RODIMIRO RODRIGO

Phone: +1(202) 288 1580, e-mail: rr1041@georgetown.edu
www.rodimirorodrigo.com

EDUCATION

Georgetown University
Ph.D. Candidate in Economics, GU fellowship, 2022 *(expected)*

> **Research fields:** Macroeconomics, Labor Economics, International Trade, Industrial Organization

> **References:** Adriana Kugler, Toshihiko Mukoyama *(main advisor)*, John Rust

Harvard Business School
Visiting Fellow PhD Student, 2021 – 2022. **Mentor:** William Kerr

University of Pennsylvania
M.A. in Economics, UPenn fellowship, 2012

Instituto Tecnológico Autónomo de México
B.A. in Economics, ITAM scholarship, *Summa Cum Laude* – Top 3% of the cohort, 2009

WORKING PAPERS

"Robot Adoption, Organizational Capital and the Productivity Paradox", 2020 *(JMP)*

"U.S. Robots and their Impacts in the Tropics: Evidence from Colombian Labor Markets", with A. Kugler, M. Kugler and L. Ripani, *NBER Working Paper No. 28034*, November 2020 *(R&R, World Development)*

WORK IN PROGRESS

"Sugar crops and the automotive industry in Brazil: the consequences of industrial policy", with W. Kerr

"Labor Market Power and Informality in Brazil" *(RAIS & PME)*, with A. Pineda

"The Life and Death of Mexican Firms in times of Covid-19", with E. Alcaraz, D. Aldama-Navarrete, L. Chigo, E. Lopez-Cordova

"Cheating Networks", with C. Martinelli and S. Parker

PUBLICATIONS

"Cheating and Incentives: Learning from a Policy Experiment", with C. Martinelli, S. Parker and A. Pérez-Gea. *American Economic Journal: Economic Policy*, 10: 298–325, February 2018 *(highlighted by the AEA)*

"Closing the Achievement Gap on Mathematics: Evidence from a Remedial Program in Mexico City", with E. Gutierrez. *Latin American Economic Review*, 1–30, November 2014

AWARDS, FELLOWSHIPS, AND GRANTS

2021	Georgetown, Department of Economics, Maloof Fellowship, for outstanding performance at the dissertation stage
2021	The Economy of Francesco, Research Fellow
2020	World Bank, Research Grant – "The impacts of Covid-19 in Mexican firms"
2019	Georgetown, Department of Economics, Summer Dissertation Fellowship
2018–2019	Inter-American Development Bank, Research Grant – "The Impact of Robots in LAC"
2018	Banco de Mexico, Summer Research Fellow
2016–2021	Georgetown, Department of Economics, PhD Graduate School Fellowship
2015	Colegio de Mexico, Víctor L. Urquidi - Economics Research Prize 2014, first place
	Citi-Banamex, Economic Research Prize 2014, honorary mention
2011	Citi-Banamex Prize for Undergraduate Thesis on Economics 2010, second place

2010	IPEA, Young Social Entrepreneur Award, first place
2006	Friedrich Naumann Foundation, National Essay Contest on Education Policy, first place

PRESENTATIONS

2021	Harvard – Department of Economics –International Lunch
	HBS - Entrepreneurial Management – Faculty Seminar
	LACEA – LAMES, and LACEA – RIDGE Showcase
	Boston University - Technology & Policy Research Initiative
	World Bank - Firms, Entrepreneurship, and Innovation
	European Economic Association
	ITAM – Alumni Conference
	Georgetown, Department of Economics - Macro Seminar
	AOM, TIM – Doctoral Consortium
	Georgetown, McDonough School of Business – Strategy Seminar, Trade Seminar
	Wharton Innovation Doctoral Symposium
2020	Georgetown, Department of Economics - Macro Seminar
2019	Georgetown, McDonough School of Business - Trade Lunch
2018	Southern Economic Association; Banco de Mexico
Pre-PhD	XX-LACEA 2015; JPAL-Matchmaking Conference 2014; NIP-LACEA 2011; COLMEX-IMCO 2011

RESEARCH EXPERIENCE

Georgetown University, McDonough School of Business
Research Assistant to Ferdinando Monte, 2019

World Bank, Trade and Competitiveness Global Practice
"The Changing Skills Demand", *World Bank and LinkedIn (Consultant)*, 2018

"Structural Transformation and its Determinants across Countries", *World Bank Policy Paper (PI)*, 2017

International Labor Office
"Public-Private Dialogue for Mexico's Productivity Growth", *ILO Policy Paper. (PI)*, 2016

Center for Economic Research, ITAM
Research Assistant to Sandra Lizarazo and Jose Ma. Da Rocha, 2008

TEACHING EXPERIENCE

Georgetown University
Teaching Assistant, graduate - MBA Macroeconomics, *(Fall 2019);* Econometrics *(Fall 2018)*

Teaching Assistant, undergraduate - Thesis Tutoring *(Spring 2020)*; Intermediate Macroeconomics *(Spring 2019)*; Economic Statistics *(Spring 2018)*; Introduction to Microeconomics *(Fall 2017)*

Instituto Tecnológico Autónomo de México
Lecturer, graduate - Economics of Institutions, 2016

Teaching Assistant, undergraduate - Intermediate Microeconomics, 2006 – 2008

PROFESSIONAL EXPERIENCE

Ministry of Finance, Economic Productivity Unit
Director for Economic Productivity Policy, 2013 – 2016

Spectron Desarrollo, *(Mexican consulting firm specialized in public policy analysis)*
Consultant / Research Assistant to Susan Parker and Luis Rubalcava, 2009 – 2010

Laboratorio de Iniciativas para el Desarrollo A.C. *(Mexican NGO for Education Policies)*
CEO & Co-founder, 2010 – 2012

SKILLS

Languages: Spanish (Native), English (Fluent)

Tools: Matlab, Python, R, Stata, LaTeX

REFERENCES

Adriana Kugler
McCourt School of Public Policy
Georgetown University
ak659@georgetown.edu

Toshihiko Mukoyama
(main advisor)
Department of Economics
Georgetown University
tm1309@georgetown.edu

John Rust
Department of Economics
Georgetown University
jr1393@georgetown.edu

ABSTRACTS

"Robot Adoption, Organizational Capital and the Productivity Paradox", 2020 (*JMP*)

Major technological changes have come with an adjustment period of stagnant productivity before the economy operates at its full potential. The mechanism of this adoption process is still not well understood. Using event studies, I document that productivity increases with a five-year lag after the adoption of industrial robots in Brazil. Combining employer-employee matched data with a novel measure of robot adoption, I provide first evidence of establishment-level labor reorganization and organizational capital depreciation induced by the automation process. During the five years after adoption, labor switching across occupations increases within firms, moving from production to support activities. I show that firms' organizational capital measured by workers' firm-occupation specific experience depreciate and then slowly re-accumulate. When these processes stop, the productivity gains reach their maximum. I use these results to estimate a general equilibrium model with heterogeneous firms, endogenous robot adoption, and organizational capital accumulation. The model accounts for the productivity paradox, the diffusion of industrial robots and the change in the aggregate skill demand. The model highlights the role of organizational costs accompanying the adoption of new technologies. I illustrate its usefulness by using it to characterize the implications of the "innovator's dilemma".

"U.S. Robots and their Impacts in the Tropics: Evidence from Colombian Labor Markets", with A. Kugler, M. Kugler and L. Ripani, Working Paper N0. 28034, November 2020 (*submitted*)

Previous studies for developed countries show negative short-run impacts of automation on employment and earnings. In this paper, we instead examine whether automation by a key trading partner can hurt workers in a developing country. We specifically focus in Colombia's labor market, and how the automation in the U.S. impacts Colombian workers by replacing exports from Colombia for cheaper robot-made U.S. products. We use employer-employee matched data from the Colombian social security records combined with data on U.S. exposure to robots in different sectors from 2011 to 2016 to examine if robots in the U.S. are displacing workers in Colombia. We find that U.S. robots decrease employment and earnings for Colombian workers in those sectors of local labor markets that have high levels of automation in the U.S. labor market. Importantly, local labor markets which exported the most to the U.S. in the past, are also the most affected by the increased adoption of U.S. robots, suggesting that Colombian workers may be losing employment to automated jobs reshored back to the U.S. Our estimates suggest that there may be sectors that benefit from automation due to productivity effects as the general equilibrium effects are nil at the local labor market level.