

Do Investors Price Extreme Events? Evidence from Capital Markets

Project abstract: Extreme climatic and environmental events (such as heat-waves, floods, hurricanes, and wildfires) are becoming more frequent and severe, raising fundamental questions about how economic agents perceive and price tail risks. While a growing literature documents the real effects of extreme events on firms and households, less is known about whether and how investors understand, anticipate, and price these rare but disruptive shocks.

This project investigates whether capital markets “get” extreme events. Specifically, it examines how measures of extreme risk (derived from weather extremes or other rare-event indicators) are reflected in financial markets. Students will explore empirical evidence from equity markets (returns, volatility, trading volume), option markets (implied volatility, skewness, tail risk measures), or selected macro-financial variables.

The project sits at the intersection of climate risk, extreme-event modelling, and financial economics, drawing conceptually on rare events and large deviations, while remaining empirically tractable. The goal is to assess whether market reactions are consistent with rational pricing of tail risks, delayed learning, or systematic under-reaction to extreme events.