Comments on JJ Prescott and Eric Laber’s
“The Effects of Judge, Prosecutor, and Defendant Race and Gender Interactions on Defendant Outcomes”

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Background: Inter-Judge Disparity

Do different judges yield different decisions?
- Exploit random assignment of judges to cases

Gaudet et al (1933)
“Individual Differences in the Sentencing Tendencies of Judges”
- Criminal cases from a NJ county
  - ≈1000 cases per judge
- Finds large variation in incarceration rates

Waldfogel (1998)
“Does Inter-Judge Disparity Justify Empirically Based Sentencing Guidelines”
- Federal criminal cases in San Francisco
  - ≈100 cases per judge
- Finds large variation in sentence lengths

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Justin Wolfers, Comments on Abrams
“Do Judges Vary in their Treatment of Race?”
Abrams, Bertrand and Mullainathan (2008)

1. Sentence\_j = \gamma_I(\text{Judge}_j) + \delta_j I(\text{Judge} \ast \text{black defendant})
   - Interpret \delta_j as judge-specific racial bias

2. \delta_j = \beta \text{Black judge}_j + \text{other judge characteristics}
   - Interpret \beta as own-race bias

### Table 9: Correlation with Judge Characteristics

<table>
<thead>
<tr>
<th></th>
<th>Dependent Variable: Judge Fixed Effects in...</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sentence length</td>
</tr>
<tr>
<td>Black judge? (Y=1)</td>
<td>45.03 (60.20)</td>
</tr>
<tr>
<td>Male judge? (Y=1)</td>
<td>54.02 (56.50)</td>
</tr>
<tr>
<td>Older judge? (Y=1)</td>
<td>-11.03 (42.78)</td>
</tr>
<tr>
<td>Judge was public defender? (Y=1)</td>
<td>-0.56 (49.19)</td>
</tr>
<tr>
<td>Judge F.E. in sentence length</td>
<td>0.07 (0.17)</td>
</tr>
<tr>
<td>Judge F.E. in incarceration rate</td>
<td></td>
</tr>
</tbody>
</table>

R\^{2}: 0.02, 0.03, 0.10, 0.16, 0.04, 0.11

Observations: 67, 67, 67, 67, 67, 67

Standard errors in parentheses. Each column correspond to a different regression. In each regression, each observation is weighted by the inverse of the square of the estimated standard error for the fixed effect used a dependent variable in that column. See text for additional detail.
What this paper does

- Analysis of criminal cases from arrest to sentencing
- Careful coding of race of
  - Defendant
  - Assistant district attorney (ADA)
  - Judge
- Document random assignment of:
  - District Attorney to defendants
  - Judges to defendants
- Estimate:
  - Judge and District attorney effects
  - Sentencing and charging behavior
  - Plus interactions with defendant characteristics

Justin Wolfers, *Comments on Prosecutor & Defendant Race*
Empirical Approach

\[
\text{Decline}_{ijt} = \beta_1 \text{ProsRace}_j + \beta_2 \text{DefRace}_i + \beta_3 \text{DefRace}_i \times \text{ProsRace}_j \\
+ \gamma \text{DefendantChars}_i + \delta \text{ProsecutorChars}_j + \alpha \text{CaseChars}_i \\
+ \nu \text{TimeFixedEffects}_i + \varepsilon_{ijt}
\]

- **Race**: dummies for white or black (other races dropped)
- **Defendant Chars**: age dummies, sex, arrest location, arresting division, dummies, criminal history flag
- **Prosecutor Chars**: age dummies, sex, political party, experience (and experience squared) at NODA, any disciplinary action in record
- **Case Chars**: charge class, case type, maximum *recommended* charge, number of witnesses
- **Specifications**: OLS (and Logit, for declination)
Empirical Approach

\[ \text{Decline to charge}_{ijt} = \beta_1 \text{Prosecutor Race}_i + \beta_2 \text{Defendant Race}_i \\
+ \beta_3 \text{Defendant Race}_i \times \text{Prosecutor Race}_j \\
+ \gamma \text{DefendantChars}_i + \delta \text{ProsecutorChars}_j + \alpha \text{CaseChars}_i \\
+ \nu \text{TimeFixedEffects}_t + \epsilon_{ijt} \]

Observations on random assignment

- Prosecutor is randomly assigned, prosecutor race is not
  - Prosecutor-specific black-white charging differences are causal
    - Correlation of these diffs with prosecutor race comes with the usual caveats

- Authors test random assignment conditional on time
  - But their results are also conditional on defendant and case characteristics
  - They need to do this: Unconditional comparisons yield low power
    - Do we infer that the randomization test is also low power?
  - At a minimum: Form of randomization test should match regressions
Table 3: Racial Disparities in Full Declination
(Linear Probability Model)

<table>
<thead>
<tr>
<th></th>
<th>Fully Declined (1)</th>
<th>Fully Declined (2)</th>
<th>Fully Declined (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black ADA *</td>
<td>-0.124</td>
<td>-0.032</td>
<td>-0.036**</td>
</tr>
<tr>
<td>Black Defendant (BB)</td>
<td>(0.086)</td>
<td>(0.019)</td>
<td>(0.018)</td>
</tr>
<tr>
<td>Black ADA *</td>
<td>-0.108</td>
<td>-0.080***</td>
<td>-0.087***</td>
</tr>
<tr>
<td>White Defendant (BW)</td>
<td>(0.092)</td>
<td>(0.017)</td>
<td>(0.021)</td>
</tr>
<tr>
<td>White ADA *</td>
<td>-0.047**</td>
<td>-0.009</td>
<td>-0.008</td>
</tr>
<tr>
<td>Black Defendant (WB)</td>
<td>(0.022)</td>
<td>(0.013)</td>
<td>(0.013)</td>
</tr>
<tr>
<td>BB - WB</td>
<td>-0.077</td>
<td>-0.023</td>
<td>-0.028**</td>
</tr>
<tr>
<td></td>
<td>(0.083)</td>
<td>(0.015)</td>
<td>(0.012)</td>
</tr>
<tr>
<td>(BB - WB) - (BW - WW)</td>
<td>0.031</td>
<td>0.058**</td>
<td>0.059**</td>
</tr>
<tr>
<td></td>
<td>(0.032)</td>
<td>(0.024)</td>
<td>(0.024)</td>
</tr>
</tbody>
</table>

Year*Month FEs: ✓ ✓ ✓
Defendant Characteristics: ✓ ✓ ✓
Case Characteristics: ✓ ✓ ✓
ADA demographics: ✓
Observations: 19198 19198 19198
Empirical Approach

Decline to charge\textsubscript{ijt} = \beta_1 \text{Prosecutor Race}_j + \beta_2 \text{Defendant Race}_i + \beta_3 \text{Defendant Race}_i \times \text{Prosecutor Race}_j + \gamma \text{Defendant Chars}_i + \delta \text{Prosecutor Chars}_j + \alpha \text{Case Chars}_i + \nu \text{Time Fixed Effects}_t + \epsilon_{ijt}

Observations on control variables

- If the coefficient of interest is an interaction with prosecutor race then control variables should also be interacted.
- Why focus on \textit{prosecutor race*defendant race}, and not other prosecutor characteristics (and their interactions)?
  - Aren’t these all interesting forms of unwarranted disparity?
What is a “just” response to own-race bias?

- Tradeoff between:
  - **Capriciousness**: Failing to treat equals equally
    - Role of chance in sentencing
  - **Racial discrimination** against black (or white) criminals
    - Average differences in outcomes, between otherwise comparable groups
    - E.g. Black-white sentencing differences (conditional on crime type)
  - **Racial discrimination** against white (or black) judges
    - Disparate impact of different ways of hiring judges
  - **Proportionality** in sentencing and charging
    - Failing to treat unequals differently
    - Discretion is necessary for
What is a “just” response to own-race bias?

District attorneys and judges should be:

1. The best we can find (current system)
   - Disparate impact: More white judges => black defendants lose out more often
   - Capricious: Sentence varies according to random assignment of judge
2. All white (or all black)
   - Eliminates capriciousness
   - But exacerbates disparate impact (greater black-white sentencing differences on average)
3. 50% white; 50% black
   - Eliminates disparate impact: Blacks and white defendants equally likely to be victims to own-race bias
   - Maximizes capriciousness
   - Requires affirmative action (discrimination) in hiring judges
4. Representative of the defendant population
   - Ensures minority group will suffer own-race bias more often than majority
5. Representative of the U.S. population
6. Non-randomly assigned: Always assign own-race judges (or opposite race)
   - Eliminates capriciousness
   - Eliminates disparate impact due to own-race bias
   - But maximizes disparate impact if black and white judges differ
   - Requires judicial affirmative action (racial composition of judges = racial composition of defendants)
7. Subject to strict sentencing/charging guidelines
   - Less discretion = less capriciousness
   - Less discretion = less proportionality to details of the case (those details not codified in guidelines)

Justin Wolfers, Comments on Prosecutor & Defendant Race