recovery, while pointing to the broader economic costs of chronic climate risk exposure and the importance of aligning long-term policy and market incentives to promote sustainable 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 threat that affects firms’ cash flows based on their exposure. Its complexity and uncertainty increase investor demand for disclosure, yet managers may hesitate to provide it, creating a disclosure gap. This study examines how biodiversity risk disclosures influence investor perceptions. Using natural language processing and large language models, we identify and classify voluntary biodiversity risk disclosures in 10-K filings. We find that investor and stakeholder pressure encourages firms to disclose, which helps reduce uncertainty about their risk exposure. Interestingly, firms tend to make direct disclosures—explicit acknowledgments of risk—when they are confident in their assessments. However, investors respond more strongly to indirect disclosures, where risk is implied through business discussions. This highlights a key dynamic: while managers prefer “reliability” and wait until they are certain before disclosing risk, investors place greater value on more “relevant” early indicators, even if those signals are less definitive. This dynamic shapes how emerging risks like biodiversity are communicated in financial reporting.
- **Presentations:** CICF 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 (Submitted, 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)
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

NFA PhD Student Travel Grant, 2024
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

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)