

TITLE:

subtitle

Ray Huang<sup>\*</sup>

Brown University, Honors Thesis

January 16, 2023

**Abstract**

Aspirational abstract goes here!

---

<sup>\*</sup>Contact: [ray\\_huang@brown.edu](mailto:ray_huang@brown.edu). I thank Peter Hull at Brown University for serving as my advisor and for providing me with fantastic feedback.

**Introduction**

**Motivation and Background**

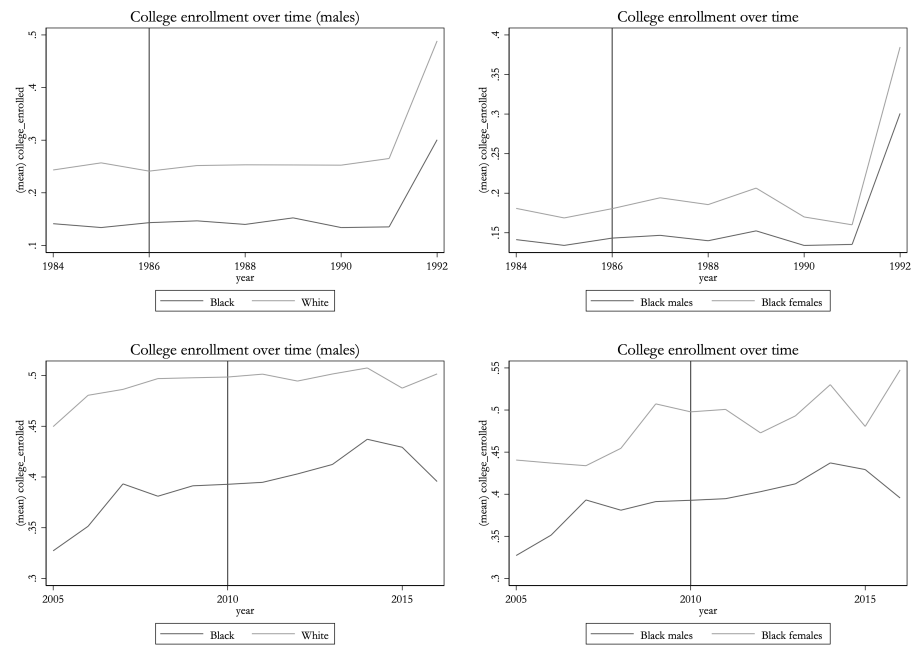
**Data Description**

**Empirical/Econometric Methods, Hypotheses tested**

## References

- Britton, Tolani. 2022. “Does locked up mean locked out? The effects of the anti-drug abuse act of 1986 on black male students’ college enrollment.” *Journal of Economics, Race, and Policy* 5 (1):54–71.
- Duflo, Esther. 2001. “Schooling and labor market consequences of school construction in Indonesia: Evidence from an unusual policy experiment.” *American economic review* 91 (4):795–813.
- Freyaldenhoven, Simon, Christian Hansen, Jorge Pérez Pérez, and Jesse M Shapiro. 2021. “Visualization, Identification, and Estimation in the Linear Panel Event-Study Design.” Working Paper 29170, National Bureau of Economic Research. URL <http://www.nber.org/papers/w29170>.

Note: all figures are limited to ages 18-24 inclusive.



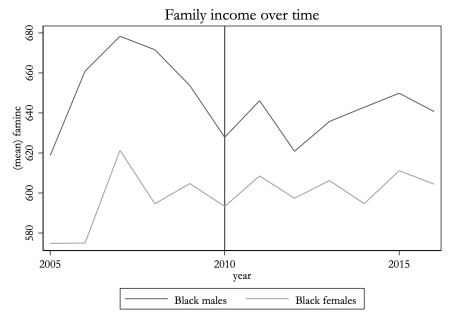
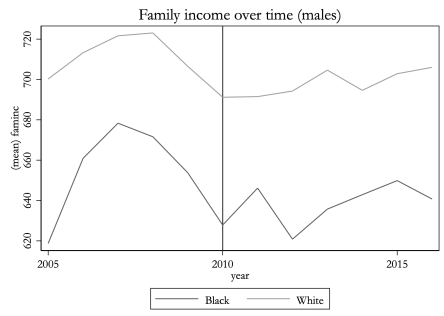
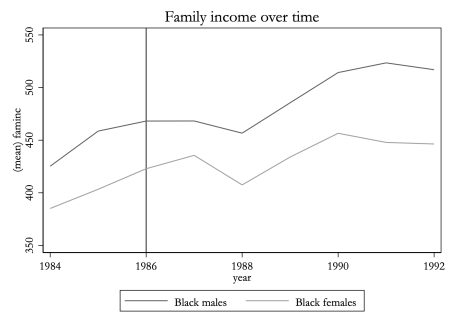
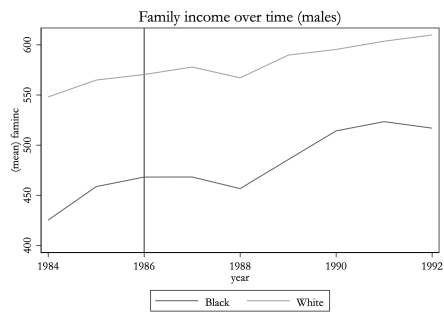


Figure 1: College enrollment overtime 1986

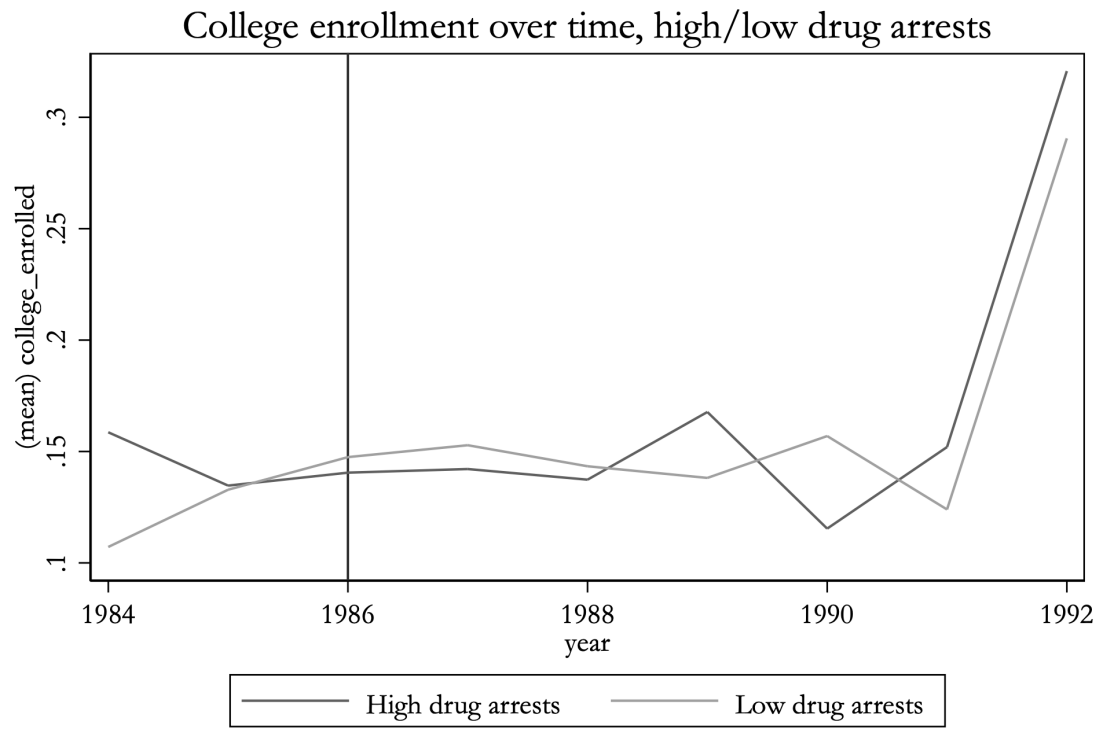


Figure 2: College enrollment overtime 2010

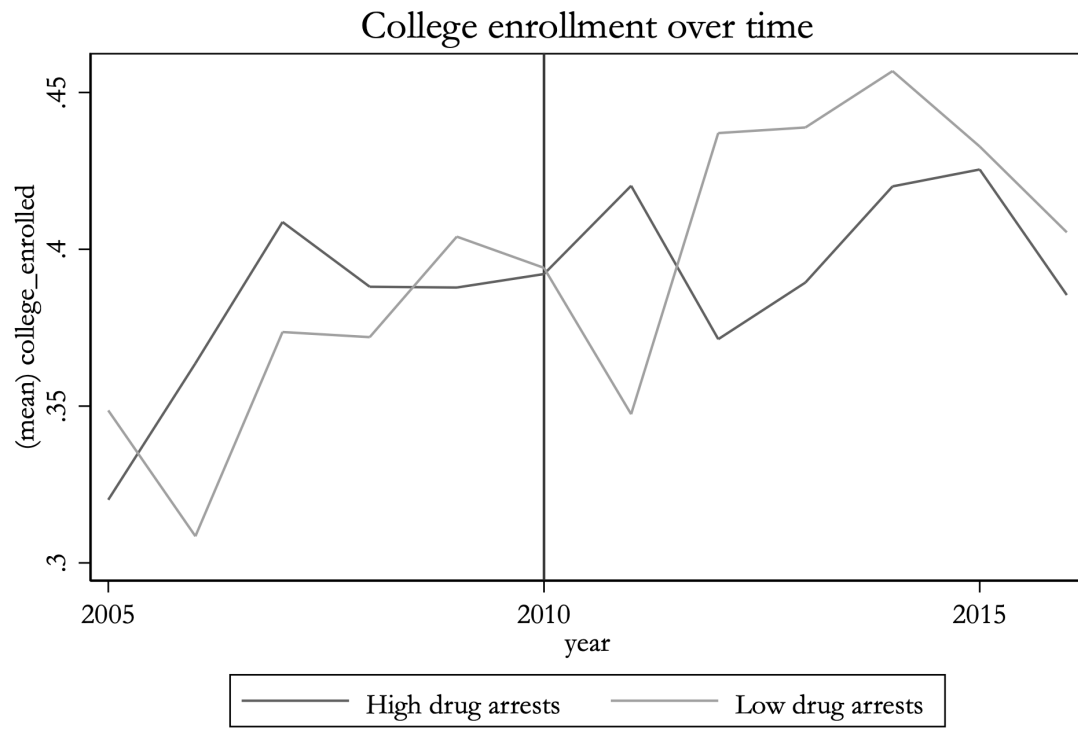


Figure 3: Event study 1986, AB arrest rate 18F

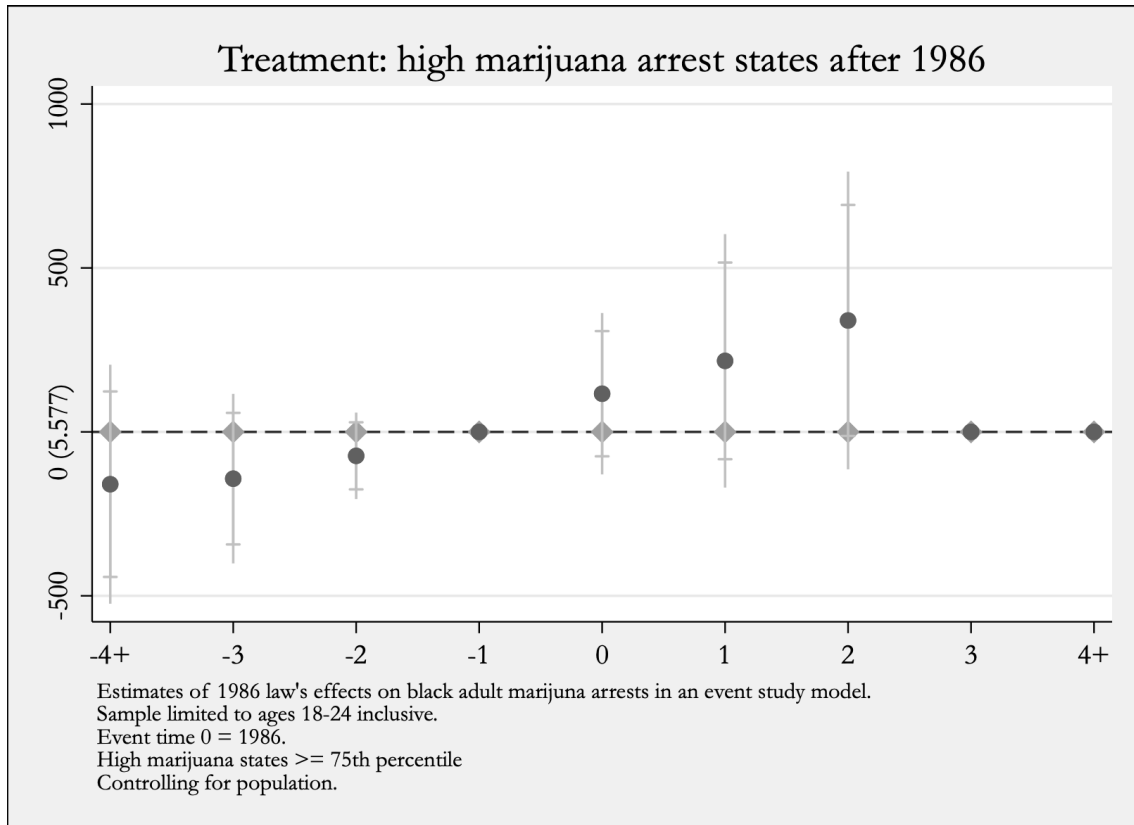




Figure 4: Event study 2010, AB arrest rate 18F

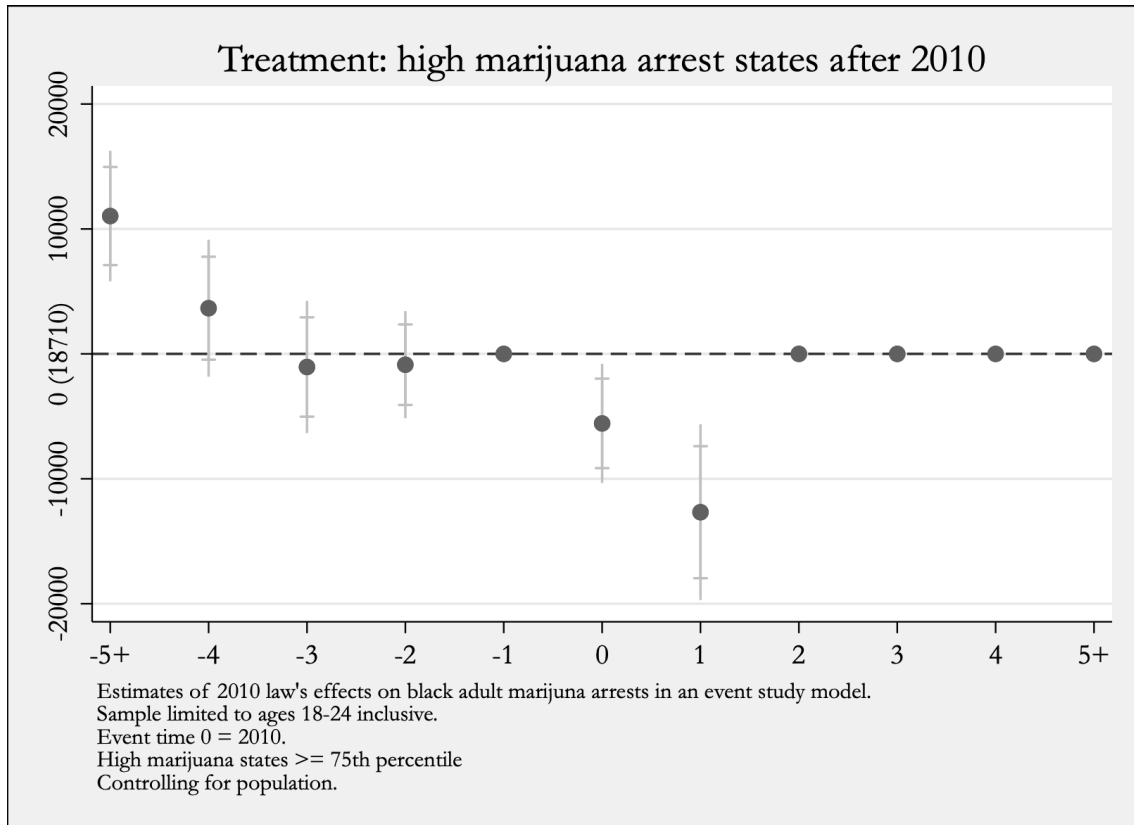


Table 1: Summary Statistics CPS

	(1)	(2)	(3)	(4)
	Pre-period 1986	Pre-period 1986	Pre-period 2010	Post-period 2010
Male	0.49 (0.500)	0.49 (0.500)	0.50 (0.500)	0.50 (0.500)
Black	0.13 (0.341)	0.14 (0.342)	0.13 (0.340)	0.15 (0.356)
HS Graduate	0.82 (0.384)	0.81 (0.390)	0.83 (0.377)	0.86 (0.344)
Enrolled in college	0.24 (0.428)	0.29 (0.453)	0.50 (0.500)	0.55 (0.498)
Enrolled in college (Black males)	0.02 (0.146)	0.03 (0.160)	0.06 (0.228)	0.07 (0.254)
Enrolled in college (Non-Black males)	0.22 (0.414)	0.26 (0.440)	0.45 (0.497)	0.48 (0.500)
Enrolled in 2-year coll.	0.00 (0)	0.01 (0.0856)	0.05 (0.215)	0.05 (0.228)
Enrolled in 4-year coll.	0.24 (0.428)	0.28 (0.450)	0.46 (0.498)	0.49 (0.500)
Observations	43962	73286	94188	72859

SD in (). Sample limited to ages 18-24. Observations missing education data were dropped.

Table 2: UCR 1986 black adult arrests related to marijuana

	(1) AB
1	3.08
2	4.35
3	2.06
4	6.00
5	13.24
6	5.56
7	7.48
8	125.75
10	5.16
11	1.00
12	2.38
13	4.63
15	3.31
16	1.80
17	5.16
18	1.00
19	8.51
20	5.44
21	2.30
22	4.87
23	2.44

Table 3: Britton Table 2

	(1)	(2)	(3)
after1986	.04427*** (.006001)	.04037*** (.005414)	0 (.)
Black	-.1021*** (.01272)	-.06456*** (.0105)	-.07368*** (.01246)
interaction	-.01133 (.01378)	-.01234 (.01137)	-.006629 (.01187)
Constant	.2446*** (.008332)	-8.086*** (.4056)	-7.946*** (.4216)
Observations	61403	61403	61403
Adjusted $R^2$	0.009	0.120	0.146
State_yr_FE	N	N	Y
Demographic_controls	N	Y	Y

Standard errors in parentheses

Weights used. Males only. SEs clustered at state level. Still missing some demographic controls.

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

Table 4: Britton Table 2, control experiment

	(1)	(2)	(3)
after1986	.05002*** (.00464)	.02519*** (.004266)	0 (.)
Black	-.1767*** (.01336)	-.08212*** (.01162)	-.07705*** (.01296)
interaction	.0001738 (.01274)	-.006754 (.0105)	-.003525 (.01088)
Constant	.4319*** (.01498)	-1.09*** (.1826)	-1.053*** (.1777)
Observations	126294	126294	126294
Adjusted $R^2$	0.013	0.119	0.135
State_yr_FE	N	N	Y
Demographic_controls	N	Y	Y

Standard errors in parentheses

Weights used. Males only. SEs clustered at state level. AGES 35-50.

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

Table 5: Britton Table 3

	(1)	(2)	(3)
after1986	.03936*** (.01306)	.0282** (.01233)	0 (.)
male	-.02641** (.01192)	-.03954*** (.01108)	-.04253*** (.01135)
sex_interaction	-.006419 (.01575)	-.004532 (.0159)	-.002536 (.0165)
Constant	.1689*** (.0097)	-4.677*** (.4739)	-4.53*** (.5066)
Observations	14991	14991	14991
Adjusted $R^2$	0.003	0.103	0.126
State_yr_FE	N	N	Y
Demographic_controls	N	Y	Y

Standard errors in parentheses

Weights used. SEs clustered at state level. Still missing some demographic controls.

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

Table 6: Britton Table 3, control experiment

	(1)	(2)	(3)
after1986	.06617*** (.00926)	.03427*** (.009134)	0 (.)
male	.02698** (.0103)	-.01173 (.01189)	-.01283 (.0114)
sex_interaction	-.01597 (.0116)	-.007721 (.01212)	-.007772 (.01238)
Constant	.2282*** (.0144)	1.063*** (.3845)	1.133*** (.3931)
Observations	24954	24954	24954
Adjusted $R^2$	0.004	0.114	0.133
State_yr_FE	N	N	Y
Demographic_controls	N	Y	Y

Standard errors in parentheses

Weights used. SEs clustered at state level. AGES 35-50.

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

Table 7: DiD: Fair Sentencing Act, blacks vs whites

	(1)	(2)	(3)
after2010	.03072*** (.007178)	.02859*** (.007088)	0 (.)
Black	-.1172*** (.01419)	-.1061*** (.01206)	-.1098*** (.01426)
interaction	.04387*** (.01025)	.03536*** (.01012)	.03728*** (.01105)
Constant	.4786*** (.008984)	-9.838*** (.254)	-9.764*** (.2498)
Observations	114090	114090	114090
Adjusted $R^2$	0.006	0.085	0.096
State_yr_FE	N	N	Y
Demographic_controls	N	Y	Y

Standard errors in parentheses

Weights used. Males only. SEs clustered at state level. Still missing some demographic controls.

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

Table 8: DiD: Fair Sentencing Act, blacks vs whites, control experiment

	(1)	(2)	(3)
after2010	.03688*** (.005766)	.03531*** (.005671)	0 (.)
Black	-.09199*** (.01557)	-.04809*** (.01238)	-.04217*** (.01285)
interaction	.02353** (.01075)	.01417 (.009078)	.009093 (.009292)
Constant	.5669*** (.007974)	.2558** (.1172)	.2816** (.1181)
Observations	285600	285600	285600
Adjusted $R^2$	0.004	0.087	0.095
State_yr_FE	N	N	Y
Demographic_controls	N	Y	Y

Standard errors in parentheses

Weights used. Males only. SEs clustered at state level. AGES 35-50

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

Table 9: DiD Fair Sentencing Act, black males vs females

	(1)	(2)	(3)
after2010	.05706*** (.01186)	.03615*** (.01219)	0 (.)
male	-.1006*** (.01081)	-.1106*** (.01056)	-.1129*** (.01082)
sex_interaction	.01753 (.01408)	.02144 (.01505)	.02335 (.01479)
Constant	.462*** (.01192)	-8.207*** (.5089)	-8.022*** (.5651)
Observations	26198	26198	26198
Adjusted $R^2$	0.012	0.103	0.111
State_yr_FE	N	N	Y
Demographic_controls	N	Y	Y

Standard errors in parentheses

Weights used. SEs clustered at state level. Still missing some demographic controls.

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

Table 10: DiD Fair Sentencing Act, black males vs females, control experiment

	(1)	(2)	(3)
after2010	.09404*** (.0117)	.07418*** (.009614)	0 (.)
male	-.06253*** (.005736)	-.08723*** (.006097)	-.08835*** (.005948)
sex_interaction	-.03364*** (.008531)	-.02353*** (.008622)	-.02367*** (.008802)
Constant	.5375*** (.01185)	-.3061 (.2063)	-.2344 (.2227)
Observations	59353	59353	59353
Adjusted $R^2$	0.013	0.102	0.111
State_yr_FE	N	N	Y
Demographic_controls	N	Y	Y

Standard errors in parentheses

Weights used. SEs clustered at state level. AGES 35-50

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

Table 11: DiD 1986, high vs low drug arrest states

	(1)	(2)	(3)
after1986	.05844*** (.01806)	.05228*** (.01761)	0 (.)
ab	.0007097*** (.0002166)	.0004725** (.0002309)	0 (.)
ab_post_interact	-.0006435*** (.0002201)	-.0004241* (.0002247)	0 (.)
Constant	.1274*** (.01413)	-3.879*** (.945)	-4.142*** (.9937)
Observations	2529	2529	2529
Adjusted $R^2$	0.003	0.075	0.096
State_yr_FE	N	N	Y
Demographic_controls	N	Y	Y

Standard errors in parentheses

Weights used. SEs clustered at state level. Still missing some demographic controls.

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

Table 12: DDD 1986

	(1)
after1986	0 (.)
Black	-.06174*** (.02004)
high_drug	0 (.)
post_black_interact	.01296 (.03946)
high_drug_black_interact	-.03643 (.0222)
high_drug_post_interact	0 (.)
triple_interact	-.02596 (.04182)
Constant	-8.663*** (.4515)
Observations	28152
Adjusted $R^2$	0.141
State_yr_FE	Y
Demographic_controls	Y

Standard errors in parentheses

Weights used. SEs clustered at state level. Still missing some demographic controls.

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