

An overview of statistical methods to estimate inequality of opportunity

17th Winter School on Inequality and Social Welfare Theory
Alba di Canazei 7-12 January 2024

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Inequality of opportunity is a popular concept among politicians and social scientists. In the last two decades, influential theoretical contributions by John Roemer, Marc Fleurbaey, and François Maniquet have led to an increasing focus on the study of inequality of opportunity among economists. Applied economists have attempted to operationalize it as a measurable concept, but the question remains: have convincing estimation approaches emerged? This class provides an overview of the methods proposed by economists to estimate inequality of opportunity.

Reading list

Essential reading:

- Roemer, John E., and Alain Trannoy. 2016. "Equality of Opportunity: Theory and Measurement." **Journal of Economic Literature**, 54, 4, 1288–133.
- Checchi, Daniele, and Vito Peragine. 2010. "Inequality of Opportunity in Italy." **The Journal of Economic Inequality**, 8, 429-450.
- Ferreira, Francisco H.G., and Jérémie Gignoux. 2011. "The Measurement of Inequality of Opportunity: Theory and an Application to Latin America." **Review of Income and Wealth**, 57, 622-657.

References to methods covered in class:

Finite Mixture models

- Li Donni, Paolo, Juan Gabriel Rodriguez, and Pedro Rosa Dias. 2015. "Empirical Definition of Social Types in the Analysis of Inequality of Opportunity: A Latent Classes Approach." **Social Choice and Welfare**, 44, 673–701.

Random Forests

- Brunori, Paolo, Paul Hufe, and Daniel Gerszon Mahler. 2023. "The Roots of Inequality: Estimating Inequality of Opportunity from Regression Trees." **Scandinavian Journal of Economics**, 125, 4, 900-932.

Transformation and Model-based trees

- Brunori, Paolo and Davillas, Apostolos and Jones, Andrew and Scarchilli, Giovanna. 2022. "Model-Based Recursive Partitioning to Estimate Unfair Health Inequalities in the United Kingdom Household Longitudinal Study." **Journal of Economic Behavior and Organization**, 204, 543–565.
- Brunori, Paolo, Ferreira, Francisco H.G., and Pedro Salas-Rojo. 2023. "Inherited inequality: a general framework and an application to South Africa." **III Working Paper** 107, London School of Economics and Political Science. <https://eprints.lse.ac.uk/120308/>