## **Explaining Racial Disparities in Personal Bankruptcy Outcomes**

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### Motivation

- ► Great paper! Theory, econometric design, & uses matching algorithm to impute race
- Methodological Contribution: Creates racial bias estimator & partially identifies (bounds) portion caused by
  - 1. Accurate statistical discrimination
  - 2. Inaccurate statistical discrimination
  - 3. Taste-based discrimination
- ► Type of discrimination determines the type of remedy required:
  - 1. Accurate statistical discrimination use decision rule based on non-race characteristics to standardize review process; offer financial incentives to decision makers (DMs)
  - 2. Inaccurate statistical discrimination providing DMs data or guidelines to help reduce prediction errors; increasing DM diversity or matching DMs to bankruptcy filers based on race
  - 3. Taste based discrimination Debias training; increasing DM diversity or matching DMs and filers based on race

Decision maker who influences the outcome of an individual

DM solves:  $\max_{d \in \{0,1\}} E_j[u_j(Y_d; j, r_i, x | r_i, x)]$  $\Delta(j, r_i, x) \equiv u(Y_1; j, r_i, x) - u(Y_0; j, r_i, x)$ Dismissal:  $D(j, r_i, x) = \mathbb{1}E_j[\Delta(j, r_i, x) | r_i, x] \ge 0$ where  $Y_1$  - case dismissed,  $Y_0$  - case approved

#### Decompose DM j's expected utility into 3 components



#### Map Decision Maker Problem to Homophily Estimand

• Homophily Estimand  $(\tau)$  analogous to difference-in-difference estimator

$$\tau \equiv \left\{ E[D|r_i = b, r_j = w] - E[D|r_i = w, r_j = w] \right\} - \left\{ E[D|r_i = b, r_j = b] - E[D|r_i = w, r_j = b] \right\}$$
  
$$\tau = \left\{ E_{bw}[D] - E_{ww}[D] \right\} - \left\{ E_{bb}[D] - E_{wb}[D] \right\}$$

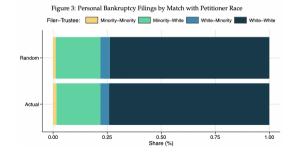
 Assumption 1: Parrallel Disparities - counterfactual racial disparities are equal across Black and White DMs

$$\{E_{bw}[D] - E_{ww}[D]\} = \{E_{bb}[D] - E_{wb}[D]\}$$

- Parallel bias test in the theory is for 2 races
  - homophily is defined as relative homophily a Black DM's leniency for a Black filer relative to a white filer compared to a white DMs leniency for a white filer relative to a Black filer
- ► Imputed race in the data is a continuous measure
  - Not clear that this parallelism would hold with continuous measure
  - The empirics use white vs non-white to establish the balance test
- ► May not hold because of differences in the distribution of the continuous measure
  - For example, all white DMs may respond to each borrower within a race with a consistent racial bias
  - However Black and Hispanic DMs may respond differently to white, Black, and Hispanic filers. The distribution of each of the race pairs will affect whether the biases are parallel.

#### Main Comment 2: Discussion of random assignment

- Random assignment: Paper compares minority-white matching of DM-filer to a random assignment simulated nationwide
  - Recommend showing this race by race for above a cutoff of the continuous race measure
  - Recommend t-tests by inspection they look similar but yellow and bar is smaller in 'Random' and this is exactly where parallel disparities need to hold



- ► Use more of great data and textual discussions with DMs!
- ► There could be matching to DMs based on similarity of cases
- DMs could ask other DMs who took on similar cases for precedent, this could differ within races. (ie. maybe white DMs feel more comfortable doing this since they make up such a large portion of DMs)
  - May help to minimize the role of precedent because the paper stays within bankruptcy
  - Would be great to add in some of the additional text discussions to control for the types of precedent that DMs are following to get closer to random assignment as in (Frandsen, Lefgren, Leslie (2023))

# Thank you!

- ► Would be helpful to define each new term or dependence the first time it is used. For example I did not see a definition for D(w) on page 23
- Try to use parallel framing and wording when possible to set up similar topics and variables. For example, opening each paragraph the same way, and mirroring the development of the paragraph when explaining each of the different types of discrimination. This would help reader parse information more efficiently and follow the paper more closely.