

New Climate Economy: Poverty and Inequality Training Course Syllabus

World Resources Institute*

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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

Suggested Readings

- Acemoglu⁴
- Alvaredo et al.⁵
- Atkinson and Piketty⁶
- Bassi⁷
- Bourguignon, Ferreira, and Lustig⁸
- Clark⁹
- Johns and Slemrod¹⁰

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⁴Daron Acemoglu (2002). “Technical change, inequality, and the labor market”. In: *Journal of economic literature* 40.1, pp. 7–72.

⁵Facundo Alvaredo et al. (2017). “Global inequality dynamics: New findings from WID.world”. In: *American Economic Review* 107.5, pp. 404–09.

⁶Anthony Barnes Atkinson and Thomas Piketty (2007). *Top incomes over the twentieth century: a contrast between continental european and english-speaking countries*. oup Oxford.

⁷Andrea M Bassi (2015). “Moving towards integrated policy formulation and evaluation: The green economy model”. In: *Environmental and climate technologies* 16.1, pp. 5–19.

⁸François 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.

⁹John Bates Clark (1908). *The distribution of wealth: a theory of wages, interest and profits*. Macmillan.

¹⁰Andrew Johns and Joel Slemrod (2010). “The distribution of income tax noncompliance”. In: *National Tax Journal* 63.3, p. 397.

- Kuznets¹¹
- Laurison and Friedman¹²
- Malthus¹³
- Marx¹⁴
- Mill¹⁵
- Nozick¹⁶
- Ohlin¹⁷
- Pareto¹⁸
- Pigou¹⁹
- Piketty²⁰
- Piketty, Saez, and Zucman²¹
- Piketty, Saez, and Zucman²²
- Rawls²³
- Ricardo²⁴
- Sen²⁵
- Smith²⁶
- Stern²⁷
- Tinbergen²⁸
- <https://wid.world/>

¹¹Simon Kuznets (1955). “Economic growth and income inequality”. In: *The American economic review* 45.1, pp. 1–28.

¹²Daniel Laurison and Sam Friedman (2016). “The class pay gap in higher professional and managerial occupations”. In: *American Sociological Review* 81.4, pp. 668–695.

¹³Thomas Robert Malthus (1872). *An Essay on the Principle of Population*..

¹⁴Karl Marx (2007). *Capital: A critique of political economy*. Duke University Press.

¹⁵John Stuart Mill (1965). *Principles of political economy*. Vol. 3.

¹⁶Robert Nozick (1974). *Anarchy, state, and utopia*. Vol. 5038. New York: Basic Books.

¹⁷Bertil Ohlin (1935). *Interregional and international trade*. Harvard University Press, Cambridge.

¹⁸Vilfredo Pareto (1964). *Cours d'économie politique*. Vol. 1. Librairie Droz.

¹⁹Arthur Cecil Pigou (2013). *The economics of welfare*. Palgrave Macmillan.

²⁰Thomas Piketty (2015). “About capital in the twenty-first century”. In: *American Economic Review* 105.5, pp. 48–53.

²¹Thomas 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.

²²Thomas Piketty, Emmanuel Saez, and Gabriel Zucman (2019). “Simplified Distributional National Accounts”. In: *AEA Papers and Proceedings*. Vol. 109, pp. 289–95.

²³John Rawls (2009). *A theory of justice*. Harvard university press.

²⁴David Ricardo (1891). *Principles of political economy and taxation*. G. Bell and sons.

²⁵Amartya Sen (1992). *Inequality reexamined*. Oxford University Press.

²⁶Adam Smith (1937). *The wealth of nations [1776]*.

²⁷Nicholas 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*.

²⁸Jan Tinbergen (1975). *Income distribution: Analysis and policies*.

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

- Aaberge and Brandolini²⁹
- Alvaredo³⁰
- Atkinson et al.³¹
- Deaton³²
- Foster, Greer, and Thorbecke³³

Day 3 - Part 1: Inequality

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

Suggested Readings

- Alkire et al.³⁴
- Atkinson and Bourguignon³⁵
- Atkinson et al.³⁶

²⁹Rolf Aaberge and Andrea Brandolini (2015). “Multidimensional poverty and inequality”. In: *Handbook of income distribution*. Vol. 2. Elsevier, pp. 141–216.

³⁰Facundo Alvaredo (2018). *The World Inequality Report*. Harvard University Press.

³¹Anthony B Atkinson et al. (1970). “On the measurement of inequality”. In: *Journal of economic theory* 2.3, pp. 244–263.

³²Angus Deaton (1997). *The analysis of household surveys: a microeconomic approach to development policy*. The World Bank.

³³James Foster, Joel Greer, and Erik Thorbecke (1984). “A class of decomposable poverty measures”. In: *Econometrica: journal of the econometric society*, pp. 761–766.

³⁴Sabina Alkire et al. (2015). *Multidimensional poverty measurement and analysis*. Oxford University Press, USA.

³⁵Anthony B Atkinson and François Bourguignon (2014). *Handbook of income distribution*. Vol. 2. Elsevier.

³⁶Atkinson et al., “On the measurement of inequality”.

- Fisher, Johnson, and Smeeding³⁷
- Foster et al.³⁸
- Milanovic³⁹
- Gore⁴⁰
- Markkanen and Anger-Kraavi⁴¹
- Seguino et al.⁴²

Day 3 - Part 2: Impact evaluation

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

Suggested Readings

- Angrist and Pischke⁴³
- Ayres and Donohue III⁴⁴
- Blattman and Dercon⁴⁵
- Dehejia and Wahba⁴⁶
- Nyqvist and Jayachandran⁴⁷

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

³⁷Jonathan 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.

³⁸James Foster et al. (2013). *A unified approach to measuring poverty and inequality: Theory and practice*. The World Bank.

³⁹Branko Milanovic (2012). *Global Income Inequality by the Numbers: In History and Now-an Overview*. World Bank, Development Research Group, Poverty and Inequality Team.

⁴⁰Tim Gore (2020). “Confronting Carbon Inequality: Putting climate justice at the heart of the COVID-19 recovery”. In: *Oxfam*.

⁴¹Sanna 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.

⁴²Stephanie Seguino et al. (2013). *Humanity divided: Confronting inequality in developing countries*. UNDP.

⁴³Joshua D Angrist and Jorn-Steffen Pischke (2008). *Mostly harmless econometrics: An empiricist's companion*. Princeton university press.

⁴⁴I. Ayres and J. J. Donohue III (2003). “Shooting Down the ‘More Guns Less Crime’”. In: *Stanford Law Review*, pp. 1193–1312.

⁴⁵Christopher 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*.

⁴⁶Rajeev 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.

⁴⁷Martina Björkman Nyqvist and Seema Jayachandran (2017). “Mothers Care More, But Fathers Decide: Educating Parents about Child Health in Uganda”. In: *American Economic Review: Papers and Proceedings*.

- Evidence review and problem set

Suggested Readings

- Aizer et al.⁴⁸
- Alix-Garcia, Sims, and Yañez-Pagans⁴⁹
- Ayres and Donohue III⁵⁰
- Blattman and Dercon⁵¹
- McIntosh et al.⁵²
- Dehejia and Wahba⁵³
- De Neubourg, Castonguay, Roelen, et al.⁵⁴
- Duflo, Glennerster, and Kremer⁵⁵
- Korpi and Palme⁵⁶
- Marx, Salanauskaite, and Verbist⁵⁷
- Nyqvist and Jayachandran⁵⁸
- Paul J. Gertler and Rubio-Codina⁵⁹
- <https://www.povertyactionlab.org/>
- <https://ec.europa.eu/eurostat>

Day 5: Practical Exercise

- Evidence review and problem set

Suggested Readings

- Heckman, Ichimura, and Todd⁶⁰
- Jha, Matthews, and Muller⁶¹

⁴⁸Anna Aizer et al. (2016). “The long-run impact of cash transfers to poor families”. In: *American Economic Review* 106.4, pp. 935–71.

⁴⁹Jennifer 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.

⁵⁰Ayres and Donohue III, “Shooting Down the ‘More Guns Less Crime’”.

⁵¹Blattman and Dercon, “The Impacts of Industrial and Entrepreneurial Work on Income and Health: Experimental Evidence from Ethiopia”.

⁵²Craig McIntosh et al. (2018). “The Neighborhood Impacts of Local Infrastructure Investment: Evidence from Urban Mexico”. In: *American Economic Journal: Applied Economics*.

⁵³Dehejia and Wahba, “Causal Effects in Nonexperimental Studies: Reevaluating the Evaluation of Training Programs”.

⁵⁴Chris 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.

⁵⁵Esther Duflo, Rachel Glennerster, and Michael Kremer (2007). “Using randomization in development economics research: A toolkit”. In: *Handbook of development economics* 4, pp. 3895–3962.

⁵⁶Walter 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.

⁵⁷Ive Marx, Lina Salanauskaite, and Gerlinde Verbist (2013). “The paradox of redistribution revisited: and that it may rest in peace?” In: *IZA discussion paper*.

⁵⁸Nyqvist and Jayachandran, “Mothers Care More, But Fathers Decide: Educating Parents about Child Health in Uganda”.

⁵⁹Sebastian 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.

⁶⁰James 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.

⁶¹Akshaya 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.

References

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- Alkire, Sabina et al. (2015). *Multidimensional poverty measurement and analysis*. Oxford University Press, USA.
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- Jha, Akshaya, 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.

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- Markkanen, Sanna 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.
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- McIntosh, Craig et al. (2018). "The Neighborhood Impacts of Local Infrastructure Investment: Evidence from Urban Mexico". In: *American Economic Journal: Applied Economics*.
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