DING LIU

Southern Methodist University
Department of Economics
Box 0496, SMU, Dallas, TX 75275-0496

Cell Phone: (214) 984-4354
Website: http://econdingliu.weebly.com
Email: dingl@smu.edu

EDUCATION

Ph.D. in Economics, Southern Methodist University, Dallas, TX, May 2022 (expected)
Advisors: Daniel Millimet (primary), James Lake, Thomas Fomby
Dissertation: Three Essays in Applied Microeconomics

M.A. in Economics, Southern Methodist University, May 2018

M.S. in Applied Economics and Predictive Analytics, Southern Methodist University, May 2016

B.S. in Financial Mathematics and Statistics, Northwest University, China, July 2014

RESEARCH FIELDS

Labor Economics, International Trade, and Applied Microeconomics

PUBLICATIONS

Liu, D. and D.L. Millimet (2021) "Bounding the Joint Distribution of Disability and Employment with Misclassification", *Health Economics*, 30(7), 1628-1647.

Abstract: *Understanding the relationship between disability and employment is critical and has long been the subject of study. However, estimating this relationship is difficult, particularly with survey data, since both disability and employment status are known to be misreported. Here, we use a partial identification approach to bound the joint distribution of disability and employment status in the presence of misclassification. Allowing for a modest amount of misclassification leads to bounds on the labor market status of the disabled that are not overly informative given the relative size of the disabled population. Thus, absent further assumptions, even a modest amount of misclassification creates much uncertainty about the employment gap between the non-disabled and disabled. However, additional assumptions considered are shown to have some identifying power. For example, under our most stringent assumptions, we find that the employment gap is at least 15.2% before the Great Recession and 22.0% afterward.*

WORKING PAPERS

Liu, D. "Impact of Robots in Monopsonistic Labor Markets", Job Market Paper

Abstract: *Perhaps the two most important features of current labor markets in the US and other developed countries are the increasing importance of robots and the growing monopsony power of firms in labor markets. While each has been studied extensively in isolation, the interplay between them has been overlooked. This paper explores how monopsony power affects the impact of robot adoption on US labor markets. Theoretically, I show that robots have stronger effects (either positive or negative) on employment and wages in a perfectly competitive labor market than a perfectly monopsonistic labor market. Moreover, the sign*

of the effects depends on whether robots and labor are substitutes or complements. Empirically, I define a labor market as a commuting-zone-by-occupation cell, and measure robot exposure and labor market monpsony power for each cell. To alleviate endogeneity concerns, I instrument for both the US exposure to robots and labor market monopsony power. My empirical results show that, from 2006 to 2014, one more industrial robot per thousand workers significantly reduces the employment-to-population ratio by 2% and wages by 0.9% in near-perfectly competitive labor markets. But consistent with the theory, the employment and wage effects diminish as labor market monopsony power grows and they become statistically insignificant in near-monopsonistic labor markets.

Lake, J. and Liu, D. "Local Labor Market Impacts of the 2002 Bush Steel Tariffs"
Abstract: *President Bush announced the three-year imposition of safeguard tariffs on a variety of steel products in early 2002. Based on US local labor markets and US input-output tables, we use a difference-in-difference methodology to analyze the local labor market employment effects of these tariffs depending on how much local labor markets rely on steel as an intermediate input and how much they rely on steel production. Our results show that, at best, the tariffs only slightly boosted local employment in steel-producing industries. But, the tariffs substantially depressed local employment in steel-consuming industries and this depression did not bounce back after Bush removed the tariffs. These results suggest significant and long-lasting damage from the Trump administration's national security tariffs on steel and aluminum.*

CONFERENCES

Impact of Robots in Monopsonistic Labor Markets
Southern Economic Association 91th Annual Meeting (2021), SMU Brown Bag Seminar (2021), SMU Three Minute Thesis Finals (2021), SMU Microeconomics Workshop (2021)

Bounding the Joint Distribution of Disability and Employment with Misclassification
Southern Economic Association 90th Annual Meeting (2020) (Virtual), Texas Camp Econometrics XXV (2020), Stata Texas Empirical Microeconomics Conference (2019), SMU Third-year Paper Presentation (Cobb Fellowship winner, 2019)

Local Labor Market Impacts of the 2002 Bush Steel Tariffs
SMU Microeconomics Workshop (2020)

ACADEMIC EXPERIENCE

Research Assistant

Prof. James Lake, Southern Methodist University (Sept–Nov 2020, May–Dec 2021)
Prof. Yunok Cho, Southern Methodist University (May–Aug 2019, Sept–Nov 2020)

Teaching Assistant, Southern Methodist University

Principles of Microeconomics, International Trade, Strategic Behavior, Intermediate Macroeconomics, Special Topics in Economic History and Development, Microeconomic Theory (PhD), Quantitative Economics (PhD), Econometrics (PhD), Strategic Management (MBA)

PROFESSIONAL EXPERIENCE

Board Member, SMU Economics Graduate Club, Dallas (2018–present)
Part-time Tutor, FrogTutoring, Dallas (2016–present)

Intern, Pan-China Certified Public Accountants, Xi'an, China (July–Aug 2015)
Intern, Chang'an Bank, Xi'an, China (Jul–Sept 2013)

PROGRAMMING SKILLS

Stata, SAS, R, TeX, MATLAB, Python

FELLOWSHIPS AND AWARDS

Dean's Dissertation Fellowship, Southern Methodist University, 2021
Moody Travel Grant for SEA 91th Conference, Southern Methodist University, 2021
Cobb Fellowship, Southern Methodist University, 2019
Full Tuition Scholarship, Southern Methodist University, 2017–2021
Omicron Delta Epsilon National Honor Society in Economics, 2016
SAS Advanced Programming Certificate, 2016
SAS Base Programming Certificate, 2015
First Prize in China Mathematical Contest in Modeling, China, 2012
First Rank Scholarship in Northwest University, China, 2012
Third Rank Scholarship in Northwest University, China, 2013

REFERENCES

Prof. Daniel Millimet (primary advisor)
Department of Economics, Southern Methodist University
E-mail: millimet@smu.edu
Phone: (214) 768-3269

Assoc. Prof. James Lake
Department of Economics, Southern Methodist University
E-mail: jlake@smu.edu
Phone: (214) 768-3274

Prof. Thomas Fomby
Department of Economics, Southern Methodist University
E-mail: tfomby@smu.edu
Phone: (214) 768-2559

Dr. Wenhua Di
Federal Reserve Bank of Dallas
E-mail: wenhua.di@dal.frb.org
Phone: (214) 922-5534