

Case Studies

Unobserved Case Characteristics

 ${ \ \, {\rm Measurement} } \\ { Error }$

Selection Bias

Conclusion

Ethnic Disparities in Sentencing: Can You Trust the "Evidence"?

Jose Pina-Sánchez



Background

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 $\begin{array}{c} {\rm Measurement} \\ {\rm Error} \end{array}$

Selection Bias

- Sentencing is the most consequential criminal justice process
 - Certainly the most visible and symbolic



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Selection Bias

- Sentencing is the most consequential criminal justice process
 - Certainly the most visible and symbolic
- If perceived as discriminatory, important implications follow
 - Affecting individuals subject to discrimination
 - but also members of the same demographic group
 - Undermining trust with the criminal justice system
 - and other political and social institutions too



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- Hundreds of studies exploring ethnic disparities in sentencing
 - Most document harsher sentences on ethnic minority offenders
 - However, the evidence remains largely contested
 - Many point at ethnic disparities due to 'differential involvement'



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- Hundreds of studies exploring ethnic disparities in sentencing
 - Most document harsher sentences on ethnic minority offenders
 - However, the evidence remains largely contested
 - Many point at ethnic disparities due to 'differential involvement'
- Are those disparities 'warranted' or unwarranted?
 - Is that a question we can even answer?
 - In our project we try to do so by exploring the main forms of bias affecting the evidence



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Two Case Studies

- Hopkins et al. (2016), from the Ministry of Justice
 - 21,639 cases, covering all offence types processed in the Crown Court
 - Controls for offender demographics, offence type, previous convictions and guilty plea
 - Estimates 20% higher probability of incarceration for Blacks
 - Question: Is this evidence of discrimination?



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Two Case Studies

- Hopkins et al. (2016), from the Ministry of Justice
 - 21,639 cases, covering all offence types processed in the Crown Court
 - Controls for offender demographics, offence type, previous convictions and guilty plea
 - Estimates 20% higher probability of incarceration for Blacks
 - Question: Is this evidence of discrimination?
- Isaac (2020), from the Sentencing Council
 - 14,000 cases of three drug offences sentenced in the Crown Court
 - Controls for offender demographics, and practically all factors listed in the sentencing guidelines
 - Estimates 21% higher probability of incarceration for Blacks
 - Question: Is this evidence of discrimination?



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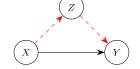
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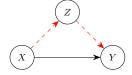
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- We rule out this being a problem in Isaac (2020), but it is likely present in Hopkins (2016)
- We use simulations to assess how strong those unobserved case characteristics need to be in Hopkins to explain away the reported disparities



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Simulations: Results

- Six congruous scenarios with an overestimated ethnicity effect on incarceration
 - None of them explained it away entirely, only halved it
- For that to be the case, the unobserved characteristics has to...
 - be much more prevalent in Blacks than White offenders
 - and have a strong effect on the probability of incarceration



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Simulations: Results

- Six congruous scenarios with an overestimated ethnicity effect on incarceration
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Congruous scenarios where the ethnic disparities reported in Hopkins could be overestimated as a result of unobserved case characteristics

prevalence	relative prevalence	effect of the un-	direct effect,
of the un-	of the unobserved	observed on incar-	$OR_{X \to Y}$
observed	in minorities com-	ceration, $OR_{U \to Y}$	$(RR_{X \to Y})$
in Whites	pared to Whites	$(RR_{U \to Y})$	
0.2	2	1.93 (1.41)	1.25 (1.10)
0.3	1.75	2.12 (1.46)	1.25(1.10)
0.3	2	2.12 (1.46)	1.25(1.10)
0.3	2	1.58 (1.25)	1.25 (1.10)
0.5	1.5	1.91 (1.36)	1.25 (1.10)
0.5	1.75	1.91 (1.36)	1.25 (1.10)



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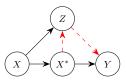
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- Racially-determined case characteristics
 - E.g. dangerousness, remorse, 'good character', but also previous convictions and many others
 - Controlling for these will bias ethnic disparities estimates downwards



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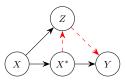
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- Racially-determined case characteristics
 - E.g. dangerousness, remorse, 'good character', but also previous convictions and many others
 - Controlling for these will bias ethnic disparities estimates downwards
- Misclassification in the White group
 - Question: What do you think the White group is composed of? And, do you think that could affect the reported disparities?



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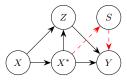
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• Upstream disparities

- Ethnic minority individuals are more likely to being stopped, arrested, charged and found guilty
- Sentencing cases are therefore not representative of the criminal justice system, another attenuation bias



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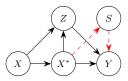
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• Upstream disparities

- Ethnic minority individuals are more likely to being stopped, arrested, charged and found guilty
- Sentencing cases are therefore not representative of the criminal justice system, another attenuation bias

• Missing data could be as problematic

- Question: What kind effect would you expect from...
- (in Hopkins) 12% of cases do not have offenders' ethnicity, which was self-reported
- (in Isaac) about 40% of questionnaires were not submitted by judges to the Sentencing Council



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- Estimates of ethnic disparities in sentencing are subject to multiple biases
 - $-\,$ Unobserved case characteristics is only one of them
 - By carefully mapping their impact we can potentially test the presence of discrimination in sentencing



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- Estimates of ethnic disparities in sentencing are subject to multiple biases
 - Unobserved case characteristics is only one of them
 - By carefully mapping their impact we can potentially test the presence of discrimination in sentencing
- The England and Wales evidence seems to point at real sentencing discrimination
 - Without a doubt for the case of drug offences
 - This problem needs to be redressed through effective policy
 - Ideally informed by further research exploring the specific mechanisms behind these disparities (class discrimination, legal aid, pre-sentence reports, etc.)
 - And where are those disparities more present