

Empirical Research on Economic Inequality

Why study inequality?

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This course is about:

- ▶ Economic inequality,
- ▶ its historical evolution,
- ▶ causes of observed changes,
- ▶ and the role of policy choices.

Questions for you

- ▶ Why economic inequality?
- ▶ Why study its causes?
- ▶ Should we worry about inequality?
- ▶ Why are you here?

Coming up:

- ▶ Reasons why one might care
- ▶ Perspectives from the literature on theories of justice
- ▶ Feel free to disagree / discuss!

Four sets of reasons why one might care

1. We cannot *not* study inequality
if we evaluate policies based on the welfare of individuals.
2. Arguments of Justice:
Nearly all theories of justice ask for some form of equality.
3. Consequences of inequality
4. Historical variability and the role of policy
vs. ahistorical explanations

3. Consequences of inequality

Hypothesized consequences of rising inequality:

- ▶ Political:
 - ⇒ rising influence of campaign donations and lobbying
 - ⇒ undermines democratic institutions, “one person, one vote.”
- ▶ Social:
 - ⇒ increasing social segregation (residential, educational, etc.)
 - ⇒ reducing knowledge of the way others live, undermining social cohesion and solidarity.
- ▶ Economic:
 - ⇒ destabilization of the economy
 - e.g. mortgage lending as a substitute for income growth of the less rich ⇒ financial crisis starting in 2008.

4. Versus ahistorical explanations

- ▶ Popular explanations of inequality:
 - ▶ Biological (variants: racism, sexism)
 - ▶ Individual (effort)
- ▶ Such explanations leave no role for society, history
- ▶ Undermined by evidence: historical variability, role of policy
- ▶ Examples:
 - ▶ Unemployment varies a lot over the business cycle – hard to explain by individual variation in laziness
 - ▶ Women have overtaken men in education – hard to reconcile with sexist theories of the past
 - ▶ Economic inequality was high, then lower, now high again in the US – policy changes matter

Rest of these slides

- ▶ Theories of justice – items 1. and 2.

- ▶ Some references:

Rawls, J. (1973). A theory of justice. Harvard University Press, Cambridge.

Sen, A. (1995). Inequality reexamined. Oxford University Press, Oxford.

Roemer, J. E. (1998). Theories of distributive justice. Harvard University Press, Cambridge.

Normative individualism

Common presumption for most theories of justice:

- ▶ Normative statements about society based on statements about individual welfare
- ▶ Formally:
 - ▶ Individuals $i = 1, \dots, n$
 - ▶ Individual i 's welfare v_i
 - ▶ Social welfare as function of individuals' welfare

$$SWF = F(v_1, \dots, v_n).$$

Questions for you

- ▶ **Who is to be included** among $i = 1, \dots, n$?
 - ▶ All citizens? All residents? All humans on earth?
 - ▶ Future generations? Animals?
- ▶ **How to measure individual welfare** v_i ?
 - ▶ Opportunities or outcomes?
 - ▶ Utility? Resources? Capabilities?
- ▶ **How to aggregate** to *SWF*?
How much do we care about
 - ▶ Trevon vs. Emily, Sophie vs. José?
 - ▶ Millionaires vs. homeless people?
 - ▶ Sick vs. healthy people?
 - ▶ Groups that were victims of historic injustice?

Not covered by this framework

Framework covers many approaches, but not all:

- ▶ Libertarian:
“Market outcomes are just, no matter what the welfare consequences for individuals”
- ▶ Fascist:
“What counts is the greatness of the nation”
- ▶ Environmental concerns:
“Preservation of the environment is a value, beyond its consequences for humans”

How to measure individual welfare

Utilitarian approach:

- ▶ Dominant in economics
- ▶ Formally:
 - ▶ Choice set C_i
 - ▶ Utility function $u_i(x)$, for $x \in C_i$
 - ▶ Realized welfare

$$v_i = \max_{x \in C_i} u_i(x).$$

- ▶ Double role of utility
 - ▶ Determines choices (individuals choose utility-maximizing x)
 - ▶ Normative yardstick (welfare is realized utility)

- ▶ Policies do not change u_i but change C_i
⇒ change v_i
- ▶ Problems with utilitarian approach:
 - ▶ Preferences do not exist in a pre-social vacuum.
(parental aspirations, gender norms, ...)
 - ▶ People might not always act according to their preferences.
(cf. behavioral economics)
 - ▶ How to compare utility across people?

Capabilities approach:

- ▶ Proposed by
 - Sen, A. (1995). Inequality reexamined. Oxford University Press, Oxford.*
- ▶ Evaluate C_i directly, without reference to u_i
- ▶ “Capability to function”
subject to all constraints faced by individuals
 - ▶ legal
 - ▶ economic
 - ▶ political
 - ▶ social norms
 - ▶ ...
- ▶ Distinction between choices and options
(example: religious fasting vs. starving)

Opportunities approach:

- ▶ Proposed by

Roemer, J. E. (2009). Equality of opportunity. Harvard University Press.

- ▶ Empirical / pragmatic approach:

- ▶ Define a list of observable factors called “circumstances.” (parental background, race, gender, ...?)
- ▶ Inequality predicted by these factors: “inequality of opportunity”
Rest: “inequality of effort”
- ▶ v_i : outcomes predicted by circumstances

- ▶ Problems

- ▶ How to pick the list of factors?
- ▶ Separation circumstances vs. effort conceptually shaky

How to aggregate

Welfare weights:

- ▶ $SWF = F(v_1, \dots, v_n)$

- ▶ Define:

$$\omega_i := \frac{\partial}{\partial v_i} F(v_1, \dots, v_n).$$

- ▶ For small change of some policy:

$$dSWF = \sum_i \omega_i \cdot dv_i.$$

- ▶ Welfare weight ω_i measures how much we care about increasing welfare of i .
- ▶ There is no “objective” way to pick welfare weights.

Questions for you

What do you think welfare weights should depend on?
Income, health, ...?

The veil of ignorance

- ▶ Thought experiment in
Rawls, J. (1973). A theory of justice. Harvard University Press, Cambridge.
- ▶ Choice of welfare weights as a decision problem, formalizing “impartiality”
- ▶ Imagine
 - ▶ You know nothing about yourself.
 - ▶ The next morning you could wake up as any $i = 1, \dots, n$.
 - ▶ You have to pick between social arrangements, policies.
 - ▶ By what criterion would you pick?

Rawls' answer:

- ▶ Faced with fundamental uncertainty, you want to insure yourself as much as possible.
- ▶ You want to mitigate the worst possible outcome.
- ▶ Thus evaluate arrangements based on welfare of the person worst off:

$$F(v_1, \dots, v_n) = \min_i v_i.$$

- ▶ This is called maximin.

Conclusions for empirical research

Some of my takeaways:

- ▶ Report disaggregated results
 - ▶ Distribution of v_i , relation to covariates
 - ▶ Allows one to evaluate *SWF* no matter what welfare weights.
 - ▶ Allows one to think about winners and losers of changes.
- ▶ Be aware your variable does not measure welfare directly
 - ▶ Welfare is a complicated thing.
 - ▶ Not the same as wages or earnings or income or consumption or wealth or ...
- ▶ Be explicit about why you study some dimension of inequality
 - ▶ Why inequality along some demographic variable?
 - ▶ Why just a specific mechanism?