

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>	2014 - 2018

RESEARCH PAPERS

Working Papers

“How Firms Recover after Floods: Mechanisms and Evidence” (JMP)

- **Abstract:** Floods are among the costliest disasters, yet we know little about how businesses recover. This matters as climate risk rises and the Federal Emergency Management Agency (FEMA) faces fiscal pressures. Using establishment-level data that link remote sensing inundation to FEMA flood maps, I provide novel causal evidence that flood insurance is a key driver of business recovery. I combine a triple difference design around Hurricane Sandy with a spatial regression discontinuity at floodplain borders. Flooded establishments just inside floodplains, where properties with federally backed or regulated mortgages must carry flood insurance, recover more in employment and sales than otherwise similar sites just outside. Effects are larger where firms are likelier to be insured and where policy limits can cover more losses. Using parent companies’ pre-event insurance-opportunity disclosures as a coverage proxy, I find that affiliated establishments recover more after flooding. Federal post-disaster aid is associated with additional local improvements. In equity markets, price drops around flood news are smaller for firms with prior exposure or disclosure. Overall, the evidence indicates insurance coverage materially shapes business recovery as claims provide liquidity that enables capital upgrading and reallocation.
- **Workshop/Presentation:** AFA Poster 2026 (scheduled); NBER Climate Finance PhD Workshop, 2025 (scheduled); Cornell Finance Brown Bag.

“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.

“Corporate Disclosure of Biodiversity Risk Exposure” with Miao Liu, Yao Lu, and David Ng (Under Review)

- **Abstract:** Biodiversity risk is an emerging challenge for firms and a growing concern for investors. We 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. While managers tend to issue direct disclosures in response to information demand, investors react more strongly to indirect disclosures, especially when these disclosures appear for the first time. This divergence underscores a tension in disclosure preferences for exposure to emerging and rapidly evolving risks 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

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.

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

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

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)

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

Periclean Scholar Thesis Award, 2018

- Undergrad Thesis: “Stock Market Reactions to Industrial Disasters: Evidence from Incident Firms and Their Competitors”

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

Passed PhD qualifying Exams

Languages

R, Python, Julia, Java, SQL

Finance in Jan. 2023; Dyson Economics in June 2021.

Mandarin (native), English (fluent), Spanish (basic)

REFERENCES

David Ng (chair)

Professor of Finance

Geller Family Faculty Fellow

Cornell University

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Kelly Posenau

Assistant Professor of Finance

Cornell University

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Andrew Karolyi

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Harold Bierman Professor

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