Ana Carolina Bottega de Lima

anabottegalima@gmail.com ⋄ + 55 35 998065538 ⋄ anabottega.github.oi

Education

University of São Paulo (USP), São Paulo, Brazil   *Aug. 2020 - Present*
Doctoral Candidate in Development Economics

Federal University of Minas Gerais (UFMG), Belo Horizonte, Brazil   *Jan. 2018 - June 2020*
Master of Arts in Economics (Highest honors)

Federal University of Minas Gerais (UFMG), Belo Horizonte, Brazil   *March 2014 - Dec. 2017*
Bachelor of Arts in Economics (Highest honors)
Exchange student at the University of Duisburg-Essen (2017)

Research Visits

Princeton University   *Feb. - March 2023*
Industrial Relations Section, Sponsor: Ellora Derenoncourt

Cambridge University   *April - June 2023*
Center of Latin American Studies, Sponsor: Pedro Loureiro

Research Interests

Public Finance, Macro, and Labor Economics

Research Experience

Research Assistant   *Dec 2023 - Present*
Department of Economics, Columbia University

- Research Assistant for Professors Michael Best (Columbia), Joana Naritomi (LSE), and Dimitri Szerman (Amazon)

"Public Procurement in São Paulo"

- Preparation, documentation, and analysis of a large database of purchases by government and private-sector buyers.

Research Fellow on Inequality and Taxation Studies   *April 2021 - Present*
[Research Center on Macroeconomics of Inequalities (MADE)](), University of São Paulo

- Project Coordinator and Research Assistant for Professors Pedro Forquesato (USP) and Fabiana Rocha (USP) (2022-Present)

"BRASMOD: An Open-Access Tax-Benefit Microsimulation Model for Brazil"

- Assisted with compiling the rules and specifications of the Brazilian federal tax and transfer system and later coded those rules into the EUROMOD microsimulation platform.
- Prepared and harmonized the expenditure survey "Pesquisa de Orçamentos Familiares, 2017-2018" and the quarterly household survey "Pesquisa Nacional por Amostra de Domicílios" according to the EUROMOD specifications to use it as an input for the model. Assisted with the matching of these two databases using machine learning tools.
- Coordinated validating the model results using Brazilian administrative data.

- Coordinated a group of undergraduate research assistants, especially their training concerning Brazilian databases, coding methods, and research practices (like using Git and Github). Also supervised and delegated day-to-day tasks to this group.

- Planned and is executing two coauthored papers on the progressivity and distortions of the Brazilian tax and transfer system and on inequality decompositions for 21st-century Brazil.

· Research Assistant for Professor Laura Carvalho (OSF and USP), Rodrigo Orair (IPEA), and Fernando Gaiger (IPEA) (2021)

"Distributional effects of personal income taxation in Brazil"

- Constructed a new income distribution database for Brazil, being the first group to combine household expenditure surveys with personal tax records and national accounts data, following the Distributional National Accounts methodology. In this case, the expenditure survey was "Pesquisa de Orçamentos Familiares, 2017-2018".

- Explored the final database producing different inequality measures and analyses, mainly related to gender and racial top-income inequality.

- Simulated the distributive and budgetary effects of different Brazilian Personal Income Tax reforms using the constructed database, which also demanded working with data concerning firms' profit distribution using causal inference tools.

- Produced policy briefs that were widely circulated in the media about our findings regarding the gender and racial income distribution in Brazil, as well as our estimations of the immediate effects of Personal Income Tax reforms debated in Congress or proposed by politicians.

External Consultant to BHP Brasil   *Sep. 2023 - March 2024*

· Assisted with programming and data analysis in evaluating the social-economic and educational impacts of the Mariana mining disaster in 2015 in Minas Gerais, Brazil.

- Organized and merged multiple databases (FINBRA, Census, administrative data on the disaster characteristics) in the municipal-level data (by writing a particular code that combines Python and SQL).

- Applied quasi-experimental methods to estimate the effects on economic and education outcomes.

Research Fellow, "PET" Undergraduate Independent Research Program *Aug. 2014 - Dec. 2017*
Federal University of Minas Gerais

- Elaborated and executed one independent research project a year with advisors from the Economics (2014-2015, 2017) and Mathematics (2016) Departments;

- Participated in the editing process of the journal "Revista Multiface Online" (Editor-in-Chief, 2017; Associate Editor, 2016; Editing Director, 2014-2015);

- Participated in university extension projects;

- Organized biannual study groups.

Works in Progress

"Progressivity, distortions, and impacts of the Brazilian tax and benefit system: microsimulation results" with Pedro Forquesato, Fabiana Fontes, and João Francisco Cabral.

This paper provides the first systematic evaluation of the distributional and distortionary effects of the overall Brazilian tax and transfer system, including the responses to the Covid-19 pandemic. We combine different sources of survey and administrative data, estimations of the informal sector, and a microsimulation model to measure progressivity, incidence, and labor market distortions of the overall tax-benefit schedule and of each separate policy. Moreover, we determine the effective incidence of these policies along the income distribution and quantify the trade-offs between direct and indirect taxation. To do so, we construct Brazil's first open-access large-scale microsimulation model within the EUROMOD framework.

"Payroll Taxes, Trade, and Wages".

"Income inequality and redistribution in 21-century Brazil: decomposing the effects of policies, markets, and demographics" with Pedro Forquesato, Fabiana Rocha, João Francisco Cabral, and Hiaman Santos.

"Solutions for delay differential equations in growth and business cycle macroeconomic models".

Policy Briefs

"Notes on the distributive and budgetary effects of a reform of the Personal Income Tax bands" (in Portuguese) with Luiza Pires and Pedro Forquesato, 2023, MADE/USP NPE n. 023.
Media coverage: Folha de S. Paulo

"How Much Income is Appropriated by Black Women? An Analysis of the Income Distribution in Brazil" (in Portuguese) with Isabela Bouza, Matias Cardomingo, Luiza Pires, and Fernanda Pereira, 2021, MADE/USP NPE n. 018.
Media coverage: Folha de S. Paulo, Correio Brasiliense

"The Reform Proposal for the Brazilian Personal Income Tax and its Effects on Inequality" (in Portuguese) with Rodrigo Orair, Fernando Gaiger, Laura Carvalho, Matias Cardomingo, Rodrigo Fernandes, and Theo Ribas, 2021, Made/USP NPE n. 15.
Media coverage: Folha de S. Paulo

Peer-reviewed Publications

"Kalecki Meets Schumpeter: The Decline of Competition in a Demand-led Dynamic Model" with Rafael S. M. Ribeiro, *Metroeconomica*, 74:3, 584–605.

"The Impact of Demand on Innovation and Research Intensity" with João P. Romero and Arthur B. Cordeiro, 2022, *International Review of Applied Economics*, 37:2, 217–235.

"Mind the wage gap: an empirical analysis of the impact of labor income inequality on economic growth" with Rebecca Gramiscelli Hasparyk and Rafael S. M. Ribeiro, *Review of Keynesian Economics*, 11:1, 10–30.

"Innovation, Export Performance and Trade Elasticities across Different Sectors" with João P. Romero, 2021, *Structural Change and Economic Dynamics*, *58*, 174–184.

Invited Seminars

2022   USP Seminar Series on Taxation in Brazil: Challenges and New Perspectives (São Paulo).

2021   International Taxation Forum (São Paulo).

Conference Presentations and Summer Schools (including scheduled)

2024	How can a UN Tax Convention address inequality in Europe and beyond? (Paris School of Economics)*
2023	Stone Center Summer Institute (UC Berkeley); 49th Annual Conference of the Eastern Economic Association (NY); 51st ANPEC's Meeting (Rio de Janeiro)
2022	50th ANPEC's Meeting (Fortaleza); 26th IMK-FMM Conference (Berlin); 30th IAFFE Annual Conference (virtual).
2020	46th Annual Conference of the Eastern Economic Association (Boston).
2019	47th ANPEC's Meeting (São Paulo); 31st Annual EAEPE Conference (Warsaw); 7th IMK-FMM International Summer School (Berlin), Model-based Macroeconomics Summer School (Rio de Janeiro).
2018	22nd IMK-FMM Conference (Berlin), YSI/INET Latin America Convening (Buenos Aires).

Other Academic Activities

Interviews

2022	"An overview of racism in Brazil: from micro to macro analyses" (in Portuguese), FEA/USP.
2021	"Tax the rich" (in Portuguese), Jornal do Campus USP; "Can the end of the *Auxílio Emergencial* worsen income inequality in Brazil?" (in Portuguese), IG Brasil Econômico.
2020	"Economics, philosophy, and the pandemic" (in Portuguese), IV Philosophy Graduate Students Meeting at UFMG.

Academic Service

Young Scholars Initiative, Institute for New Economic Thinking (YSI/INET)   *2020 - Present*
Working Group Coordinator

Referee service

"Planejamento e Políticas Públicas"

Teaching Experience

University of São Paulo
TA, Social Accounting and Balance of Payments (Undergrad)   *Fall 2021*
TA, Development and Macroeconomics (Grad)   *Spring 2022*
TA, Thesis Advising (Undergrad)   *2021-2022*

Federal University of Minas Gerais
Committee Member, Rebecca Gramiscelli Hasparyk (BA Thesis)   *Spring 2020*
TA, Econometrics (Undergrad)   *Fall 2019*

Fellowships, Awards, and Honors

CAPES scholarship for short-period research studies abroad, 2023

FIPE full scholarship for PhD program

CNPq full scholarship for master's degree program, 2018-2020

Master's thesis defended with the highest honors and "Fernando José Cardim de Carvalho" Prize on best master's thesis on macroeconomics in Brazilian programs, 2020

Bachelor's thesis selected as best of the year by the Economics Department of UFMG, 2017

Ranked 1st in the class in the bachelor's (GPA 4.0/4.0) and master's (GPA 4.0/4.0) degrees, 2017 and 2020

"Hochschulwinterkurs" scholarship at the University of Duisburg-Essen, from the German Academic Exchange Service (DAAD), 2017

"PET" Undergraduate Independent Research Program scholarship, from Sesu/MEC, 2014-2017

Additional Information

Programming	R, STATA, SQL, Python, LaTeX.
Languages	Portuguese (native speaker), English (fluent), German (intermediate), Spanish (basic).

Updated: December 2023