

**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

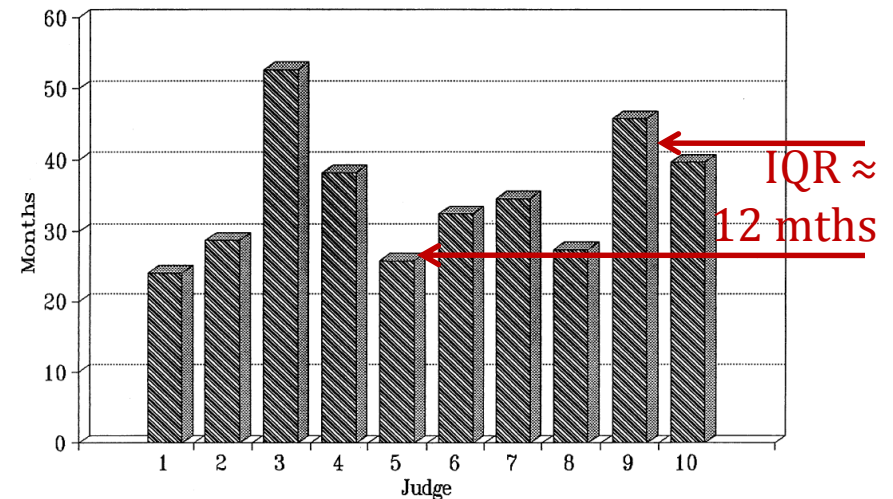
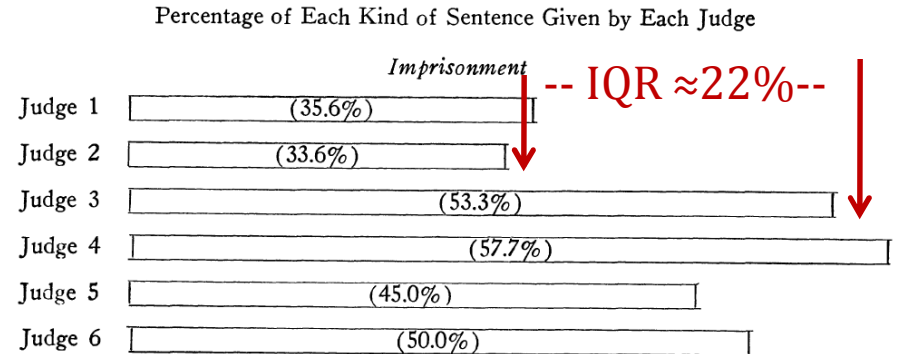


FIG. 1. Average prison terms by judge for the Northern District of California from 1984 to 1987.

“Do Judges Vary in their Treatment of Race?”

Abrams, Bertrand and Mullainathan (2008)

1. $\text{Sentence}_j = \gamma_j I(\text{Judge}_j) + \delta_j I(\text{Judge}_j) * \text{black defendant}$
 - ▶ Interpret δ_j as judge-specific racial bias
2. $\delta_j = \beta \text{Black judge}_j + \text{other judge characteristics}$
 - ▶ Interpret β as own-race bias

Table 9: Correlation with Judge Characteristics

	Dependent Variable: Judge Fixed Effects in...					
	Sentence length	Incarceration rate	Black-White difference in sentence length		Black-White difference in incarceration rate	
Black judge? (Y=1)	45.03 (60.20)	-0.02 (0.04)	-152.69 (80.14)	-156.71 (81.34)	-0.03 (0.04)	-0.03 (0.04)
Male judge? (Y=1)	54.02 (56.50)	0.03 (0.03)	61.14 (74.22)	57.6 (75.28)	0.02 (0.04)	0.02 (0.04)
Older judge? (Y=1)	-11.03 (42.78)	-0.03 (0.03)	48.80 (57.19)	48.79 (57.59)	0.01 (0.03)	0.01 (0.03)
Judge was public defender? (Y=1)	-0.56 (49.19)	0.02 (0.03)	30.77 (65.04)	31.39 (65.50)	-0.04 (0.03)	-0.05 (0.03)
Judge F.E. in sentence length				0.07 (0.17)		
Judge F.E. in incarceration rate						0.3 (0.15)
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

Empirical Approach

$$\begin{aligned} \text{Decline}_{ijt} = & \beta_1 \text{ProsRace}_j + \beta_2 \text{DefRace}_i + \beta_3 \text{DefRace}_i * \text{ProsRace}_j \\ & + \gamma \text{DefendantChars}_i + \delta \text{ProsecutorChars}_j + \alpha \text{CaseChars}_i \\ & + \nu \text{TimeFixedEffects}_t + \varepsilon_{ijt} \end{aligned}$$

- 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)
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Empirical Approach

$$\begin{aligned} \text{Decline to charge}_{ijt} = & \beta_1 \text{Prosecutor Race}_i + \beta_2 \text{Defendant Race}_i \\ & + \beta_3 \text{Defendant Race}_i * \text{Prosecutor Race}_j \\ & + \gamma \text{DefendantChars}_i + \delta \text{ProsecutorChars}_j + \alpha \text{CaseChars}_i \\ & + \nu \text{TimeFixedEffects}_t + \varepsilon_{ijt} \end{aligned}$$

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



Low Power of Unconditional Comparisons

**Table 3: Racial Disparities in Full Declination
(Linear Probability Model)**

	Fully Declined	Fully Declined	Fully Declined
	(1)	(2)	(3)
Black ADA *	-0.124	-0.032	-0.036**
Black Defendant (BB)	(0.086)	(0.019)	(0.018)
Black ADA *	-0.108	-0.080***	-0.087***
White Defendant (BW)	(0.092)	(0.017)	(0.021)
White ADA *	-0.047**	-0.009	-0.008
Black Defendant (WB)	(0.022)	(0.013)	(0.013)
BB - WB	-0.077	-0.023	-0.028**
	(0.083)	(0.015)	(0.012)
(BB - WB) - (BW - WW)	0.031	0.058**	0.059**
	(0.032)	(0.024)	(0.024)
Year*Month FEs	✓	✓	✓
Defendant Characteristics		✓	✓
Case Characteristics		✓	✓
ADA demographics			✓
Observations	19198	19198	19198

Empirical Approach

$$\begin{aligned} \text{Decline to charge}_{ijt} = & \beta_1 \text{Prosecutor Race}_j + \beta_2 \text{Defendant Race}_i \\ & + \beta_3 \text{Defendant Race}_i * \text{Prosecutor Race}_j \\ & + \gamma \text{Defendant Chars}_i + \delta \text{Prosecutor Chars}_j + \alpha \text{Case Chars}_i \\ & + \nu \text{Time Fixed Effects}_t + \varepsilon_{ijt} \end{aligned}$$

Handwritten notes in red:
- Under β_3 term: Defendant Race_i * Prosecutor Race_j
- Under γ term: *x Prosecutor race?*
- Under α term: *x Prosecutor race*

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 *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)