# 孙欣慧

微信：18501303855
邮箱：xinhuis2@illinois.edu
个人主页：https://xinhuis.github.io/


## 教育背景

**伊利诺伊大学香槟分校**
经济学博士 （预计）2026 年 5 月
导师: Tatyana Deryugina 教授

**伊利诺伊大学香槟分校**
经济学硕士 2019 年 12 月

**对外经济贸易大学**
经济学学士（辅修法语） 2018 年 6 月

**加州大学伯克利分校**
交换生 2017 年 1 月–5 月

## 研究兴趣

**因果推断, 环境经济, 行为经济**

## 工作论文

**Air Pollution and Economic Activity: Evidence from Foot Traffic Patterns in the U.S.** (Job Market Paper)

I investigate how air pollution affects economic activity. Using over 600 million phone-location-based foot traffic data points from SafeGraph, I conduct a large-scale analysis to examine the causal effect of air pollution on activity patterns across the US. Using changes in local wind direction as an instrumental variable (IV) for air pollution, I characterize the dynamic response to pollution exposure. I find that PM2.5 reduces economic activity in both the short and medium run, with effects persisting for up to two weeks before gradually recovering. The reductions are widespread across different economic sectors, with recreational activities experiencing the largest decline. The effect is more pronounced in higher-income counties and areas with larger shares of children, suggesting greater awareness among wealthier or more vulnerable populations.

**Go with the Wind: Polluters' Strategic Response to Wind Directions**

I investigate the strategic behavior of polluters in the US. Under the Clean Air Act, air quality monitor data determine whether an area meets environmental standards. Because wind carries pollution, monitors detect more pollution from upwind sources and less from downwind sources. This disparity incentivizes polluters to emit less when they are upwind of a monitor, and more when they are downwind. I identify such strategic behavior among US coal-fired power plants, finding that a one-standard-deviation increase in favorable wind direction—when wind blows pollutants away from monitors—leads to a 0.8% (172 lbs) and 0.4% (54 lbs) increase in sulfur dioxide ($SO_2$) and nitrogen dioxide ($NO_x$) emissions, respectively. At the same time, fuel input remains constant while emission rates rise, suggesting that power plants temporarily turn off pollution control equipment. Additionally, the increase is more pronounced when power plants are in a non-attainment county, located in the same state as the monitor, or surrounded by fewer nearby polluters. These findings suggest that polluters facing stricter regulatory pressure are more likely to respond strategically when conditions are favorable.

## 在研项目

**Natural Disasters and Occupational Mobility: Evidence from the 1927 Mississippi Flood**
(合作者：Xiaohan Wang)

We investigate how a major natural disaster affect intergenerational occupational mobility in the agricultural sector. Linking individuals across the 1920, 1930, and 1940 Censuses, we show that children residing in counties affected by the 1927 Mississippi Flood were significantly less likely to become farmers as adults. This effect is mainly driven by children from non-farming families, who were 9% less likely to work in agriculture and 10% more likely to transition into the service sector. In the longer run, these individuals achieved socioeconomic status scores about 3% higher than comparable children in non-flooded counties. Our findings suggest that natural disasters can accelerate structural change by shifting new labor market entrants out of agriculture and into higher-status occupations.

**Social Networks and Household Protective Investments: Evidence from Wildfire Smoke**
(合作者：Sanjukta Mitra)

**Deforestation and Air Pollution in the Indonesian Rainforest**
(合作者：Francesco Cenerini)

## 学术会议

**2026**

美国经济学年会 (费城)

**2025**

南部经济学协会年会（坦帕），中西部经济学协会年会（堪萨斯城），东部经济学协会年会（纽约市），Applied Micro Research Lunch（伊利诺伊大学香槟分校），Graduate Student Research Seminar（伊利诺伊大学香槟分校）

**2024**

Occasional Workshop in Environmental and Resource Economics（加州大学圣塔芭芭拉分校），Online Summer Workshop in Environment, Energy, and Transportation（线上），Applied Micro Research Lunch（伊利诺伊大学香槟分校），Graduate Student Research Seminar（伊利诺伊大学香槟分校）

**2023**

Price Theory Summer Camp（芝加哥大学），Applied Micro Research Lunch（伊利诺伊大学香槟分校）

**2022**

Berkeley/Solan Summer School in Environmental and Energy Economics，Applied Micro Research Lunch（伊利诺伊大学香槟分校）

## 工作与科研经历

**伊利诺伊大学商学院** 美国伊利诺伊州
研究助理（Tatyana Deryugina 教授） 2022 年 8 月至今

**伊利诺伊大学经济系** 美国伊利诺伊州
研究助理（Eunyi Chung 教授） 2021 年 6 月–2022 年 8 月

**北京大学中国教育财政科学研究所** 北京
研究助理 2020 年 3 月–8 月

**交通银行总行风险管理部** 上海
数据分析实习生 2017 年 6 月–8 月

**对外经济贸易大学国际经济贸易学院** 北京
研究助理（苑德宇教授） 2016 年 9 月–2017 年 1 月

## 教学经历

**ECON 102：微观经济学原理** 2021 年秋季，2022 年春季
助教

**企业经济学（华沙大学 EMBA 项目）** 2019 年秋季
助教

**ECON 528：商业微观经济学** 2019 年春季，夏季
课程助理

## 荣誉

- Robert Willis Harbeson Memorial Dissertation Fellowship, 伊利诺伊大学香槟分校 2025
- Hung-Chao and Julia Tai Family Fellowship, 伊利诺伊大学香槟分校 2025
- Cleo Fitzsimmons Award, 伊利诺伊大学香槟分校 2022
- 研究生奖学金, 伊利诺伊大学香槟分校 2020

## 技能

**语言**: 中文 (母语), 英文 (精通), 法语 (基础).
**计算机**: `R`, `Python`, `Stata`, `Git`, `Shell`.

推荐人

**Tatyana Deryugina（委员会主席）**
副教授
Gies 商学院
伊利诺伊大学香槟分校

**David Molitor**
副教授
Gies 商学院
伊利诺伊大学香槟分校

**Julian Reif**
副教授
Gies 商学院
伊利诺伊大学香槟分校

**George Deltas**
教授
经济系
伊利诺伊大学香槟分校