Do Robots Necessarily Displace Workers? Evidence from Mexican Local Labor Markets

This study uses the rapid rise of automation in Mexico to examine the labor market effects of industrial robot adoption in industrializing countries. I combine unique data on robot imports with administrative, survey, and economic census data. I exploit spatial and time variation in robot imports across commuting zones to estimate the impacts of automation on labor market outcomes. I find that industrial robot adoption does not negatively affect formal employment and average wages in Mexico; these results contrast with findings for developed countries. I can rule out adverse effects of a size as large as -0.7% for formal employment and -0.01% for formal wages in the short run, and I find positive effects of 6% and 3%, respectively, in the long run. I also provide evidence that these results are not due to compositional effects. Additionally, I show that after a CZ starts importing robots, its aggregated gross value added per worker increases, consistent with the productivity effect dominating or compensating for any adverse displacement effect. Despite a substantial pool of unskilled labor, automation in industrializing economies such as Mexico can yield nonnegative employment effects because of the significant productivity enhancements associated with a higher price elasticity of demand and the early stages of automation.

Publications


WORKING PAPERS

WORKS IN PROGRESS
Reconciling the Evidence on False Links in Historical Data (with Martha Bailey, Connor Cole, and Jonas Helgertz)
Social Mobility and Economic Development: Cohort Level Evidence (with Guido Neidhöfer, Matias Ciaschi, Antonio Ciccone, and Leonardo Gasparini)
Effectiveness and Consequences of Occupation and Industry-specific Minimum Wages (with Tomas Guanziroli)

AWARDS AND FELLOWSHIPS
Dissertation Year Fellowship, Graduate Division, UCLA, 2023
Graduate Summer Research Mentorship Program, Graduate Division, UCLA, 2019.
Graduate Division Fellowship, Department of Economics, UCLA, 2018
Distinguished Graduate Award, UNLP, 2017 (awarded to the most outstanding graduate of the MA in Economics at UNLP each year)
Graduate Scholarship, Granted by the National Scientific and Technical Research Council (equivalent to NSF), Argentina. June 2014 - June 2018.

Young Economist Award 2016 for the best paper presented by a junior researcher under 29 years old, granted by the Argentine Association of Political Economy (AAEP), 2016.
Dr. Joaquín V. González Award, Municipality of La Plata, 2013 (awarded to the top three graduates in Economic Sciences at UNLP each year).
Manuel Belgrano Award, Facultad de Ciencias Económicas, UNLP, 2013 (awarded to the most outstanding graduate of the BA in Economics at UNLP each year).

RELEVANT POSITIONS
CCPR Student Affiliate, California Center for Population Research, UCLA. Since 2019.
Associate Researcher, Center for Distributive, Labor and Social Studies (CEDLAS) Universidad Nacional de La Plata. Since 2018.
Research Assistant, Center for Distributive, Labor and Social Studies (CEDLAS) Universidad Nacional de La Plata. 2012-2013.

TEACHING EXPERIENCE
Teaching Assistant at UCLA in:
ECON 133 (Intergenerational Poverty in the US), undergraduate. Fall 22
ECON 1 (Microeconomics), undergraduate. Fall 20, Winter and Spring 22, 23.
ECON 101 (Advanced Microeconomics), undergraduate. Spring 20.
ECON 103 (Econometrics), undergraduate. Winter 20.
ECON 2 (Macroeconomics), undergraduate. Fall 19.
Teaching Assistant at Universidad Nacional de La Plata in:


Presentations at Conferences and Seminars


1º Academic cooperation meeting on social information, Universidad del Litoral, Santa Fe, Argentina, June 2017.


Professional Service

Referee: Journal of Labor Economics (JOLE), Journal of Development Economics (JDE), World Development (WD)

Others

Citizenship: Argentina

Languages: Spanish (native), English (fluent), Italian (fluent)

Software: STATA, R, ArcGIS, Python, Matlab