

# Studying Social Inequality with Data Science

INFO 3370 / 5371  
Spring 2023

## **Opportunity**

As measured by economic mobility

# Learning goals for today

By the end of class, you will be able to

- ▶ argue about economic mobility as a measure of opportunity
- ▶ frame economic mobility as a prediction question

Before class, you read the intro and discussion of:

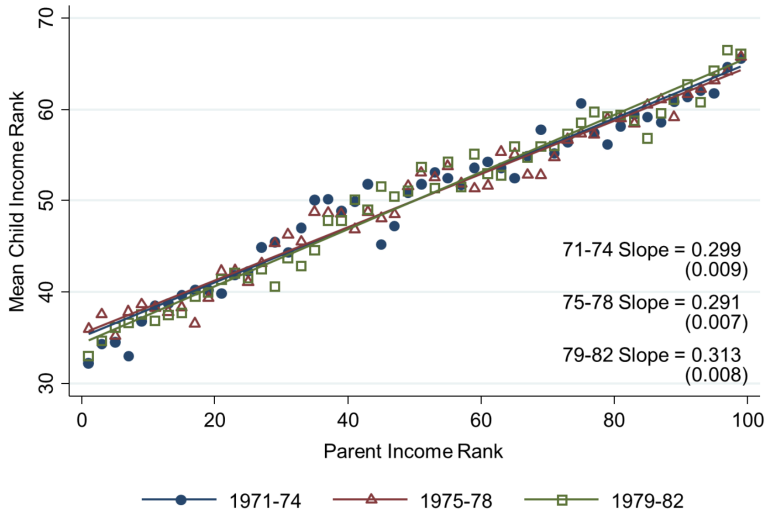
- ▶ Chetty et al. 2014. [Is the United States Still a Land of Opportunity? Recent Trends in Intergenerational Mobility.](#) American Economic Review 104(5):141–147.

Let's discuss

- ▶ The ladder metaphor
- ▶ Changes in inequality
- ▶ Changes in rank-based mobility

Then we will look at figures

**Figure 1. Child Income Rank vs. Parent Income Rank by Birth Cohort**



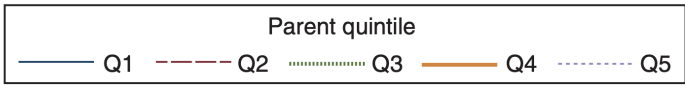
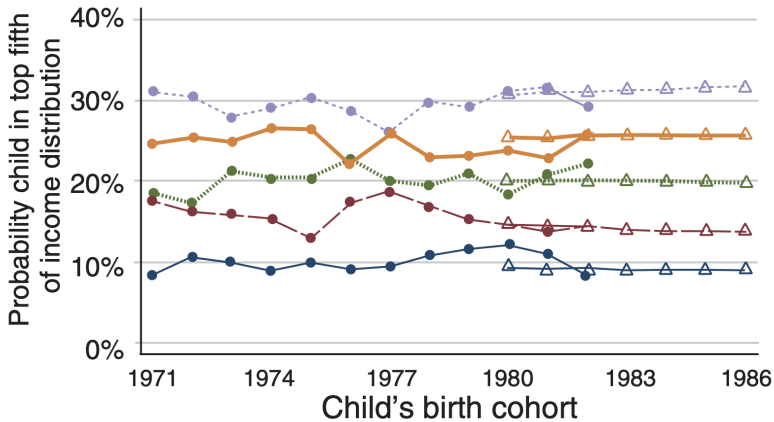


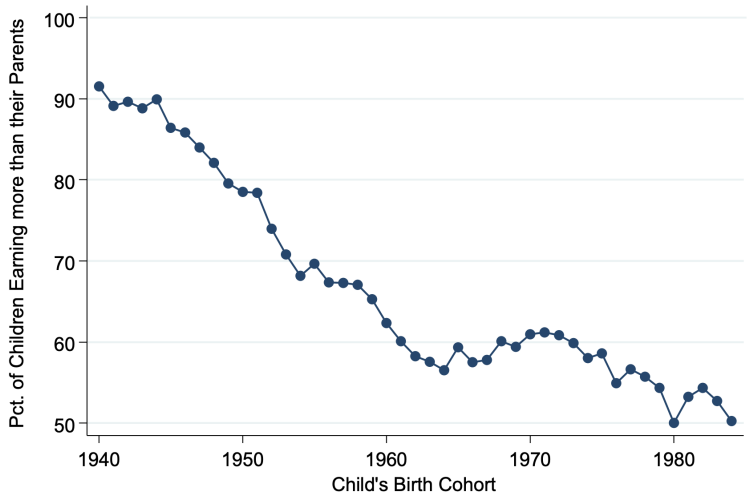
FIGURE 3. PROBABILITY OF REACHING TOP QUINTILE AT AGE 26 BY BIRTH COHORT

Additional evidence from a paper you did not read:

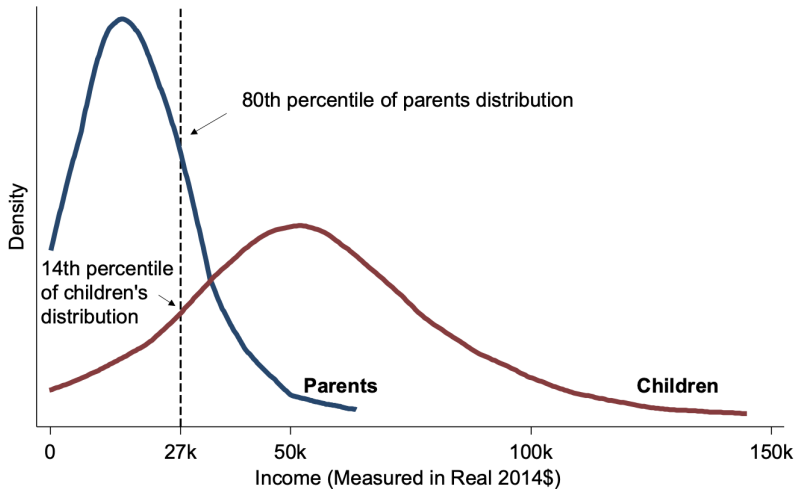
- ▶ Chetty et al. 2017. [The fading American dream: Trends in absolute income mobility since 1940](#). Science 356.6336:398-406.

This paper

- ▶ assumes that rank-based mobility was constant
- ▶ given that assumption, focuses on **absolute** mobility

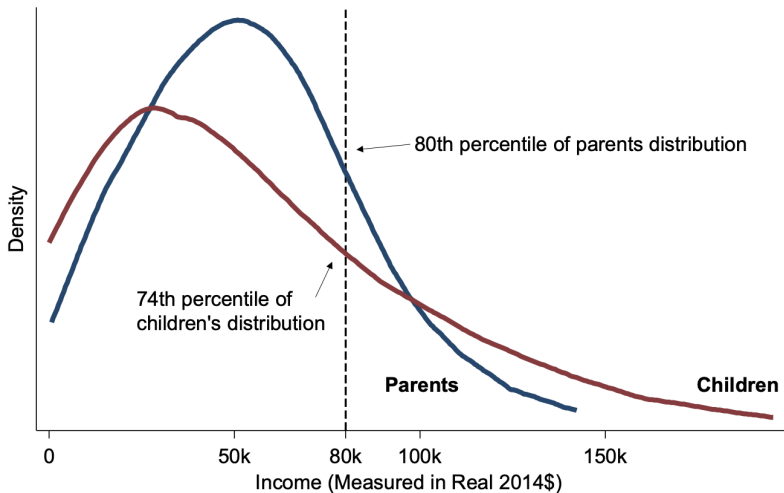


## B. Family Income Distributions: 1940 Birth Cohort





### C. Family Income Distributions: 1980 Birth Cohort

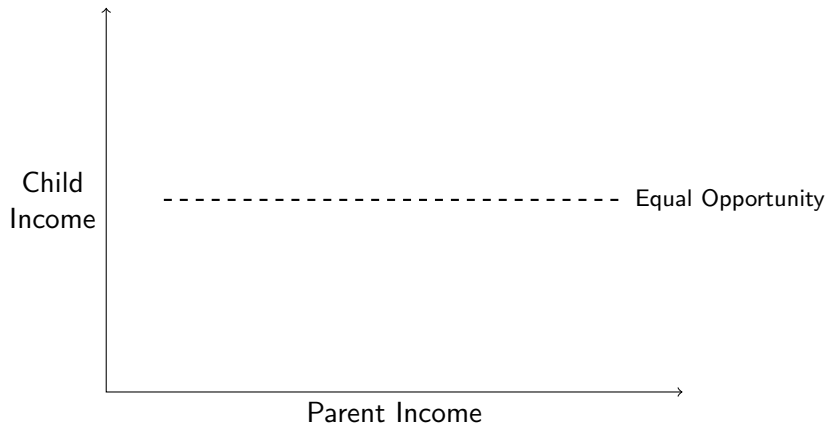


The probability that a child out-earns their parent has fallen

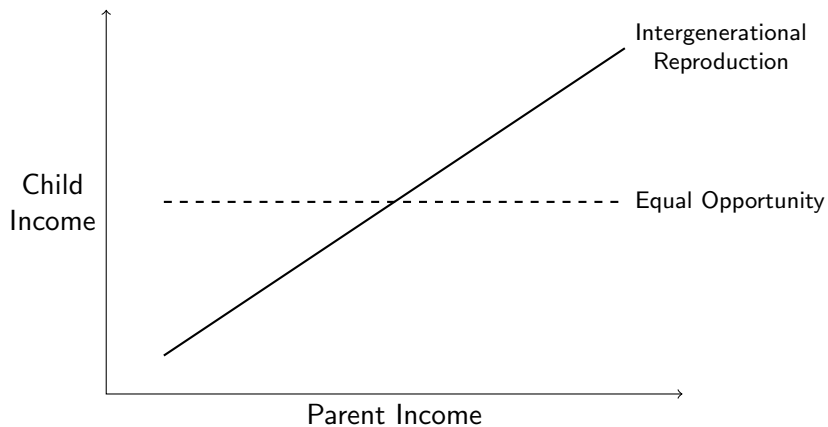
## Generalizing these ideas



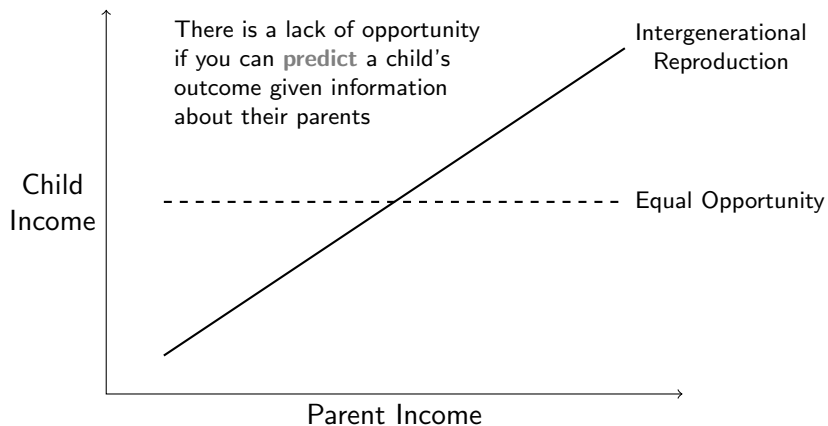
# Generalizing these ideas



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