

Rodrigo Azuero Melo

Inter-American Development Bank
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Citizenship: Colombia. US Permanent Resident.

Date of Birth: September 10, 1986.

Gender: Male.

Education

Ph.D. Economics, University of Pennsylvania, 2012-2017.

M.A. Economics, University of Pennsylvania, 2015.

M.A. Economics, Universidad de los Andes, Bogota, 2011.

B.Sc. Economics, *Cum Laude* (Top 3% GPA of last 5 years). Minor: History. Universidad de los Andes, Bogota, 2009.

Econometrics Certificate, Tilburg University, Spring 2008.

Employment

Inter-American Development Bank: (Washington DC)

Economist. Fiscal Management Division. July 2017-current position.

Team Leader: "Tax Policy, Informality, and Productivity in Latin America and the Caribbean?" \$185,000 grant."

Team Leader: "Using Data Analytics to Improve Tax Compliance" \$85,000 grant.

Consultant and Research Fellow. Social Sector. Various periods between 2010–2016.

Universidad de los Andes: (Bogota, Colombia). Research Assistant: January 2009-April 2010.

Ferro Consulting group: (Bogota, Colombia). Consultant: June 2006-January 2009.

Consultant in various projects related to actuarial mathematics and game theory.

Research and Teaching Fields

Labor Economics, Development Economics, Applied Microeconomics, Applied Econometrics

Teaching Experience

Instructor:

Inter-American Development Bank: Machine Learning (Spring, 2019).

University of Pennsylvania: Introduction to Microeconomics (Summer, 2015)

Universidad de los Andes: Stata workshop (Spring, 2010)

Teaching Assistant:

University of Pennsylvania: Introduction to Microeconomics (Fall, 2014), Introduction to Statistics (Fall 2014, Spring 2015, Spring 2016), Intermediate Microeconomics (Fall, 2013)

Universidad de los Andes: Statistics I for Social Sciences (Spring 2009), Integral Calculus (Spring 2009), Microeconomics III (Spring 2010), Differential Calculus (Fall 2008), Game Theory (Fall 2007), Introduction to Economic Theory (Graduate level-Spring, 2009), Econometrics for Impact Evaluation (Graduate level-Spring, 2009)

Universidad Externado de Colombia: Math for Lawyers (Fall, 2006-Fall, 2007)

Publications

Schady, N; Azuero, R *et al.* (2015). “[Wealth Gradients in Early Childhood Cognitive Development in Five Latin American Countries](#)”. *Journal of Human Resources*, 50(2):446-463.

Working Papers

Azuero, R. (2019). “[Evaluating Early Childhood Policies: An Estimable Model of Family Child Investments](#)”. (Job Market Paper)

Azuero, R. & Zarruk, D. 2019. “[The Effects of Student Loans on the Provision and Demand for Higher Education](#)”. [[slides](#)]

Work in Progress

Small Business Tax Regimes, Informality and Productivity: Evidence from the 2017 Tax Reform in Peru. With Alejandro Lagomarsino (Harvard University).

Optimal Taxation and Informality. With Juan Hernández (IDB) and Daniel Wills (Universidad de los Andes).

Machine Learning Tools to fight tax evasion.

Presentations

2018

Economics of Informality (Universidad del Rosario, Bogota); LACEA (scheduled); 1st Conference of Colombian Economics Meetings (Universidad de los Andes, scheduled), Machine Learning Applications for Development (Inter-American Development Bank, scheduled).

2017

Arizona State University, Universidad del Rosario (Colombia), American Institutes for Research, IMPAQ International, NERA Economic Consulting.

2016

[EMCON](#): Empirics and Methods in Economics, Northwestern University.

University of Pennsylvania: Empirical Micro Seminar. Empirical Micro Workshop.

2015

University of Pennsylvania, Empirical Micro group.

Universidad Católica de Chile. Workshop on Early Childhood Development.

[ECONCON](#). Conference sponsored by Columbia University, New York University, Princeton University, University of Pennsylvania and Yale University.

[LACEA](#): Latin American and Caribbean Economics Association Annual Meetings.

Student Advising

Graduate Program in Impact Evaluation. Universidad de los Andes

Rojas, L. A. & Casas, C. The Impact of “Comedores Comunitarios” on Nutritional Outcomes. Grade: 5.0/5.0

Grants

Inter-American Development Bank Economic Sector Works Research Grant.

Tax Policy, Informality, and Productivity in Latin America and the Caribbean?

Using Data Analytics to Improve Tax Compliance

School of Arts and Sciences Conference Grant. University of Pennsylvania. (2016).

Penn Institute for Economic Research. Stipend Matching Grant. (2015).

Latin American and the Caribbean Economic Association (LACEA). Grant to present at the annual LACEA meetings in Santa Cruz, Bolivia, 2015.

Graduate and Professional Student Association (GAPSA) Travel Grant. University of Pennsylvania. 2015.

Tilburg University study abroad program. Econometrics Certificate. (90% of tuition). 2008.

Honors, Awards, & Fellowships

Judith Rodin Fellow. Fellowship awarded to doctoral students in the Social Sciences who are committed to nation-building. 2016

Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD R01HD065436). Fellowship for the 2016 fall term.

University of Pennsylvania Fellowship. 2012.

Cum Laude. Universidad de los Andes. Awarded to students with GPA located in the top 3% of the department during the last 5 years. 2009.

Graduate Dissertation in Economics, Universidad de los Andes, Colombia. Grade: 5.0 / 5.0. Chosen for publication.

Professional Activities

Referee: *International Economic Review*, *Journal of Labor Economics*, *Economia* (Journal of LACEA), *Coyuntura Económica: Investigación Económica y Social* (Journal of Fedesarrollo).

Book Reviewer: Universidad de los Andes, Economics

Empirical Micro Lunch organizer. University of Pennsylvania. (Fall 2014-Spring 2015)

Languages

English (Fluent), Spanish (Native), French (Advanced)

Programming Skills

Fortran, Matlab, Python, Stata, R, Rcpp, C++, OpenMP, Julia, Cuda, SQL.

Software

[gmapsdistance](#): R-package to compute distance and travel time between multiple points using the Google Maps Distance API.

[Rtauchen](#): R-package to discretize an AR(1) process following Tauchen (1986). A discrete Markov chain that approximates in the sense of weak convergence a continuous-valued univariate Autoregressive process of first order is generated. It is a popular method used in economics and in finance.

Certificates

Machine Learning Certificate by Stanford University on Coursera. 2018.

Neural Networks and Deep Learning by deeplearning.ai on Coursera. 2019.

Additional Information

Github profile: <https://github.com/rodazuero>

Linkedin profile: <https://www.linkedin.com/in/rodrigo-azuero/>

Last updated: February 20, 2019