Systemic Discrimination: Theory and Measurement

Discussion

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NBER Labor Studies

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Overview

This paper formalizes a notion of *systemic* vs. *direct* discrimination

1. Connects to ideas in education and sociology literatures
2. Illustrates model with many interesting examples
3. Measures and decomposes sources of discrimination in a hiring experiment

My plan:

1. Discuss connections to legal and regulatory landscape
2. Provide alternative views on why the individual / systemic distinction matters
This paper

Decision $A_j$, group $G_i \in \{m, f\}$, non-group signal $S_i$, “qualification” $Y_i^0$

1. **Direct discrimination**: \( \exists s \text{ s.t. } A_j(m, s) \neq A_j(f, s) \)

2. **Systemic discrimination**: \( \exists g \text{ s.t. } A_j(g, S_i) \not\perp G_i \mid Y_i^0 \)

3. **Total discrimination**: \( A_j(G_i, S_i) \not\perp G_i \mid Y_i^0 \)

Total discrimination can be decomposed into direct and systemic sources
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2. **Systemic discrimination**: $\exists \ g \ s.t. \ A_j(g, S_i) \nparallel G_i | Y_i^0$

3. **Total discrimination**: $A_j(G_i, S_i) \nparallel G_i | Y_i^0$

Total discrimination can be decomposed into direct and systemic sources

$\rightarrow$ implies systemic can be backed out as total minus direct
Connection to discrimination law

**Disparate treatment** is *direct* discrimination on protected characteristics

- Doesn't require explicit evidence of intent (McDonnell Douglas v. Green)
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**Disparate impact** is *indirect* discrimination due to specific policies

- DOJ Title VI handbook: a “claim that relies on a statistical disparity must fail if the plaintiff cannot point to a defendant’s policy causing the disparity”
- Title VII: complainant must “[demonstrate] that a respondent uses a particular employment practice that causes a disparate impact”
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- Title VII: complainant must “[demonstrate] that a respondent uses a particular employment practice that causes a disparate impact”

→ not obvious how statistical treatment disparities conditional on $Y_i^0$ relate
How much of “total discrimination” is discrimination?

Total discrimination:

$$\Delta_j(y^0) = E[A_j(G_i, S_i)|G_i = m, Y_i^0 = y^0] - E[A_j(G_i, S_i)|G_i = f, Y_i^0 = y^0]$$

Law does not require total discrimination to be set to zero

- Some awkwardness when zeroing $\Delta_j(y^0)$ actually requires illegal discrimination

Beyond the law, may be situations where total discrimination $\neq 0$ due to preferences

- Example from paper: What if students with different innate ability $Y_i^0$ choose different high school activities across groups because they want to?

Better to think of “total discrimination” as “total disparity”? 
People vs. institutions vs. systems

Paper offers a definition of “institutional” discrimination as the aggregation of individual decisions within the firm.

Implies the firm is simply the sum of its parts: it discriminates iff a random manager does in expectation.

Think this misses an important sense in which firms can have “top down” influence through rules, policies, and cultures that shape how managers behave.

This is how regulators / enforcers view “systemic”:

- EEOC: “bias that is built into systems, originating in the way work is organized,” “structures that shape the work environment or employment prospects differently for different types of workers,” and “patterns of behavior that develop within organizations that disadvantage certain employees”
An alternative framework

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An alternative framework

Direct

Individual

Sexist hiring manager

Manager prefers candidates from own school

Systemic

Pattern or practice, culture of sexism

Firm-wide biased algorithm
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Relevant for regulatory approach

Relevant for legal theory, policy fix
EEOC systemic enforcement vs. the world

Use of criminal history background checks (v. BMW, 2015)


Refusal to hire African American, Hispanics and older workers for front of the house positions (v. McCormick & Schmicks, 2014)

Staffing agency referring applicants based on race (v. Paramount Staffing, 2010)

Aptitude tests for skilled-trade apprenticeships (v. Ford Motor Co., 2007)

Eliminating tap-on-the-shoulder recruiting in favor of job posting (v. Dillard’s, 2020)
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“Bringing one systemic action...is more efficient than undertaking one individual investigation or lawsuit at a time that may not fully resolve the issue underlying the discrimination.”
Reconciling with the sociologists

Non-economic literature on these topics is difficult to pin down.

Clear that the idea of propagated discrimination, where direct discrimination in one domain / period results in disparate impact in another, is critical.

- Reskin, *American Review of Sociology*: “race discrimination is a system whose emergent properties reinforce the effects of their components”... resulting in “über discrimination”

Closest to what the authors have measured in their empirical exercise here, and describe in several of their examples.

Worth modeling more directly how interactions / dynamics across domains propagate direct discrimination, and how / when we can measure propagation in the field.
Wrap up

Important advance in defining / modeling concepts in dire need of definitions / models

Useful to tie these definitions to policy and regulatory landscape explicitly

- Not obvious (to me) how total discrimination relates to illegal discrimination

And useful to model how / when individual preferences affect total discrimination

Words perhaps < math, but worth reserving “systemic” to distinguish between idiosyncratic vs. widespread patterns of discrimination?

- Direct vs. indirect distinction already clear, both practically and legally

- Aligns with regulators’ views on functional importance of distinction

- Fine to call it “institutional” instead
Thanks!

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