

Tianyi Wang

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CONTACT INFORMATION

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University of Copenhagen
Department of Economics
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EDUCATION

Ph.D., Economics, University of Pittsburgh, 2020
Thesis Title: “Technology, Media, and Political Change”
Thesis Committee: Prof. Randall Walsh (Co-Chair), Prof. Osea Giuntella (Co-Chair), Prof. Allison Shertzer, Prof. Daniel I. Rees, and Prof. Douglas Hanley

M.A., Economics, University of Pittsburgh, 2018
B.A., Economics and Mathematics, Colgate University, *Summa Cum Laude*, 2015

APPOINTMENTS

Postdoc, Department of Economics, University of Copenhagen, since September 2020
IZA (Institute of Labor Economics) Research Affiliate, since September 2020

RESEARCH INTERESTS

Primary Fields: Political Economy, Economic History, Health Economics
Secondary Fields: Labor Economics, Technological Innovation

PUBLICATIONS

[“The Phenomenon of Summer Diarrhea and its Waning, 1910-1930”](#) (with D. Mark Anderson and Daniel I. Rees), *Explorations in Economic History*, forthcoming.

WORKING PAPERS

[“Media, Pulpit, and Populist Persuasion: Evidence from Father Coughlin”](#) (Job Market Paper). Revision requested by the *American Economic Review*.

[“The Electric Telegraph, News Coverage and Political Participation.”](#) Revision requested by the *Journal of Economic History*.

[“Water Purification Efforts and the Black-White Infant Mortality Gap, 1906-1938”](#) (with D. Mark Anderson, Kerwin Kofi Charles, and Daniel I. Rees), Revised and resubmitted to the *Journal of Urban Economics*.

“Waves of Empowerment: Black Radio and the Civil Rights Movement.”

“Industrial Robots, Workers’ Safety, and Health” (with Rania Gihleb, Osea Giuntella, and Luca Stella), IZA Discussion Paper No. 13672.

“Is an Army of Robots Marching on Chinese Jobs?” (with Osea Giuntella and Yi Lu), IZA Discussion Paper No. 12281.

TEACHING EXPERIENCE

Instructor, University of Pittsburgh

Intermediate Microeconomics, Summer 2019

Teaching Effectiveness Score: 4.7/5; Winner of the Graduate Student Teaching Award

Teaching Assistant, University of Pittsburgh

Introduction to Macroeconomics, Spring & Summer 2018, Spring & Summer 2020

Average Teaching Effectiveness Score: 4.6/5

Introduction to Microeconomics, Fall 2017, Fall 2019

Average Teaching Effectiveness Score: 4.6/5

Managerial Economics (MBA), Summer 2018

Average Teaching Effectiveness Score: 4.9/5

Peer Tutor

Economics for Public Affairs (MPA), University of Pittsburgh, Summer 2016

Principles of Economics, Colgate University, 2012-2014

HONORS, FELLOWSHIPS AND GRANTS

Sokoloff Dissertation Fellowship, Economic History Association, 2020

Outstanding Presenter Award, Grad Expo, University of Pittsburgh, 2019

Social Science Doctoral Dissertation Fellowship, University of Pittsburgh, 2018-2019

Best Second-Year Paper Award, University of Pittsburgh, 2018

Chou Fellowship for Economics, University of Pittsburgh, 2015-2017

SEMINAR AND CONFERENCE PRESENTATIONS

2020: Florida State University; University of New South Wales (scheduled); Montana State University (scheduled); University of Bayreuth (scheduled); Jinan University (scheduled); ASREC24h Conference (scheduled); Southern Economic Association Conference (scheduled); Applied Young Economist Webinar; Economic History Association Annual Meeting; ASREC Grad Student Workshop; NBER Development of American Economy Summer Institute (poster); Midwest Political Science Association Conference; Mountain West Economic History Conference; Werner Troesken Memorial Conference (cancelled); Social Science History Association Meeting (cancelled)

2019: Society of Labor Economists (SOLE) Annual Meeting; TASKS V Robotics, Artificial Intelligence and the Future of Work Conference; 17th Annual Media Economics Workshop; Southern Economic Association Conference; Economic History Association Annual Meeting (poster); Cliometrics Society Conference; Social Science History Association Conference; Pitt Grad Expo

2018: West Virginia University Applied Economics, Regional, and Urban Studies Conference; University of Michigan Health, History, Demography and Development (H2D2) Conference (poster); Economic History Association Annual Meeting (poster); Pitt Grad Expo

PROFESSIONAL ACTIVITIES

Referee: *Economic Inquiry, Industrial and Labor Relations Review, Journal of Computational Social Science, Labour Economics*

Organizing Committee Member: Werner Troesken Memorial Conference, 2020

Mentorship: Graduate Student Teaching Mentor, University of Pittsburgh, 2019-2020; Mentor for Second-Year Economics PhD Student, University of Pittsburgh, 2018-2019

OTHER PROFESSIONAL EXPERIENCE

Department Delegate, Arts & Sciences GSO, University of Pittsburgh, 2018-2019
Research Assistant for Prof. Osea Giuntella, Pitt Economics, Summer 2018
Research Assistant for Prof. Zijun Luo, Colgate Economics, Summer 2014
Research Assistant for Prof. Jing Wang, Colgate Asian Studies, 2013-2014
Research Intern, World Scientific Publishing, Singapore, March-June 2011

COMPUTER SKILLS:

Stata, Python, ArcGIS, MATLAB, SAS, LaTeX

LANGUAGES:

English (Fluent), Chinese (Native)

PERSONAL INFORMATION:

Date of Birth: November 1, 1991

Citizenship: China

WORKING PAPER ABSTRACTS

[“Media, Pulpit, and Populist Persuasion: Evidence from Father Coughlin”](#) (Job Market Paper). Revision requested by the *American Economic Review*.

New technologies make it easier for charismatic individuals to influence others. This paper studies the political impact of the first populist radio personality in American history. Father Charles Coughlin blended populist demagoguery, anti-Semitism, and fascist sympathies to create a hugely popular radio program that attracted tens of millions of listeners throughout the 1930s. I evaluate the short- and long-term impacts of exposure to Father Coughlin's radio program. Exploiting variation in the radio signal strength as a result of topographic factors, I find that a one standard deviation increase in exposure to Coughlin's anti-FDR broadcast reduced FDR's vote share by about two percentage points in the 1936 presidential election. Effects were larger in counties with more Catholics and persisted after Father Coughlin left the air. An alternative difference-in-differences strategy exploiting Coughlin's switch in attitude towards FDR during 1932-1936 confirms the results. Moreover, I find that places more exposed to Coughlin's broadcast in the late 1930s were more likely to form a local branch of the pro-Nazi German-American Bund, sell fewer war bonds during WWII, and harbor more negative feelings towards Jews in the long run.

[**"The Electric Telegraph, News Coverage and Political Participation."**](#) Revision requested by the *Journal of Economic History*.

How does timely access to national news shape political outcomes? Using newly digitized data on the growth of the telegraph network, the paper studies the impact of the electric telegraph on political participation in the mid-19th century America. I use proximity to daily newspapers with telegraphic connection to Washington to generate plausibly exogenous variation in access to telegraphed news from Washington. I find that access to Washington news with less delay increased presidential election turnout. Effects were concentrated in regions least connected to Washington prior to the telegraph. For mechanisms, I provide evidence that newspapers facilitated the dissemination of national news to local areas. Text analysis on historic newspapers shows that the improved access to news from Washington led newspapers to cover more national political news, including coverage of Congress, the presidency, and sectional divisions involving slavery. The results suggest that the telegraph made newspapers less parochial, facilitated a national conversation and increased political participation.

[**"Water Purification Efforts and the Black-White Infant Mortality Gap, 1906-1938"**](#) (with D. Mark Anderson, Kerwin Kofi Charles, and Daniel I. Rees), Revision requested by the *Journal of Urban Economics*.

According to Troesken (2004), efforts to purify municipal water supplies at the turn of the 20th century dramatically improved the relative health of blacks. There is, however, little empirical evidence to support the Troesken hypothesis. Using city-level data published by the U.S. Bureau of the Census for the period 1906-1938, we explore the relationship between water purification efforts and the black-white infant mortality gap. Our results suggest that, while water filtration was effective across the board, adding chlorine to the water supply reduced mortality only among black infants. Specifically, chlorination is associated with an 11 percent reduction in black infant mortality and a 13 percent reduction in the black-white infant mortality gap. We also find that chlorination led to a substantial

reduction in the black-white diarrhea mortality gap among children under the age of 2, although this estimate is measured with less precision.

“Waves of Empowerment: Black Radio and the Civil Rights Movement.”

In the early 1960s, as the civil rights movement was gaining momentum, Black-oriented radio stations were broadcasting across large swaths of the South. This paper uses newly digitized data to provide the first empirical evidence on the effects of Black radio on the civil rights movement. Exploiting plausibly exogenous variation in signal reception resulting from topographic factors, I find strong evidence that Black radio increased Black political participation and activism in the South during the early 1960s, as measured by Black voter registration and the presence of a local chapter of the NAACP. For mechanisms, I find evidence consistent with Black radio increasing the reach of civil rights groups and providing positive role models to African Americans. Moreover, results suggest that exposure to Black radio translated into substantive economic and political gains for the Black community in the form of greater state aid and legislative support for civil rights bills. Much of the effects of Black radio took place before the enactment of landmark civil rights legislation, highlighting the significance of Black radio to the Black community.

“Industrial Robots, Workers’ Safety, and Health” (with Rania Gihleb, Osea Giuntella, and Luca Stella), IZA Discussion Paper No. 12281.

This study explores the relationship between the adoption of industrial robots and workplace injuries using data from the United States and Germany. Our empirical analyses, based on establishment-level data for the US, suggest that a one standard deviation increase in robot exposure reduces work-related injuries by approximately 16%. These results are driven by manufacturing firms (-28%), while we detect no impact on sectors that were less exposed to industrial robots. We also show that the US counties that are more exposed to robot penetration experience a significant increase in drug- or alcohol-related deaths and mental health problems, consistent with the extant evidence of negative effects on labor market outcomes in the US. Employing individual longitudinal data from Germany, we exploit within-individual changes in robot exposure and document similar effects on job physical intensity (-4%) and disability (-5%), but no evidence of significant effects on mental health and work and life satisfaction, consistent with the lack of significant impacts of robot penetration on labor market outcomes in Germany.

“Is an Army of Robots Marching on Chinese Jobs?” (with Osea Giuntella and Yi Lu), IZA Discussion Paper No. 12281.

A handful of studies have investigated the effects of robots on workers in advanced economies. According to a recent report from the World Bank (2016), 1.8 billion jobs in developing countries are susceptible to automation. Given the inability of labor markets to adjust to rapid changes, there is a growing concern that the effect of automation and robotization in emerging economies may increase inequality and social unrest. Yet, we still know very little about the impact of robots in developing countries. In this paper we

analyze the effects of exposure to industrial robots in the Chinese labor market. Using aggregate data from Chinese prefectural cities (2000-2016) and individual longitudinal data from China, we find a large negative impact of robot exposure on employment and wages of Chinese workers. Effects are concentrated in the state-owned sector and are larger among low-skilled, male, and prime-age and older workers. Furthermore, we find evidence that exposure to robots affected internal mobility and increased the number of labor-related strikes and protests.

SELECTED RESEARCH IN PROGRESS

“Televangelism and its Impacts” (with Jeanet Bentzen)

“Technological Innovation and Health: Evidence from the Refrigeration Revolution”
(with D. Mark Anderson, Michael McKelligott, Daniel I. Rees, and Jonathan Rees)

“Import Competition and Human Capital Investment” (with Osea Giuntella)

REFERENCES

Prof. **Randall Walsh** (Co-Chair)
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