Changes in Drug Laws and College Enrollment

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Senior Thesis

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(Reminder) Background I

- Anti-Drug Abuse Act of 1986 established mandatory sentencing minimums (with disparities across drugs)
  - Increase in average time imprisoned for drug crimes from 22 months to 33 months
  - Number of black people sent to federal prison skyrocketed from approximately 50 to 250 in 100,000 adults (Equal Justice Initiative)
- Fair Sentencing Act of 2010 reduced disparities in sentencing and eliminated mandatory minimums
- Disparities in college attainment across race and gender have maintained across time
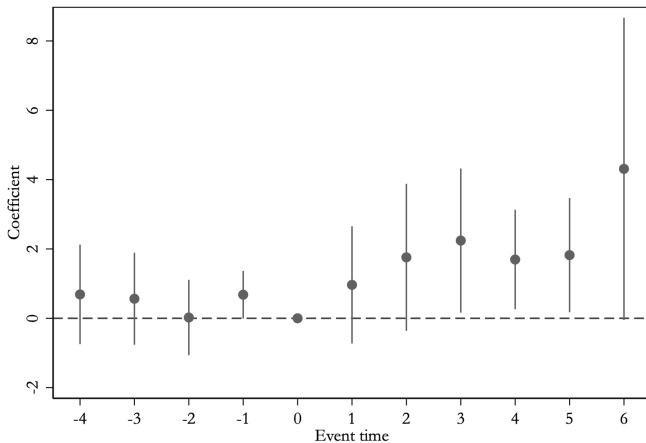
(Reminder) Research Questions

1. Did the passage of the federal Anti-Drug Abuse Act of 1986 cause a fall in relative college enrollment for Black male students?
2. Did the passage of the federal Fair Sentencing Act of 2010 cause an increase in relative college enrollment for Black male students?

Recent Progress

- Better examined first stage impact
- Implemented new counterfactual groups
  - Comparing states with high vs low drug-related arrest rates
  - Leveraged variation in arrest rates for both black males and black juveniles and various types of drug crimes
- Added more robustness checks

[Results] First Stage I

Figure: Effect of Anti-Drug Abuse Act on Drug-related Arrest Rate of Black Men, Comparing States with High and Low Black Juvenile Drug-Related Arrest Rate

Pretrends p-value (F-test): 0.191

Table 14: Impact of the Anti-Drug Abuse Act on College Enrollment: DiD Estimates Using Normalized Black Juvenile Drug Arrest Rate as Continuous Treatment
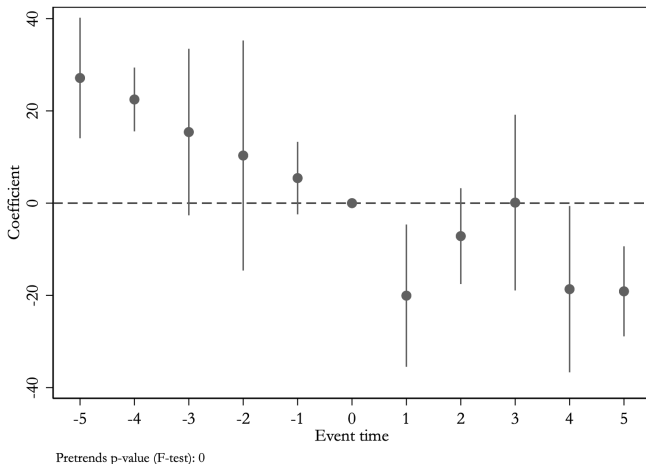
	(1)	(2)	(3)
Post-1986	.9472***	-.07305	0
	(.08494)	(.06033)	(.)
JB Drug arrest rate per 100000	.02351***	-.001597	.01487**
	(.004217)	(.006821)	(.006485)
Post-1986 x Drug arrest rate per 100000	-.00218	.01254*	-.004123
	(.004072)	(.006722)	(.003289)
Constant	11.97***	-10.96***	-11.75***
	(.04425)	(.5024)	(.7209)
Observations	68669	68669	68669
Adjusted R^2	0.030	0.147	0.160
State_yr_FE	N	N	Y
Demographic_controls	N	Y	Y

Standard errors in parentheses

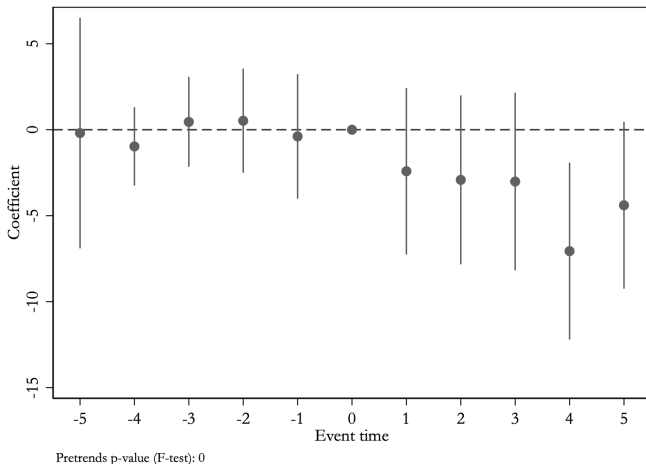* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

[Results] First Stage II

Figure: Effect of Fair Sentencing Act on Drug-related Arrest Rate of Black Men, Comparing States with High and Low Black Adult Drug-Related Arrest Rate

Pretrends p-value (F-test): 0

[Results] First Stage III

Figure: Effect of Fair Sentencing Act on Drug-related Arrest Rate of Black Men, Comparing States with High and Low Black Juvenile Drug-Related Arrest Rate

Pretrends p-value (F-test): 0

Results

- Although other counterfactual groups seem to hold up better than high/low exposure states, estimates across counterfactual groups are somewhat inconsistent
- To do
  - Finish DDD and DDIV specifications
  - Complete robustness checks
  - Connect results to broader literature

Explanations for Inconclusive Results

So far: failed to find consistent evidence. Why?

1. Invalid counterfactual groups
   1. Failed robustness checks
2. Data issues
   1. CPS failing to survey currently incarcerated populations
   2. Low-quality arrest data
   3. Insufficient power (effect size too small)
3. The populations impacted by these laws have low rates of college attendance anyway
4. Note: no evidence $\neq$ no effect!