

Measuring Systemic Discrimination with Iterated Audits

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Housing Discrimination Study Innovative Methodology Project
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Based on Bohren, Hull, and Imas (2022): "Systemic Discrimination: Theory and Measurement"

Motivation

Audit/correspondence studies have become mainstay experimental tools for detecting and measuring discrimination in many high-stakes settings

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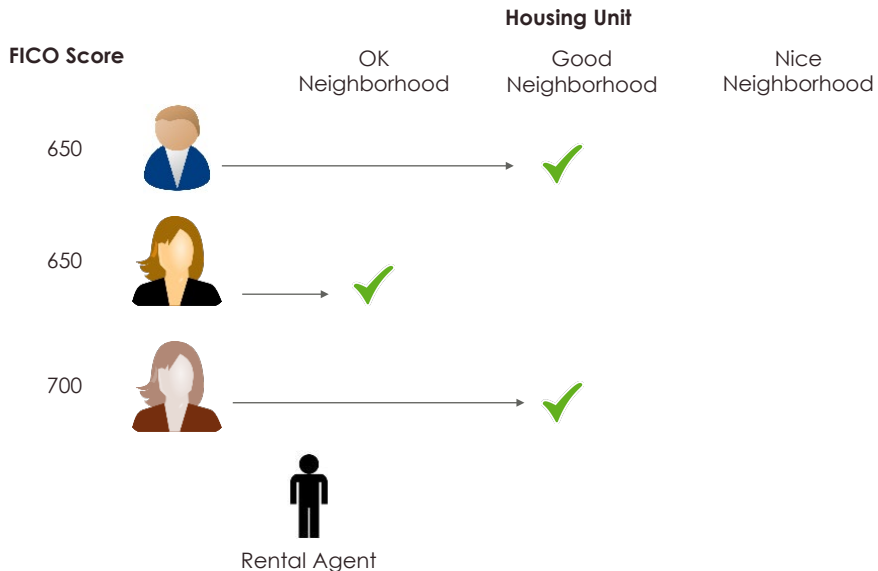
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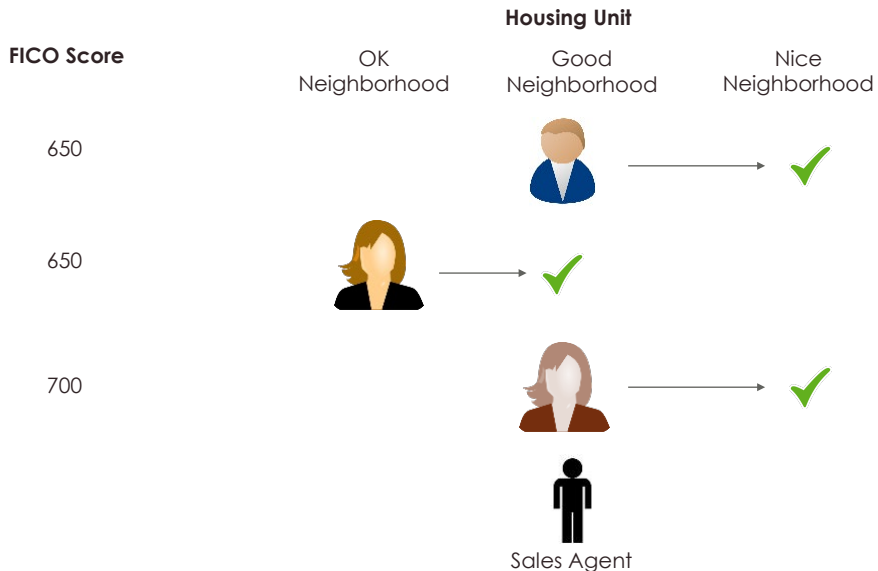
But a large body of academic work suggests this approach is incomplete

- **Systemic** (or **indirect**) **discrimination** can operate through other (e.g. non-race) characteristics, which are held fixed in an audit
- Conventional studies can therefore miss important drivers of **total discrimination** (\approx *disparate impact*; Turner et al. 2013)

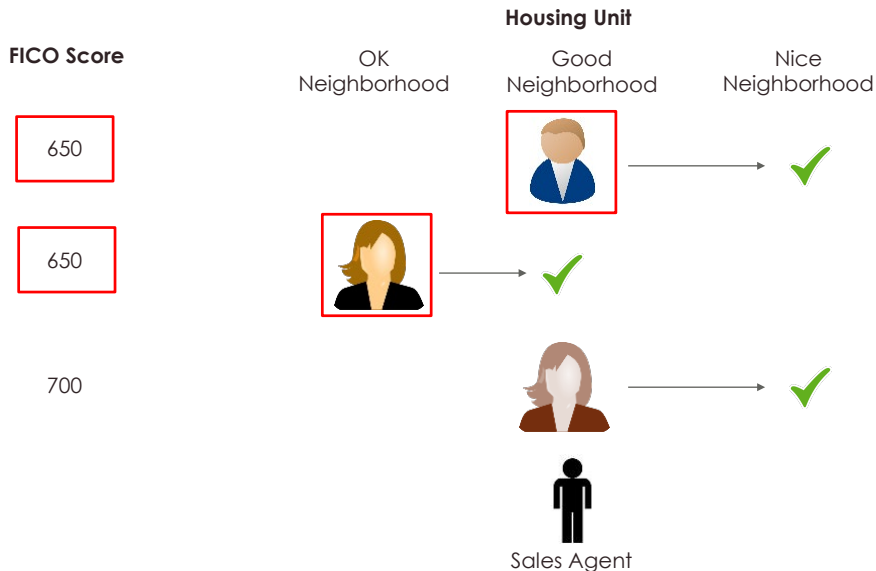
Stylized Example: Direct Discrimination by Rental Agents



Subsequent Purchase Market: No Direct Discrimination



Yet Equally Qualified Buyers are Shown Different Houses



Conceptual Framework (Bohren et al. 2022)

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Systemic discrimination: $A_j(g, S_i) \not\propto G_i \mid Y_i^0$ for some or all g

- Discrimination arising indirectly from non-group characteristics

Measuring Systemic Discrimination through Iterated Audits

Systemic discrimination can be measured by a Kitagawa-Oaxaca-Blinder **decomposition** of total discrimination into direct & systemic components

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Bohren et al. (2022) propose a general **iterated audit** methodology

- 1 Collect real group- m/f applications w/ equal qual. Y_i^0 , randomize group perceptions for some to measure direct discrimination
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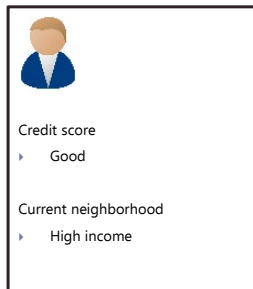
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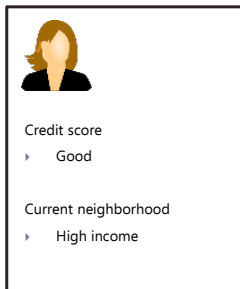
When qualification is not directly observed, this method can be combined applied using other quasi-experimental variation (e.g. Arnold et al. 2022)

Iterated Audit Example

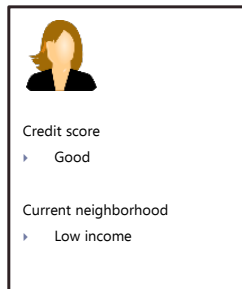
Real m application



Fake f application w/ m characteristics



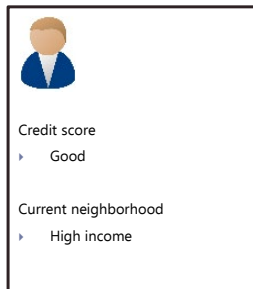
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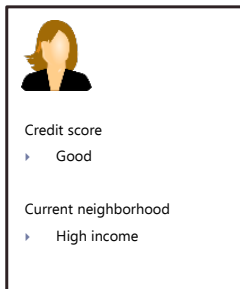
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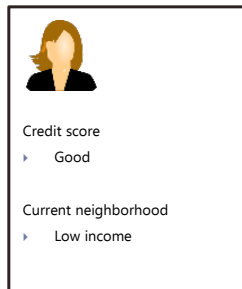
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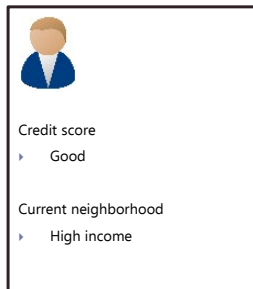
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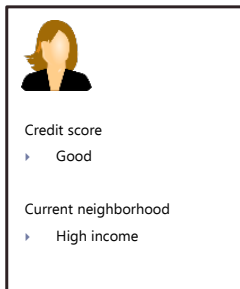
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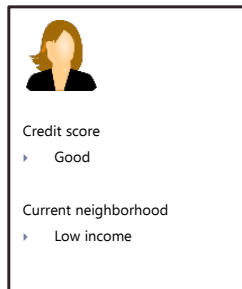
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Systemic discrimination

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Applying these measures “in the wild” may present new challenges

- Choosing + auditing different measures of qualification can bring focus to different systemic forces in the U.S. housing market