

Dayanara M. Diaz Vargas

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FIELDS

Health Economics | Labor Economics

EDUCATION

Northeastern University

Ph.D. in Economics

Master of Science in Economics

Boston, MA

September 2022 – May 2027

September 2021 – August 2022

University of Puerto Rico

Master's in Business Administration

Bachelor of Arts in Economics

San Juan, PR

Aug. 2017 – Dec. 2019

Aug. 2013 – May 2017

AWARDS & SCHOLARSHIPS

Northeastern University

Ph.D. Excellence Fellowship

David A. Radivonyk Fund for Student Research in Economics

Boston, MA

Sept. 2022 – May 2027

June 2021 – July 2021

University of Puerto Rico

Grant from the Damaso "Tom" Acevedo Endowment Fund

San Juan, PR

Aug. 2017 – May 2019

WORK EXPERIENCE

Teaching Assistant

Department of Economics | Northeastern University

Boston, MA

September 2024 – Present

- * Instructed and graded for Global Political Economy (INTL 3520), Microeconomic Theory (ECON 2316), Applied Econometrics (ECON 2560), and Principles of Macroeconomics (ECON 1125)
- * Led weekly recitations reviewing course concepts and sharing supplemental learning materials
- * Provided academic support through office hours and detailed feedback with grading

Research Assistant

D'Amore-McKim School of Business | Northeastern University

Boston, MA

September 2021 – May 2024

- * Led a team of four research assistants to develop the Supply Trace project
- * Traced production networks in global apparel supply chains, identifying critical nodes where human trafficking and labor violations concentrate.
- * Worked on dashboard visualizations on the products' supply chain route.

Quantitative Analyst

Enterprise Risk Management Dept. | FirstBank Puerto Rico

San Juan, PR

April 2019 – September 2021

- * Validate econometric, financial, and machine learning models.
- * Reproduce models and certify that their documentation is adequate.

Economist and Researcher

Inteligencia Economica Inc.

Guaynabo, PR

January 2019 – March 2019

- * Wrote feasibility studies for small businesses, international corporations and government institutions.
- * Prepared dashboards using Microsoft Power BI.

“Healthcare Privatization Effect on Labor Markets: Evidence from Puerto Rico”

* This paper employs a difference-in-differences framework to estimate the effects of mandatory managed care restrictions implemented during Puerto Rico’s 1993 healthcare reform. The project examines how the transition from an unrestricted universal healthcare model to a privatized system altered healthcare delivery and outcomes. The reform introduced multiple restrictions: closed provider networks that limited patient choice, mandatory gate-keeping requirements that created barriers to specialist care, and capitation-based payment structures that shifted financial risk to providers. By exploiting this policy shock, the study identifies causal effects on: healthcare labor markets (employment levels and wages), patient utilization patterns (preventive versus emergency care), and health outcomes (mortality rates and self-reported health status).

“Corporate Tax Incentives Elimination: Evidence from Puerto Rico”

* This paper fills a gap in the place-based policy literature by examining the consequences of withdrawing industrial incentives—a question largely unexplored despite extensive research on policy implementation. The project exploits the phase-out and elimination of IRS Section 936 in Puerto Rico, which exempted U.S. corporations from federal taxes on profits, as a quasi-experimental shock to identify causal effects on local labor markets. Using a synthetic differences-in-differences (SDiD), we estimate the effect of lifting this policy on local labor market outcomes. Our findings reveal that the phaseout (of 1996) and eventual elimination (of 2006) led to significant job losses in manufacturing (the industry that received most tax credits). Specifically, results indicate that the phaseout generated a statewide average decrease of approximately 9.2% in manufacturing jobs by 2000, and an average decrease of 28% decrease following the elimination by 2019, relative to a scenario in which the policy had remained.

TECHNICAL SKILLS

Programming Languages: R, Python, SQL, STATA, JavaScript, L^AT_EX

Languages: English (Fluent), Spanish (Native), French (Basic), Portuguese (Where is the bathroom?)