Yicheng (Tonny) Cai

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EDUCATION

Duke University Durham, NC
M.A. in Economics expected May 2028

- Duke Economics Master's Top Scholar Award (20% tuition waiver)

Oberlin College Oberlin, OH
B.A. in Economics (with Honors) and Mathematics May 2026

- Minors in East Asian Studies and Statistical Modeling. GPA 3.85/4.00
- Honors thesis: administrative burden on local government staff under China's Targeted Poverty Alleviation programme, with night-light intensity over government offices as a proxy for overtime

University of Oxford, Magdalen College Oxford, UK
Visiting Student, Economics and Mathematics 2024–2025

- GPA 3.78/4.00

RESEARCH FIELDS

Public Economics • Development Economics • Chinese Economy

PUBLICATIONS

Cai, Yicheng, Faeze Akbari, and Vahid Mohamad Taghvaee (2025). "Hypotheses Interconnecting Economic Development with Environmental Quality: Reviewing Empirical Methods, Equations, and Models." In Nicholas Apergis (ed.), *Encyclopedia of Monetary Policy, Financial Markets and Banking*, vol. 1, 624–628. Academic Press. doi:10.1016/B978-0-44-313776-1.00345-7

WORKING PAPERS

1. "Shells Without Substance: What Happens When a Tax Haven Closes." *October 2026.*
   Stacked event study around the 2018 dismantling of a Chinese border-county tax exemption, covering 183 listed parents and 1,881 haven subsidiary-years drawn from a register of 1,363,368 subsidiary-years. Exposed parents become 14.6–22.1 percentage points less likely to report positive pre-tax profit, while revenue and taxes actually paid do not move; havens that require real operations show an effect of zero.
2. "Fifty Minus One: How a Statutory Partner Cap Built a 59,000-Entity Pyramid in Nanjing, 2015–2021." *November 2026.*
   59,061 limited partnerships registered by a single operation in two founding years. Of 69 inter-tier capital ratios, 64 fall in $[48, 49]$ and none exceeds 49 (maximum 48.99, median 48.58): the 50-partner cap of the Partnership Enterprise Law minus the one required general partner.
3. "Targeting Yesterday: Industrial Zones and the Selection of Declining Industries in China, 2003–2021." *October 2026.*
   Declared industries of 2,405 national and provincial development zones matched to a county-by-industry registration panel (2,887 counties, 96 industries), estimated by stacked quadruple difference with Poisson pseudo-likelihood on 1,338,430 county-industry-year observations. Registration shifts toward the declared industry, but zones systematically declare industries already contracting nationally.

4. "A Screen for Manufactured Entry: Registered Capital Roundness in 27 Provinces of China's Business Registry." *November 2026.*
   A single-inequality screen for registrations produced by division rather than chosen by a founder, run on 81,482,453 non-individual registration records.

WORK IN PROGRESS

1. "Who Buys When the Market Stops: Local Government Platforms in China's Land Auctions, 2009–2024." Parcel-level measurement over 3,511,920 land transfers.
2. "A Cap Is an Estimator: Person-Count Thresholds, Tiling, and the Conditions Under Which an Anti-Circumvention Device Bites." Sixteen numerical caps across five jurisdictions.
3. "The Denominator Decides: Business Dynamism in China and the Arithmetic of Registered Stock." One set of flows, three denominators, three signs.
4. "Competing for Paper: Registration Arbitrage and a Newly Created Tax Base in China, 2019–2024."
5. "Deleveraging, Not a Run: How China's Local Platform Bond Market Contracted, 2021–2026."
6. "Leaving the List: What Happens When a Chinese Financing Platform Declares It Is Not One."

RESEARCH EXPERIENCE

Honors Program, Department of Economics, Oberlin College Sep 2025 – May 2026
Honors Candidate

- Measured the labor cost of a large institutional mobilization programme, taking China's Targeted Poverty Alleviation campaign as the case.
- Proxied the administrative burden on city government workers by the daily night-light intensity over government office buildings, which captures overtime that payroll and staffing records do not.
- Estimated Callaway and Sant'Anna group-time average treatment effects, to accommodate heterogeneous timing and anticipation.
- Built a two-stage central and local government game that reproduces the empirical pattern as an equilibrium of strategic interaction rather than a mechanical response.

Climate Change Economics and the Low Carbon Transition, University College London Jul 2025 – present
Research Assistant

- Assembling and summarizing interdisciplinary evidence on climate change economics for an ongoing review project.

Winter Term Research Scholar, Oberlin College Oct 2025 – Jan 2026
Oil price fluctuations and Dutch petrochemical exports

- Estimated the pass-through of Brent crude price fluctuations to Dutch petrochemical exports across eight products, from ethylene and propylene to polypropylene and ammonia.
- Instrumented the oil price with OPEC's monthly production announcements, and selected between SVAR and ARDL specifications according to the stationarity of each series.

Department of Economics, University of Oxford Sep 2024 – Apr 2025
Co-Author, economic development and environmental quality

- Reviewed the Environmental Kuznets, pollution halo, pollution haven, resource curse and Porter hypotheses, and the empirical record that separates them.
- Compared the SEY model, IPAT, STIRPAT, the Kaya identity and the log mean Divisia index as accounting frameworks. Published as a chapter; see Publications.

Department of Economics, University of Oxford Oct 2024 – Dec 2024

Research Assistant, cash transfers and farmers' migration

- Surveyed the development literature on flood exposure and agricultural conditions, migration, land holdings and per capita income.
- Focused on how cash transfers alter migration in villages along the Jamuna River, Bangladesh, under annual flooding.

Winter Term Research Scholar, Oberlin College Dec 2023 – Feb 2024

Overcapacity in China's real estate sector

- Examined the sector through the land transfer system and the household registration system, decomposing local government revenue by source.
- Presented the argument on urban and rural dual structure and excess capacity in an eight-page essay.

PROFESSIONAL EXPERIENCE

Huafu Securities, Industry Research Analyst (remote) Sep 2026 – present

- Healthcare coverage: reviewed a CAR-T developer's clinical pipeline, competitive landscape and drug targets, and wrote the initiation report.
- Built the valuation: capacity utilization assessment, DCF and sensitivity analysis; maintained absolute and relative valuation models.
- Tracked weekly portfolio performance, sector indices and block trades.

Guotai Junan Securities, Industry Research Analyst (remote) Aug 2024 – Jul 2025

- Covered the titanium and coal chemical industries: key players, policy drivers and growth factors.
- Co-authored the coal chemical industry report on supply chain, production techniques and leading competitors.
- Produced the weekly sector report and collected monthly export data for MDI, TDI, titanium dioxide and soda ash.

Paratus Capital, Private Equity Analyst Sep 2023 – Dec 2023

- Screened software and business services targets with $1–5M free cash flow; presented six-plus company profiles to the managing partner.

East Asia Qianhai Securities, Industry Research Analyst Jul 2023 – Aug 2023

- Analysed the solar cell industry's value chain and growth drivers in a 62-page report, and drafted five equity research notes on manufacturers, issuing four BUY and one HOLD.

AWARDS AND HONORS

- Duke Economics Master's Top Scholar Award, Duke University, 2026
- The Comfort Starr Prize in Economics, Oberlin College, 2026
- John F. Oberlin Scholarship ($10,000 per year), Oberlin College
- Omicron Delta Epsilon, International Honor Society for Economics

ADDITIONAL TRAINING

- Asian Summer School in Econometrics and Statistics: time series, panel data, financial econometrics
- Oxford Spring School in Quantitative Tools: machine learning and causal inference

SKILLS AND SERVICE

- **Software:** Stata, R, Python, SQL, LaTeX
- **Languages:** English (fluent), Mandarin (native)
- **Service:** Founder, OEES Club, Oberlin College, 2023–2026. An academic exchange platform in development economics, environmental economics and sociology

Last updated November 2026.