New Climate Economy: Poverty and Inequality Training Course Syllabus

World Resources Institute*

Instructors: Cristián Jara¹, Javiera Petersen² and Raimundo Smith³

Course description: This document provides an overview for a 5 day practical course on income inequality, with an emphasis on within country microdata based calculations. The course is organized as follows: day 1 will review core concepts, both theoretical and practical, days 2 and 3 will be focused on poverty and income distribution, including case studies and practical exercises, finally days 4 to 5 will cover public policy design and evaluation. Practical exercises will require usage of the STATA statistical software. Theoretical lectures will comprise a third of the coursework, while the remainder will be focused on practical exercises and reviewing evidence based research.

Day 1: Introduction - Core Concepts

- Motivation
- Income Distribution and Economic Thought
- · Methods and Data for Income Distribution
- Trends in Income Distribution
- · Case Studies

- Daron Acemoglu (2002). "Technical change, inequality, and the labor market". In: *Journal of economic literature* 40.1, pp. 7–72
- Facundo Alvaredo et al. (2017). "Global inequality dynamics: New findings from WID. world". In: *American Economic Review* 107.5, pp. 404–09
- Anthony Barnes Atkinson and Thomas Piketty (2007). Top incomes over the twentieth century: a contrast between continental european and english-speaking countries. oup Oxford
- Andrea M Bassi (2015). "Moving towards integrated policy formulation and evaluation: The green economy model". In: *Environmental and climate technologies* 16.1, pp. 5–19
- François Bourguignon, Francisco HG Ferreira, and Nora Lustig (2005). "A Synthesis of the Results". In: *The Microeconomics of Income Distribution Dynamics in East Asia and Latin America*, pp. 357–406
- John Bates Clark (1908). The distribution of wealth: a theory of wages, interest and profits. Macmillan
- Andrew Johns and Joel Slemrod (2010). "The distribution of income tax noncompliance". In: *National Tax Journal* 63.3, p. 397
- Simon Kuznets (1955). "Economic growth and income inequality". In: *The American economic review* 45.1, pp. 1–28

^{*}https://www.wri.org/

¹National Institute of Statistics of Chile (INE): cristianjara21@gmail.com

 $^{^2} University \ College \ London \ (UCL): \ {\tt javierapertersenm@gmail.com}$

 $^{^3}$ The World Bank: raimundo.smith.m@gmail.com

- Daniel Laurison and Sam Friedman (2016). "The class pay gap in higher professional and managerial occupations". In: *American Sociological Review* 81.4, pp. 668–695
- Thomas Robert Malthus (1872). An Essay on the Principle of Population..
- Karl Marx (2007). Capital: A critique of political economy. Duke University Press
- John Stuart Mill (1965). Principles of political economy. Vol. 3
- Robert Nozick (1974). Anarchy, state, and utopia. Vol. 5038. New York: Basic Books
- Bertil Ohlin (1935). Interregional and international trade. Harvard University Press, Cambridge
- Vilfredo Pareto (1964). Cours d'économie politique. Vol. 1. Librairie Droz
- Arthur Cecil Pigou (2013). The economics of welfare. Palgrave Macmillan
- Thomas Piketty (2015). "About capital in the twenty-first century". In: *American Economic Review* 105.5, pp. 48–53
- Thomas Piketty, Emmanuel Saez, and Gabriel Zucman (2018). "Distributional national accounts: methods and estimates for the United States". In: *The Quarterly Journal of Economics* 133.2, pp. 553–609
- Thomas Piketty, Emmanuel Saez, and Gabriel Zucman (2019). "Simplified Distributional National Accounts". In: *AEA Papers and Proceedings*. Vol. 109, pp. 289–95
- John Rawls (2009). A theory of justice. Harvard university press
- David Ricardo (1891). Principles of political economy and taxation. G. Bell and sons
- Amartya Sen (1992). Inequality reexamined. Oxford University Press
- Adam Smith (1937). The wealth of nations [1776]
- Nicholas Stern (2019). "Unlocking the inclusive growth story of the 21st century: the drive to the zero-carbon economy". In: Policy Insight, London: Grantham Research Institute and Centre for Climate Change Economics and Policy, London School of Economics and Political Science
- Jan Tinbergen (1975). Income distribution: Analysis and policies
- https://wid.world/

Day 2: Poverty

- Motivation
- Poverty
- Absolute and relative approaches
- Poverty measures
- Multidimensional poverty
- · Global Multidimensional Poverty Index
- Trends in multidimensional poverty
- Problem Sets

Suggested Readings

- Rolf Aaberge and Andrea Brandolini (2015). "Multidimensional poverty and inequality". In: *Handbook of income distribution*. Vol. 2. Elsevier, pp. 141–216
- Facundo Alvaredo (2018). The World Inequality Report. Harvard University Press
- Anthony B Atkinson et al. (1970). "On the measurement of inequality". In: *Journal of economic theory* 2.3, pp. 244–263
- Angus Deaton (1997). The analysis of household surveys: a microeconometric approach to development policy.
 The World Bank
- James Foster, Joel Greer, and Erik Thorbecke (1984). "A class of decomposable poverty measures". In: *Econometrica: journal of the econometric society*, pp. 761–766

Day 3 - Part 1: Inequality

- Motivation
- · Inequality and inequalities
- The inequalities of climate change
- · Inequality measures
- · Case Study

- Sabina Alkire et al. (2015). Multidimensional poverty measurement and analysis. Oxford University Press, USA
- Anthony B Atkinson and François Bourguignon (2014). Handbook of income distribution. Vol. 2. Elsevier
- Atkinson et al., "On the measurement of inequality"
- Jonathan D Fisher, David S Johnson, and Timothy M Smeeding (2013). "Measuring the trends in inequality of individuals and families: Income and consumption". In: *American Economic Review* 103.3, pp. 184–88
- James Foster et al. (2013). A unified approach to measuring poverty and inequality: Theory and practice. The World Bank
- Branko Milanovic (2012). *Global Income Inequality by the Numbers: In History and Now-an Overview*. World Bank, Development Research Group, Poverty and Inequality Team
- Tim Gore (2020). "Confronting Carbon Inequality: Putting climate justice at the heart of the COVID-19 recovery". In: Oxfam
- Sanna Markkanen and Annela Anger-Kraavi (2019). "Social impacts of climate change mitigation policies and their implications for inequality". In: *Climate Policy* 19.7, pp. 827–844
- Stephanie Seguino et al. (2013). Humanity divided: Confronting inequality in developing countries. UNDP

Day 3 - Part 2: Impact evaluation

- Why evaluation?
- Theory of Change (Toc)
- Impact Evaluation: The basics
- Selection bias

Suggested Readings

- Joshua D Angrist and Jorn-Steffen Pischke (2008). *Mostly harmless econometrics: An empiricist's companion*. Princeton university press
- I. Ayres and J. J. Donohue III (2003). "Shooting Down the 'More Guns Less Crime". In: *Stanford Law Review*, pp. 1193–1312
- Christopher Blattman and Stefan Dercon (2018). "The Impacts of Industrial and Entrepreneurial Work on Income and Health: Experimental Evidence from Ethiopia". In: *American Economic Journal: Applied Economics*
- Rajeev H. Dehejia and Sadek Wahba (1999). "Causal Effects in Nonexperimental Studies: Reevaluating the Evaluation of Training Programs". In: *Journal of the American Statistical Association* 94.448, pp. 1053–1062
- Martina BjÖrkman Nyqvist and Seema Jayachandran (2017). "Mothers Care More, But Fathers Decide: Educating Parentsabout Child Health in Uganda". In: *American Economic Review: Papers and Proceedings*

Day 4: Public Policy Design and Evaluation - Evidence

- · Social Programs and Inequality
- · Social Transfers and Safety Nets
- Taxes and Inequality
- Distributive Impacts of Carbon Taxes and Fossil Fuel Subsidies
- Evidence review and problem set

- Anna Aizer et al. (2016). "The long-run impact of cash transfers to poor families". In: *American Economic Review* 106.4, pp. 935–71
- Jennifer M Alix-Garcia, Katharine RE Sims, and Patricia Yañez-Pagans (2015). "Only One Tree from Each Seed? Environmental Effectiveness and Poverty Alleviation in Mexico's Payments for Ecosystem Services Program". In: *American Economic Journal: Economic Policy* 7.4, pp. 1–40
- Ayres and Donohue III, "Shooting Down the 'More Guns Less Crime"
- Blattman and Dercon, "The Impacts of Industrial and Entrepreneurial Work on Income and Health: Experimental Evidence from Ethiopia"
- Craig McIntosh et al. (2018). "The Neighborhood Impacts of Local InfrastructureInvestment: Evidence from Urban Mexico". In: *American Economic Journal: Applied Economics*
- Dehejia and Wahba, "Causal Effects in Nonexperimental Studies: Reevaluating the Evaluation of Training Programs"

- Chris De Neubourg, Julie Castonguay, Keetie Roelen, et al. (2007). "Social safety nets and targeted social assistance: lessons from the European experience". In: World Bank, Social Protection Discussion Paper 718
- Esther Duflo, Rachel Glennerster, and Michael Kremer (2007). "Using randomization in development economics research: A toolkit". In: *Handbook of development economics* 4, pp. 3895–3962
- Walter Korpi and Joakim Palme (1998). "The paradox of redistribution and strategies of equality: Welfare state institutions, inequality, and poverty in the Western countries". In: *American sociological review*, pp. 661–687
- Ive Marx, Lina Salanauskaite, and Gerlinde Verbist (2013). "The paradox of redistribution revisited: and that it may rest in peace?" In: *IZA discussion paper*
- Nyqvist and Jayachandran, "Mothers Care More, But Fathers Decide: Educating Parentsabout Child Health in Uganda"
- Sebastian W. Martinez Paul J. Gertler and Marta Rubio-Codina (2012). "Investing Cash Transfers to Raise Long-Term Living Standards". In: *American Economic Journal: Applied Economics* Vol. 4.No. 1, pp. 164–192
- https://www.povertyactionlab.org/
- https://ec.europa.eu/eurostat

Day 5: Practical Exercise

• Evidence review and problem set

- James J Heckman, Hidehiko Ichimura, and Petra E Todd (1997). "Matching as an econometric evaluation estimator: Evidence from evaluating a job training programme". In: *The review of economic studies* 64.4, pp. 605–654
- Akshaya Jha, Peter H Matthews, and Nicholas Z Muller (2019). "Does Environmental Policy Affect Income Inequality? Evidence from the Clean Air Act". In: *AEA Papers and Proceedings* 109, pp. 271–276