

# Racial Disparities and Bias in Consumer Bankruptcy

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**Bronson Argyle**

BYU

**Sasha Indarte**

Wharton, UPenn

**Ben Iverson**

BYU

**Christopher Palmer**

MIT & NBER

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# Bankruptcy is an Important Source of Debt Relief

- Consumer bankruptcy is a major source of debt relief for US households
  - ▶ 1 in 10 Americans have filed at some point in their life (Keys, 2018)
  - ▶ Wealth transfers made through bankruptcy exceed those of state and federal unemployment insurance programs combined (Lefgren et al., 2010)
- Receiving debt relief from bankruptcy increases earnings, longevity, homeownership, and children's earnings (Dobbie Song 2015; Dobbie et al. 2017; Hamdi et al. 2024)

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- **This paper:** are there racial disparities in access to consumer bankruptcy? Why?
  - ▶ Such disparities could exacerbate racial disparities in wealth (Derenoncourt et al., 2024) and vulnerability to economic shocks (Ganong et al., 2020)

# Paper Overview

- Use new data on ~universe of US bankruptcy cases linked to self-reported filer race
  - ▶ What observable **filer/case** characteristics explain disparities in bankruptcy outcomes?
  - ▶ Compare how disparities vary with the **race of** legal decision-makers (**trustees & judges**)
  - ▶ Develop framework to relate differences in disparities (**homophily**) to racial bias

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  - ▶ Develop framework to relate differences in disparities (**homophily**) to racial bias
- **Main findings:**
  - ▶ Minority filers' cases are more likely to be **dismissed without debt relief** on average
    - Chapter 7: **2.3 pp** more often (135% higher than average)
    - Chapter 13: **13 pp** more often (23% higher than average)
  - ▶ Random assign. to White trustees  $\Rightarrow$  Ch 13 dismissal rate  $\uparrow$  **2.3 pp** for minority filers
  - ▶ Taste-based or inaccurate statistical bias explain  $\geq$  **15%** of overall Ch 13 disparity
  - ▶ Trustee race **doesn't** affect Ch 7 dismissal rates

# Contributions to Related Literature

- **Racial disparities in household finance:** Munnell et al. (1996); Braucher et al. (2012); Reid et al. (2017); Bayer et al. (2018); Bartlett et al. (2019); Fuster et al. (2021); Morse Pence (2020); D'Acunto et al. (2021) Blattner Nelson (2021); Begley Purnanandam (2021); Kermani Wong (2021); Dobbie et al. (2021); Butler et al. (2022); Cook et al. (2022); Butler et al. (2023); Frame et al. (2023); Feng Shanthikumar Zhang (2024); Goldsmith-Pinkham Scott Wang (2024); Diamond Diamond (2024)
  - ▶ New focus on racial disparities in **bankruptcy** and its drivers
- **Impact of legal decision-makers:** Anwar et al. (2012, 2019a, 2019b); Arnold Dobbie Yang (2018); Morrison et al. (2019); Arnold Dobbie Hull (2020); Iverson (2020); Iverson et al. (2020)
  - ▶ Evidence on role of bias and importance of bankruptcy **trustees**
- **Methods for detecting and quantifying bias:** Becker (1957, 1993); Knowles et al. (2001); Anwar and Fang (2006); Alesina and La Ferrara (2014); Arnold Dobbie and Yang (2018); Arnold Dobbie and Hull (2020); Canay Mogstad and Mountjoy (2020); Hull (2021); Bohren Hull and Imas (2022)
  - ▶ New results formalizing how **homophily** can detect and quantify bias
  - ▶ Homophily can detect bias in **cases where outcome tests are infeasible**

# Background and Data

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# What is Consumer Bankruptcy?

- Allows households to discharge unsecured debt (credit card, medical, etc.)
  - ▶ To receive a debt discharge, filers must make partial payments to creditors
- Households file under either Chapter 13 (26%) or Chapter 7 (74%):
  - ▶ **Chapter 7:** discharge received (~3 months) after paying value of non-exempt assets
  - ▶ **Chapter 13:** discharge received after completing a 5 year repayment plan
  - ▶ **Payments:** creditors receive at least as much in Ch 13 as they would in Ch 7
  - ▶ **Eligibility:** must have income below state's median to choose Ch 7
- A **trustee** evaluates filer financial reporting and makes recommendation to **judge**
  - ▶ Key decision: to discharge debt or dismiss without debt relief



# The Dismissal Decision

- Trustees and judges consider multiple outcomes when choosing whether to dismiss:
  - ▶ Prevent **fraudulent** filing (misreporting of assets, income, and debt)
  - ▶ Approve a **feasible** repayment plan
  - ▶ Maximize payouts to creditors subject to **applicable** debtor protections

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- These evaluations can be highly **subjective**
  - ▶ Is filer misreporting procedural **error** or **intentional** fraud?
  - ▶ Is the Ch 13 plan **feasible**?
  - ▶ **How much time** should a filer receive to cure nonpayment on a Ch 13 plan?
- Trustee and judge objectives are numerous, hard to measure, and may interact
  - ▶ An outcome test is not well-suited to study bias in bankruptcy
  - ▶ We develop an alternative approach based on homophily/differences in disparities

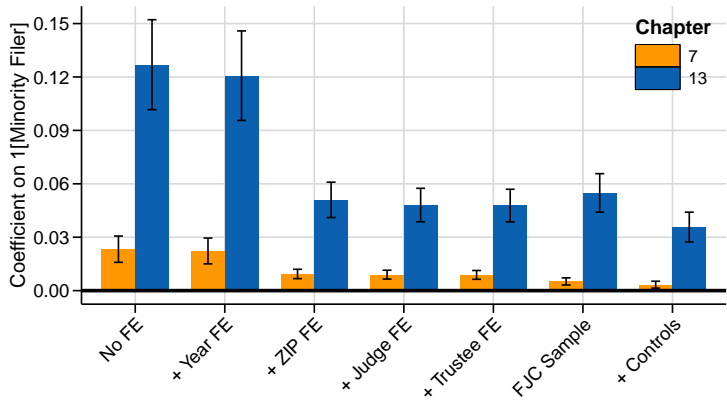
# Bankruptcy and Race Data

- **Lexis Nexis** bankruptcy case data
  - ▶ Filer name and address, chapter, events during case, case outcomes, and DM names
  - ▶ 32M cases, full coverage of US Jan. 2010 – Jun. 2022 (38% of sample)
- **Federal Judicial Center (FJC)** case data
  - ▶ Additional case info for 2008+ (e.g., filer assets, liabilities, income)
- **Filer race data:** merge to L2 using filer name and address (67% match rate)
- **Decision maker (DM) race data:** manually collected and verified (63% match rate)
- Merged dataset with full race info and all controls: 4.3M obs

# Racial Disparities in Bankruptcy Dismissals

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# Racial Disparities in Dismissal Rates

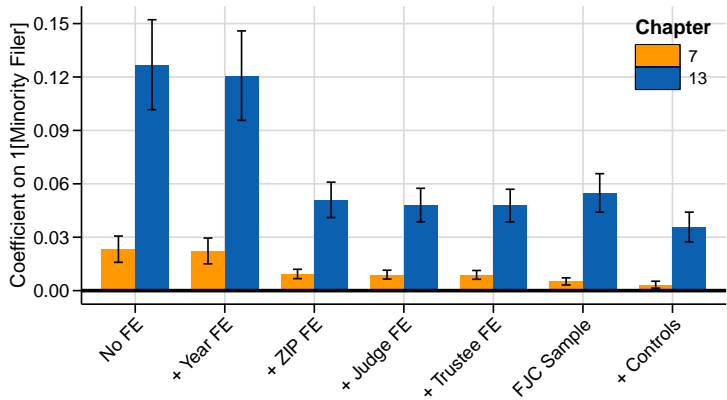


Average dismissal rates:  
54.5% (Ch 13) and 1.7% (Ch 7)

Minorities' dismissal rates are  
13% and 2.3% higher in Ch 13  
and 7 (respectively)

Shrinks to 0.3% and 3.6% for  
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Ch 13 gaps after controls:

- Black: 5.6%
- Hispanic: 0.9%
- Other: 0.7%
- Asian: 0.00%

► Table

# Decision Model & Econometric Framework

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# Overview of Decision Model & Econometric Framework

- Formulate decision model where **DM utility is a flexible function of multiple outcomes**, which the **econometrician does not observe**
- Homophily estimand:  $\tau \equiv \underbrace{\{E_{mw}[D] - E_{ww}[D]\}}_{\text{racial disparity w/i White trustees}} - \underbrace{\{E_{mm}[D] - E_{wm}[D]\}}_{\text{racial disparity w/i minority trustees}}$
- Identification challenge:** disparity = selection + biases
- If selection is similar for filers facing White vs minority DMs (**Parallel Disparities**):
$$\tau = \Delta(\text{selection}) + \Delta(\text{bias}) = \Delta(\text{bias})$$
- If accurate statistical bias is similar across DMs (**PASD**), then:
$$\tau = \Delta(\text{taste-based bias}) + \Delta(\text{inaccurate statistical bias})$$
- $\tau$  identifies the **difference in DM bias**  $\Rightarrow$  testing  $\tau = 0$  tests for presence of bias



# Applying Framework

- Homophily can test for bias in situations where outcome tests are infeasible
  - ▶ E.g., due to unobserved or abstract/complex outcomes
- Assumptions 1 & 2 restrict correlations between filer characteristics and DM race
  - ▶ **OK:** filer race can be correlated with non-race characteristics  $x$
  - ▶ **Not OK:** DM race correlated with  $x$ 's that affect their decision
  - ▶ **Test:** check if filer race and non-race  $x$ 's predict DM race (balance test)

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- But even if DMs are randomly assigned, their race is not...
  - ▶ **Significance:** do DMs of different races make decisions differently?
  - ▶ **OK:** DM strictness can be correlated with DM race
  - ▶ **Not OK:** DM preferences over outcomes correlated with filer race covary with DM race
  - ▶ **Test:** check if homophily est. is affected by interacting DM race with other covariates

# Racial Homophily and Bias in Bankruptcy

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# Econometric Specification

- We focus on dismissals and Black-White homophily between filers and trustees
- Using case-level data, we estimate

$$1[\text{Dismissed}_i] = \beta_1 1[\text{Black Filer}_i] + \beta_2 1[\text{Black Filer}_i] \times 1[\text{White Trustee}_i] + X_i \gamma + \varepsilon_i$$

- **Fixed effects:** filing year, district, filer ZIP, judge, and trustee
- **Controls:** 1[Pro Se], 1[Prior Filing], 1[Asset Case], 1[Homeowner], 1[Joint Filing], ln(Assets), Leverage, Secured Debt (%), and ln(Income)
- **Clustering:** federal bankruptcy court district (94 districts)

# A Natural Experiment from Trustee Assignment

- [Chapter 7](#) trustees are assigned to cases via a blind rotation system

# A Natural Experiment from Trustee Assignment

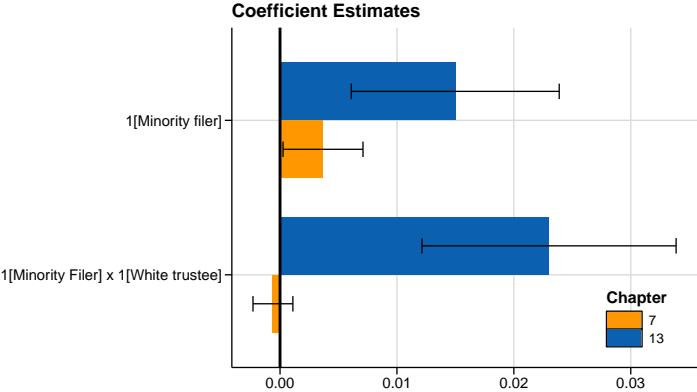
- Chapter 7 trustees are assigned to cases via a blind rotation system
- Chapter 13 Standing Trustees hired by local US Trustees Office
  - ▶ Race of local trustees varies over time  $\Rightarrow$  "quasi-random" assignment to filers

# A Natural Experiment from Trustee Assignment

- Chapter 7 trustees are assigned to cases via a blind rotation system
- Chapter 13 Standing Trustees hired by local US Trustees Office
  - ▶ Race of local trustees varies over time  $\Rightarrow$  "quasi-random" assignment to filers
- Tests of identifying assumptions:
  - ▶ **Balance Test 1:** filer race and non-race characteristics do not predict trustee race ✓
  - ▶ **Falsification Test 2:** homophily estimate unaffected by including additional interactions of trustee race with 1[White trustee] ✓

# Dismissal Homophily Estimation Results

**Ch 13:** assignment to White trustees increases Pr(dismissal)  
**2.3%** for minority filers

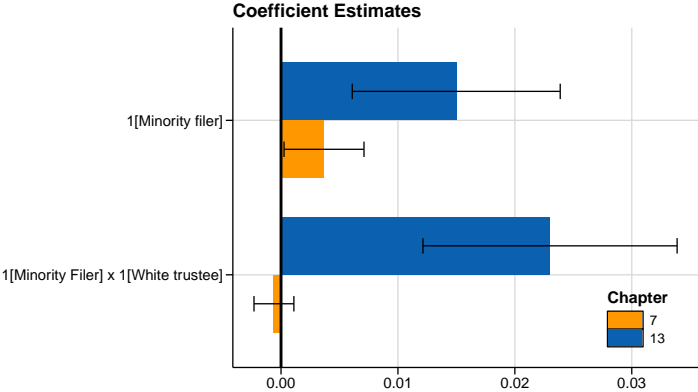




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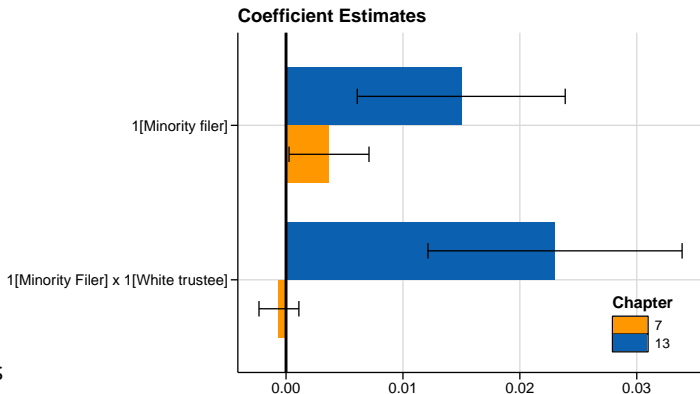


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⇒ **taste and/or inaccurate statistical bias explains  $\geq 15\%$**   
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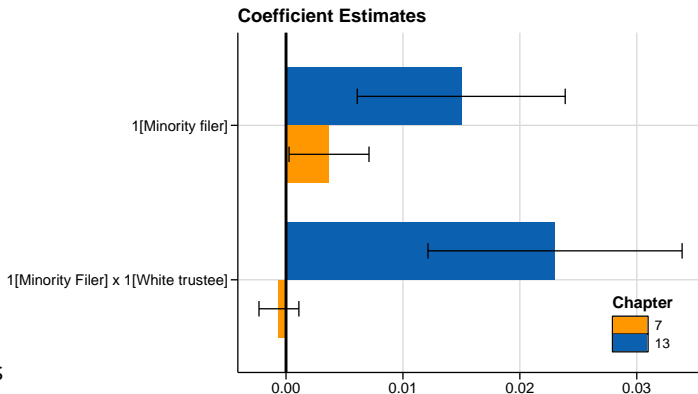


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**Hispanic:** explains 17% of initial 11.7% Ch 13 disparity

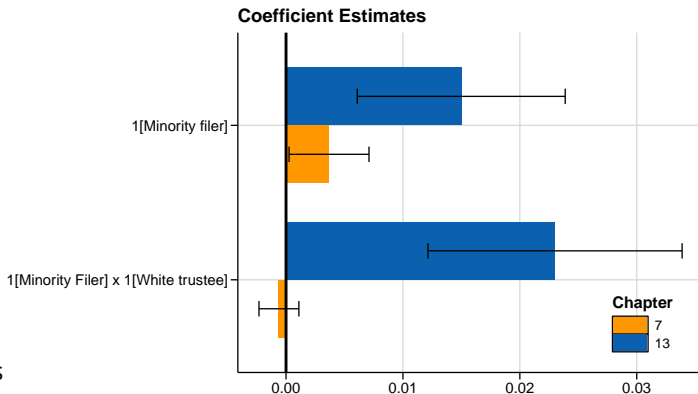
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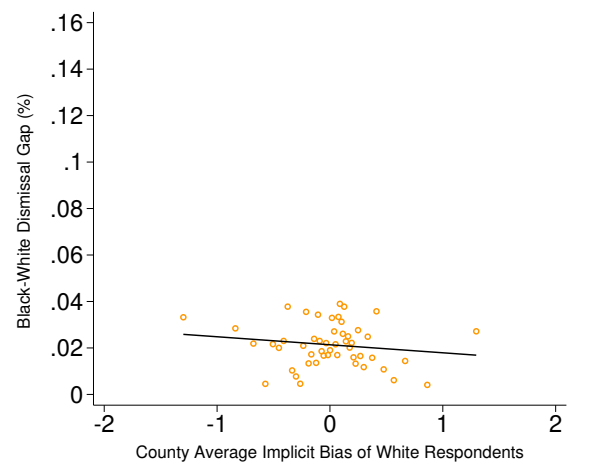
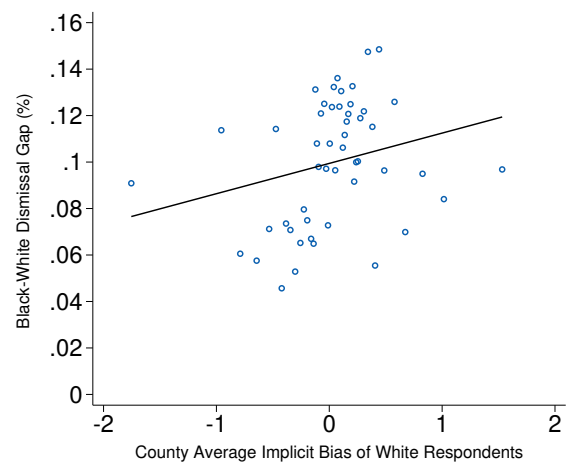
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**Judges:** smaller (but similar) patterns for judge race

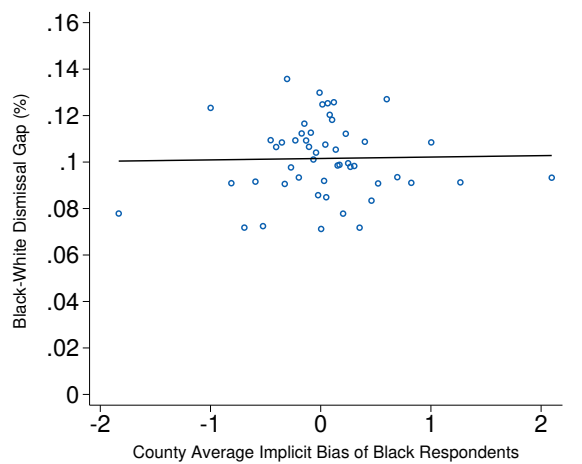
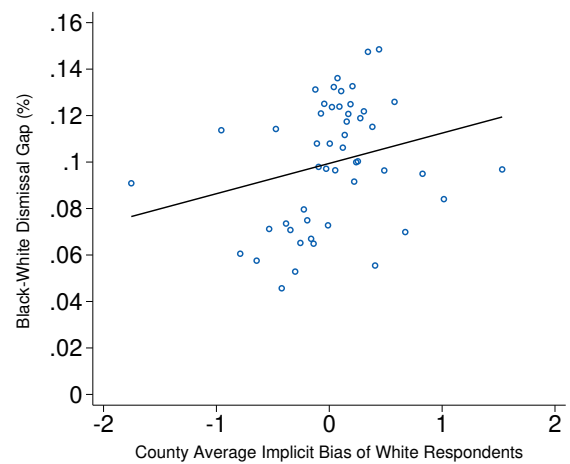
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# Direction of Bias: Evidence from Implicit Bias Scores



*Note:* Implicit bias is measured using Implicit Association Test (IAT) scores for respondents required to take the test for school or work and are aggregated at the county-year level.

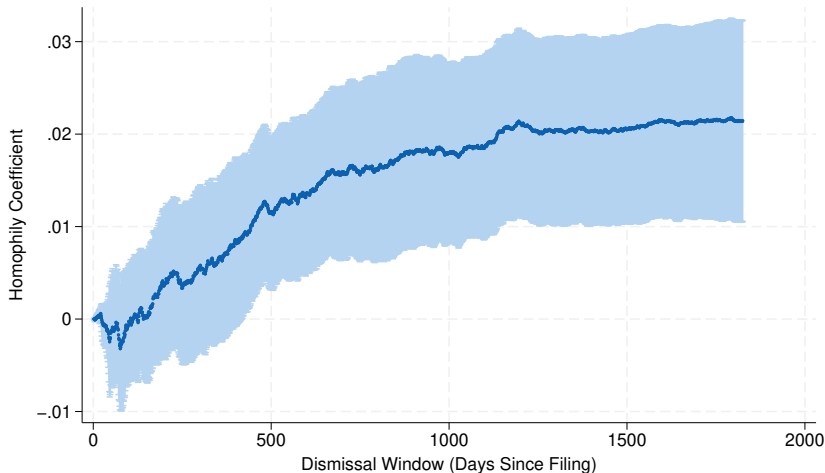
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# Ch 13 Trustee Discretion in Response to Missed Plan Payments

- Homophily emerges **after** plan confirmation



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- Homophily emerges **after** plan confirmation
- Homophily arises primarily in dismissal for nonpayment:  
1.6%\* (nonpayment), 0.4%\*\*\* (missing filing info)
- Facing a White a trustee ↑ required pmts for minority Ch 13 filers by \$19/month
- But payment size differences do not account for higher dismissal rates  
(controlling for pmt size has little effect on dismissal for nonpayment homophily)
- **Takeaway:** Homophily is likely driven by how Ch 13 trustees **react** to nonpayment



# Policy and Future Research

- What features of Chapter 7 might limit the influence of bias?
  - ▶ Less **subjectivity** (e.g., how lenient to be with nonpayment in Ch 13)
  - ▶ **Cost:** unlike Ch 13, there is generally a marginal cost to seek dismissal for trustees
  - ▶ Would reducing subjectivity in Ch 13 reduce homophily?
- Homophily is largest for trustees with ...
  - ▶ Less experience (2.7%\*\*\* vs 2.1%\*\*\*)
  - ▶ Higher caseloads (2.7%\*\*\* vs 1.0%)
  - ▶ Could training and hiring more trustees reduce homophily?
- Should access to Chapter 7 be expanded?
- Should filer race info be collected? Similar to mortgage applications?

# Conclusion

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- Minority bankruptcy filers experience significantly higher dismissal rates
  - ▶ Observables explain most Ch 7 disparities, but only ~72% for Ch 13
- **Homophily** can detect and quantify racial bias
  - ▶ Method can be applied to a variety of other settings
- Minority Ch 13 filers assigned to white trustees see **2.3 pp higher dismissal rates**
  - ▶ Indicates presence of **taste-based or inaccurate statistical discrimination**
- Policy implications: collect bankruptcy race data for monitoring, inclusive trustee hiring, Ch 13 reforms, trustee IAT training, reducing caseload & training
- **Bias among bankruptcy DMs may limit minorities' access to debt relief**

**Thanks!**



Share cases filed under Chapter 13 by filer race (%)

