College Enrollment and Earnings:

Examining the Impact of Two Federal Drug Acts

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Abstract

(to be updated abstract) I examine the impact of two federal drug acts on college enrollments and earnings among black males by using a variety of counterfactual groups. The Anti-Drug Act of 1986 transformed the formerly rehabilitation-focused justice system into a punitive one, imposed sentencing minimums and disparities. The Fair Sentencing Act of 2010 undid many of these policies. I construct estimates of the impact of these two acts on black males aged 18-24 using three unique counterfactual groups: 1) white males, 2) black females, and 3) black men aged 28-34. I also leverage the variation between high and low drug arrest states. I estimate that the Anti-Drug Act of 1986 resulted in a change in college enrollment rates between XX and XX and a change in earnings between XX and XX. For this subpopulation, this implies estimates of economic returns to education ranging from XX to XX.

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Introduction

Anti-Drug Act of 1986:

- Created minimum sentencing laws re possession of many drugs.
- Crack/powdered cocaine was particularly relevant (significantly harder rules on crack, which was cheaper and used by minorities much more, 100-1 ratio)
- The law led to an increase in the average time imprisoned for drug crimes from 22 months to 33 months (Shewan)

Fair Sentencing Act of 2010:

- Reduced the disparity between the amount of crack cocaine and powder cocaine needed to trigger certain federal criminal penalties from a 100:1 weight ratio to an 18:1 weight ratio
- Elimated minimum sentencing for crack cocaine
- Congressional Budget Office has estimated that implementing the Fair Sentencing Act of 2010 will reduce the prison population by 1,550 person-years over the time period from 2011–2015, creating a monetary savings of $42 million during that period

Existing literature:

- The Labor Market Consequences of Incarceration- Western, Kling, Weiman (2016)
- Juvenile Incarceration, Human Capital, and Future Crime: Evidence from Randomly Assigned Judges - Aizer, Doyle (2015)
- Evan Rose papers: The Impact of Incarceration on Employment and Earnings, etc

Data

- CPS October supplement
  - Dropped observations with missing family income data
  - Edtype is the variable used for college enrollment,
- UCR from ICPSR (missing data problem, many counties failed to report arrest rates for the relevant crimes)
  - Arrest data normalized per 100000. State population data are based on U.S. Census Bureau midyear population estimates.
- ACS

Empirical/Econometric Methods, Hypotheses tested

Counterfactual groups

- Black males vs white males

  - Identifying assumption: absent of the Anti-Drug Abuse Act of 1986, black and white male educational outcomes would have trended similarly.

- Black males vs black females
- Black males aged 18-24 vs black males aged 28-34 at the time of the act
- High vs low drug use

Basic event study model

$$y_{it} = \alpha_i + \gamma_t + q'_{it}\phi + \sum_{m=-G}^{M} \beta_m z_{i,t-m} + C_{it} + \epsilon_{it} \tag{1}$$

where α_i and γ_t are individual and time fixed effects,

Empirical tools:

- DiD / DDD / Event study.
- – Using Roth's pretrend & honest did suggestions
- DDIV

References

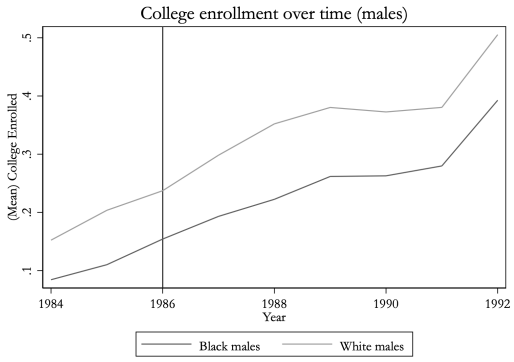
Britton, Tolani. 2022. "Does locked up mean locked out? The effects of the anti-drug abuse act of 1986 on black male students' college enrollment." *Journal of Economics, Race, and Policy* 5 (1):54–71.

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.

Figure 1: College Enrollment Around 1984

(a) Race



(b) Sex

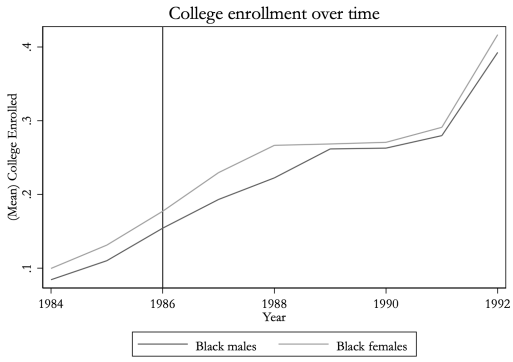
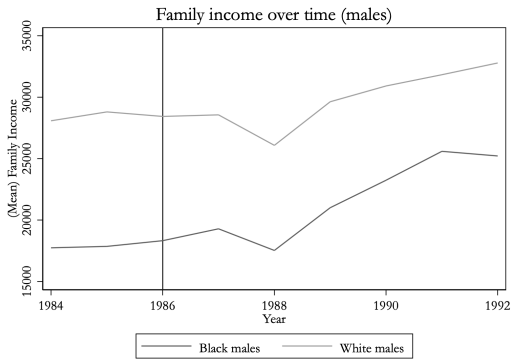
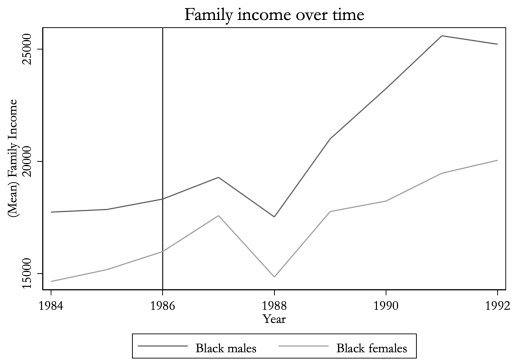


Figure 2: Family Income Around 1984

(a) Race



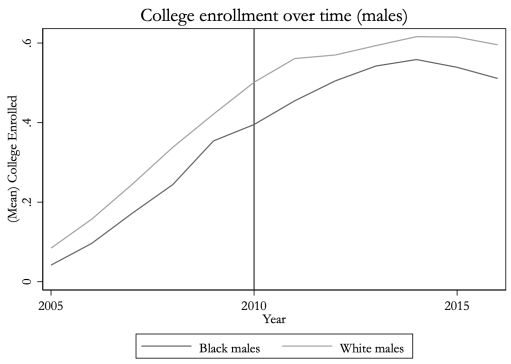
(b) Sex



Note: These figures report the outcomes for various subgroups plotted over time using CPS data from 1984-1992. Figure 1 reports the proportion enrolled in college, while figure 2 reports the average family income. A vertical line is drawn to denote the passage of the Anti-Drug Abuse Act of 1986. The universe of samples is defined as participants aged 18-24 in 1986 who were not incarcerated at the time of the survey.

Figure 3: College Enrollment Around 2010

(a) label 1



(b) label 2

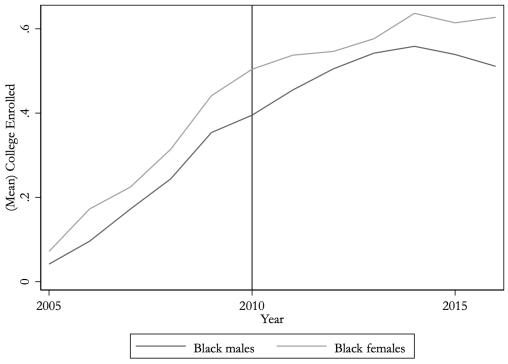
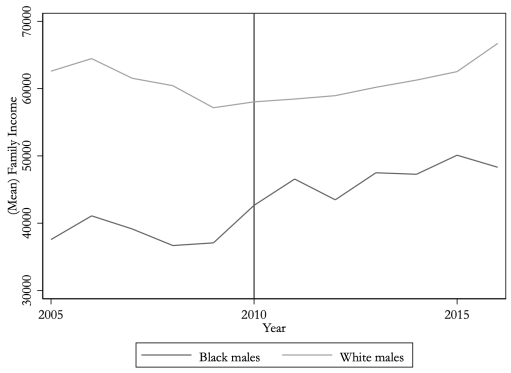
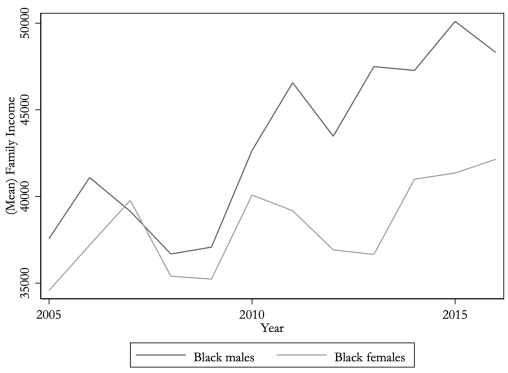


Figure 4: Family Income Around 2010

(a) Race



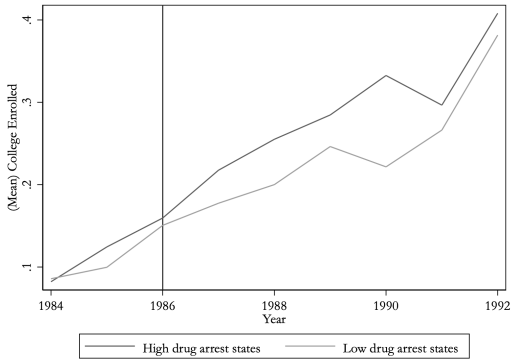
(b) Sex



Note: These figures report the outcomes for various subgroups plotted over time using CPS data from 2005-2016. Figure 3 reports the proportion enrolled in college, while figure 4 reports the average family income. A vertical line is drawn to denote the passage of the Fair Sentencing Act of 2010. The universe of samples is defined as participants aged 18-24 in 2010 who were not incarcerated at the time of the survey.

Figure 5: College Enrollment By States with High vs Low Black Adult Drug Arrest Rates

(a) 1986



(b) 2010

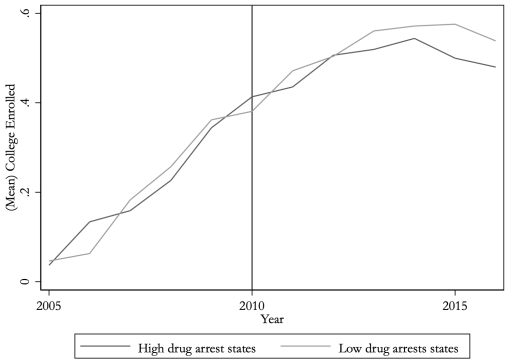
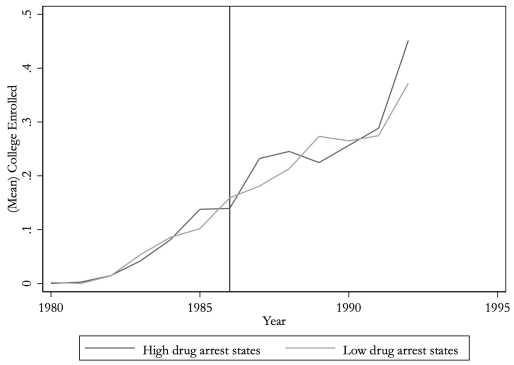
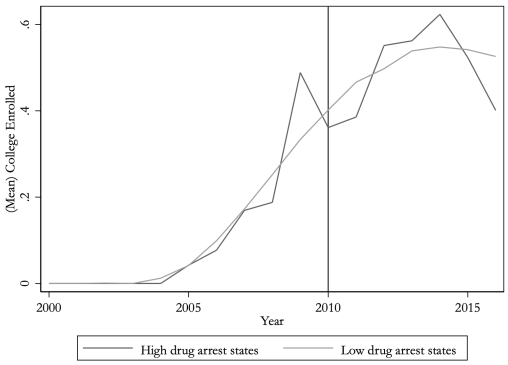


Figure 6: College Enrollment By States with High vs Low Black Juvenile Drug Arrest Rates

(a) 1986

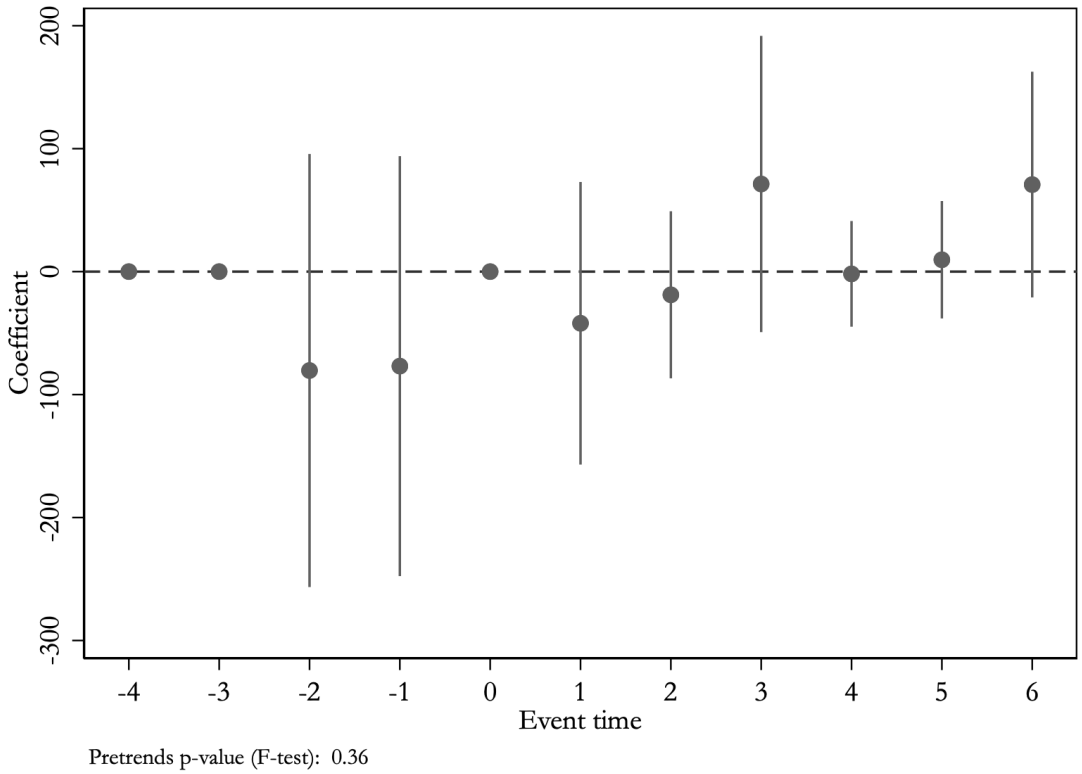


(b) 2010



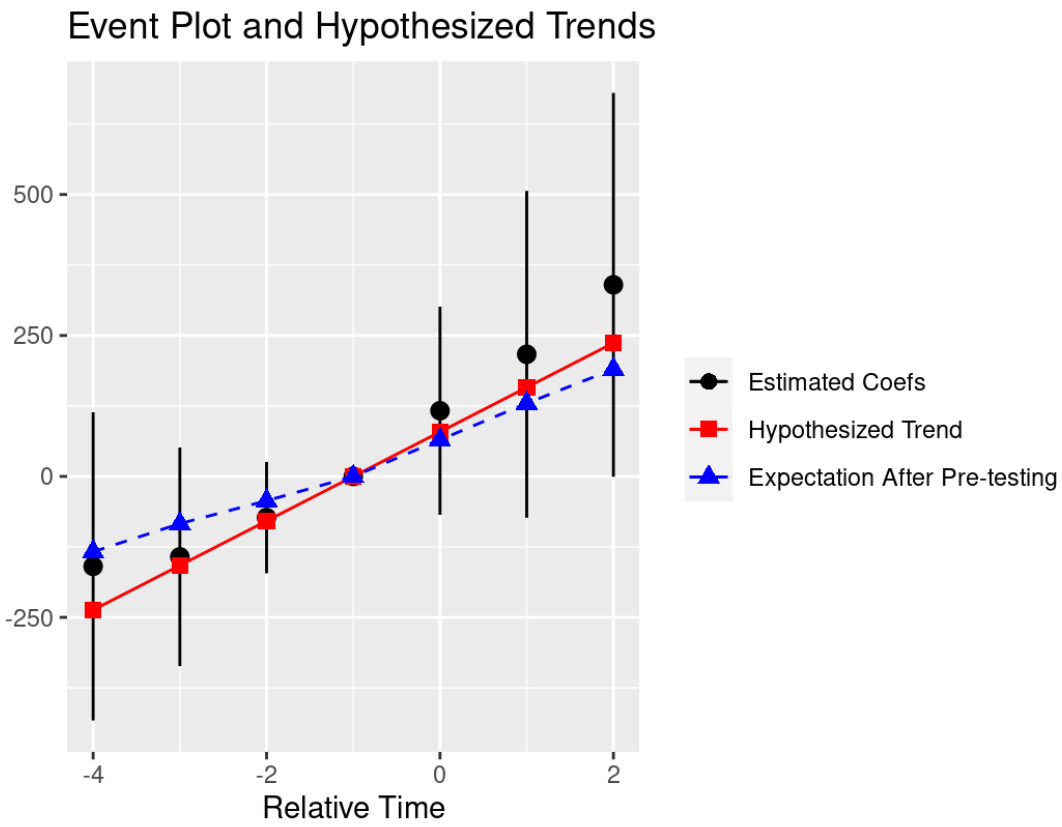
Note: These figures report the proportion enrolled in college plotted over time using CPS data from 1984-1992 and 2005-2016 for high black adult/juvenile drug arrest states and low black adult/juvenile drug arrest states, where high black adult/juvenile drug arrest states are defined to be those above the 75th percentile in 1984 and 2008. A vertical line is drawn to denote the passage of the Anti-Drug Abuse Act of 1986s and the Fair Sentencing Act of 2010. The sample is defined as black males aged 18-24 in 1986 and 2010 who were not incarcerated at the time of the survey.

Figure 7: Effect of Anti-Drug Abuse Act on Drug-related Arrest Rate of Black Men, Comparing States with High and Low Black Adult Drug-Related Arrest Raten



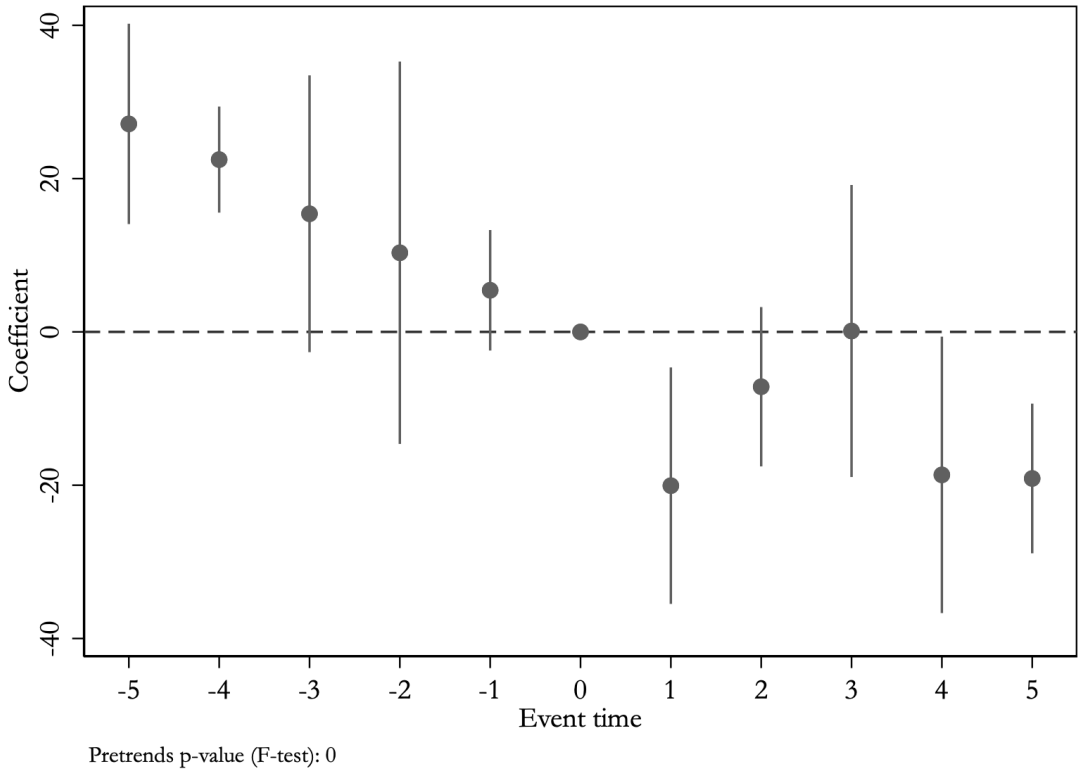
Note: This figure reports coefficients from the estimation of equation 1 evaluating the impact of the Anti-Drug Abuse Act of 1986 on arrest rates per 100,000 related to drug violations using CPS and UCR data from 1982-1992. Event time 0 := 1986. The coefficients represent the change in outcomes for high-drug arrest states relative to non-high-drug arrest states, where high black adult drug arrest states are defined to be those above the 75th percentile in 1984. The sample is defined as black males aged 18-24 in 1986 who were not incarcerated at the time of the survey. Control variables include population and unemployment rates at the state-year level.

Figure 8: Pretrends for Event study 1986, AB arrest rate 18F



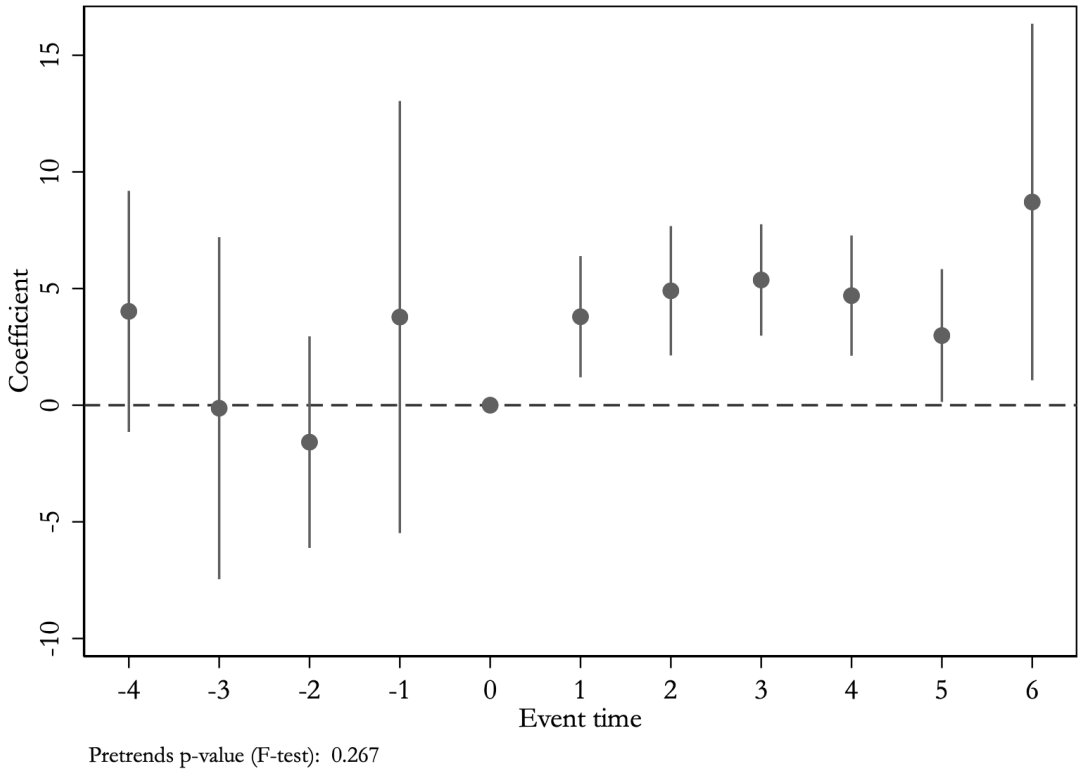
Power: 0.499. Bayes.Factor: 0.550. Likelihood.Ratio: 2.024

Figure 9: 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



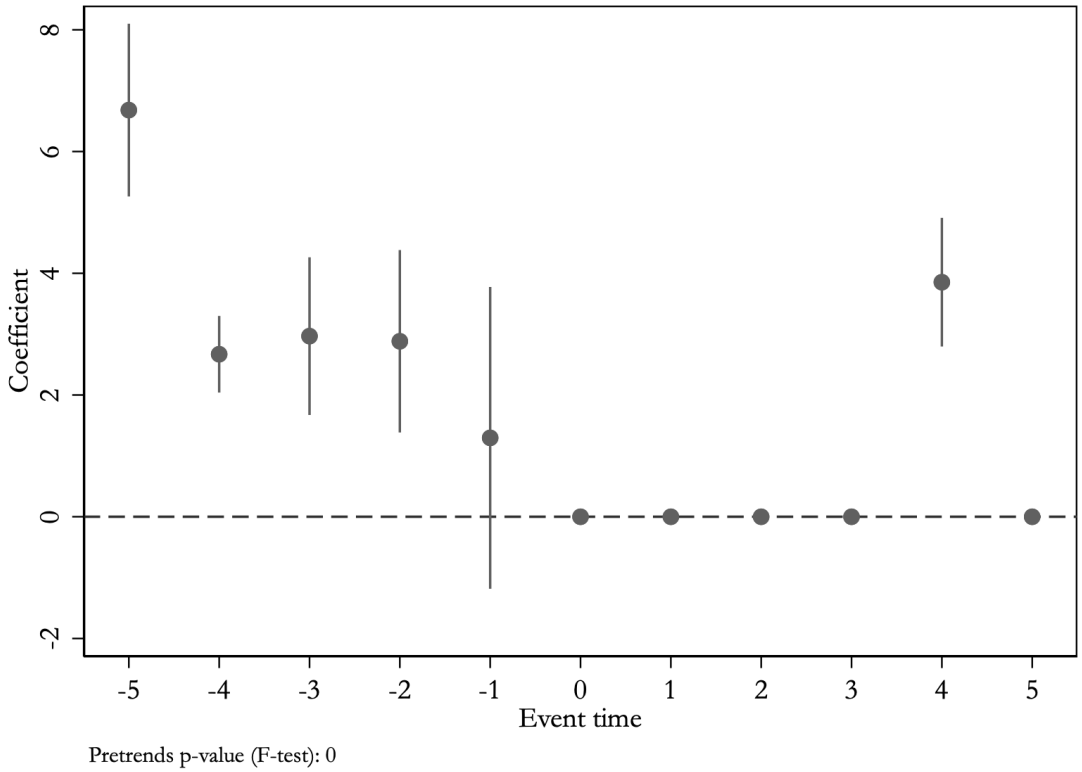
Note: This figure reports coefficients from the estimation of equation 1 evaluating the impact of the Fair Sentencing act of 2010 on arrest rates per 100,000 related to drug violations using CPS and UCR data from 2005-2015. Event time 0 := 2010. The coefficients represent the change in outcomes for high black adult drug arrest states relative to non-high-drug arrest states, where high-drug arrest states are defined to be those above the 75th percentile in 2008. The sample is defined as black males aged 18-24 in 2010 who were not incarcerated at the time of the survey. Control variables include population and unemployment rates at the state-year level.

Figure 10: 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



Note: This figure reports coefficients from the estimation of equation 1 evaluating the impact of the Anti-Drug Abuse Act of 1986 on arrest rates per 100,000 related to drug violations using CPS and UCR data from 1982-1992. Event time 0 := 1986. The coefficients represent the change in outcomes for high black juvenile drug arrest states relative to non-high-drug arrest states, where high-drug arrest states are defined to be those above the 75th percentile in 1984. The sample is defined as black males aged 18-24 in 1986 who were not incarcerated at the time of the survey. Control variables include population and unemployment rates at the state-year level.

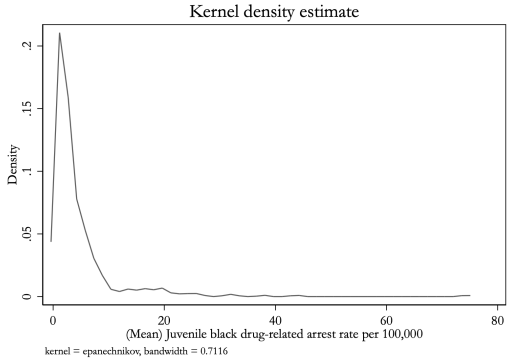
Figure 11: Effect of Fair Sentencing Act on Drug-related Arrest Rate of Black Men, Comparing States with High and Low Black Juvenile Drug-Related Arrest Rate



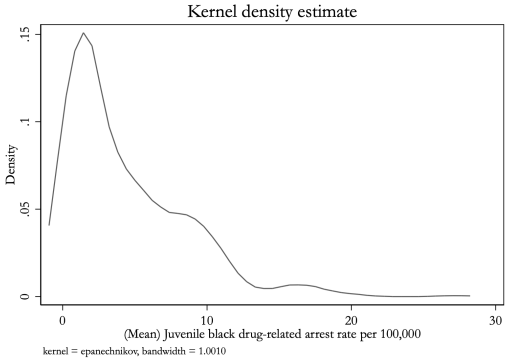
Note: This figure reports coefficients from the estimation of equation 1 evaluating the impact of the Fair Sentencing act of 2010 on arrest rates per 100,000 related to drug violations using CPS and UCR data from 2005-2015. Event time 0 := 2010. The coefficients represent the change in outcomes for high black juvenile drug arrest states relative to non-high-drug arrest states, where high-drug arrest states are defined to be those above the 75th percentile in 2008. The sample is defined as black males aged 18-24 in 2010 who were not incarcerated at the time of the survey. Control variables include population and unemployment rates at the state-year level.

Figure 12: Distribution of Black Juvenile Drug-Related Arrest Rates By State / Year

(a) 1986



(b) 2010



Note: The sample is defined as black males aged 18-24 in 1986 and 2010 who were not incarcerated at the time of the survey.

Table 1: Summary Statistics

	(1) 1984-86	(2) 1987-92	(3) 2000-09	(4) 2010-16
Male	0.49	0.49	0.51	0.50
	(0.500)	(0.500)	(0.500)	(0.500)
Black	0.14	0.13	0.15	0.15
	(0.348)	(0.335)	(0.355)	(0.355)
HS Graduate	0.71	0.85	0.41	0.90
	(0.452)	(0.356)	(0.491)	(0.296)
Enrolled in college	0.19	0.38		
	(0.396)	(0.486)		
Enrolled in college (Black males)	0.03	0.02	0.03	0.04
	(0.162)	(0.127)	(0.165)	(0.188)
Enrolled in college (Non-black males)	0.23	0.15	0.21	0.23
	(0.423)	(0.357)	(0.404)	(0.422)
Enrolled in 2-year college	0.07	0.04	0.07	0.07
	(0.254)	(0.201)	(0.256)	(0.262)
Enrolled in 4-year college	0.19	0.12	0.16	0.19
	(0.394)	(0.329)	(0.370)	(0.396)
Enrolled in college			0.23	0.27
			(0.423)	(0.443)
Observations	41761	75097	59253	70273

mean coefficients; sd in parentheses

Note: Sample means (with education weights) are displayed from the CPS October supplement merged with the UCR dataset from 1984-1992 and 2000-2016. The sample in columns 1 and 2 are defined as persons aged 18-24 in 1986, and the sample in columns 3 and 4 are defined as persons aged 18-24 in 2010, who were not incarcerated at the time of the survey. This table is partially replicated from Britton (2022).

Table 2: UCR 1986 black adult arrests related to marijuana

	(1) AB
1	10.92
2	5.30
3	10.67
4	17.53
5	8.53
6	18.97
7	16.32
8	151.89
10	19.36
11	3.58
12	58.17
13	5.91
15	7.44
16	9.67
17	13.72
18	3.13
19	20.92
20	14.44
21	18.48
22	6.50
23	17.94

Table 3: Impact of the Anti-Drug Abuse Act on College Enrollment: DiD Estimates Comparing Black and White Males

	(1)	(2)	(3)
Post-1986	-.1008***	-.001116	0
	(.0081424)	(.0083158)	(.)
Black	-.09754***	-.07123***	-.06463***
	(.01226)	(.010243)	(.010114)
Post-1986 X Black	.02853**	.01951*	.01952*
	(.012675)	(.011435)	(.011505)
Constant	.2786***	-.7408***	-.6626***
	(.0089147)	(.09414)	(.12118)
Observations	56237	56237	56237
Adjusted R^2	0.017	0.072	0.077
State_yr_FE	N	N	Y
Demographic_controls	N	Y	Y

Standard errors in parentheses

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

Note: Estimates are weighted using CPS October supplement weights. Robust standard errors are clustered at the state level. Controls: age, age-squared, Latino ethnicity, yearly state average unemployment rates, and (binned) family income. The sample is defined as black and white males aged 18-24 in 1986 who were not incarcerated at the time of the survey. This table is partially replicated from Britton (2022).

Table 4: Control Experiment Using Males 30-50. Impact of the Anti-Drug Abuse Act on College Enrollment: DiD Estimates Comparing Black and White Males

	(1)	(2)	(3)
Post-1986	-.008726***	.001346	0
	(.0018882)	(.0018894)	(.)
Black	.002504	.002191	.004505
	(.0036439)	(.0039024)	(.0036649)
Post-1986 X Black	-.007196*	-.00655	-.006052
	(.0039994)	(.0041797)	(.0041619)
Constant	.03518***	.3128***	.3078***
	(.0022329)	(.032321)	(.031232)
Observations	147007	147007	147007
Adjusted R^2	0.001	0.009	0.011
State_yr_FE	N	N	Y
Demographic_controls	N	Y	Y

Standard errors in parentheses

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

Note: Estimates are weighted using CPS October supplement weights. Robust standard errors are clustered at the state level. Controls: age, age-squared, Latino ethnicity, yearly state average unemployment rates, and (binned) family income. The sample is defined as black and white males aged 30-50 in 1986 who were not incarcerated at the time of the survey. This table is a control experiment for table 2 in Britton (2022).

Table 5: Impact of the Anti-Drug Abuse Act on College Enrollment: DiD Estimates Comparing Black Males and Females

	(1)	(2)	(3)
Post-1986	-.06084***	.0002668	0
	(.012492)	(.014094)	(.)
male	-.02008*	-.02925**	-.02841**
	(.011238)	(.01126)	(.011268)
Post-1986 X Male	-.0114	-.01632	-.01682
	(.013626)	(.014154)	(.013952)
Constant	.2012***	-.6718***	-.5771***
	(.011669)	(.17711)	(.19587)
Observations	13208	13208	13206
Adjusted R^2	0.009	0.049	0.057
State_yr_FE	N	N	Y
Demographic_controls	N	Y	Y

Standard errors in parentheses

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

Note: Estimates are weighted using CPS October supplement weights. Robust standard errors are clustered at the state level. Controls: age, age-squared, Latino ethnicity, yearly state average unemployment rates, and (binned) family income. The sample is defined as black males and black females aged 18-24 in 1986 who were not incarcerated at the time of the survey. This table is partially replicated from Britton (2022).

Table 6: Control Experiment Using Blacks Aged 30-50. Impact of the Anti-Drug Abuse Act on College Enrollment: DiD Estimates Comparing Black and Males and Females

	(1)	(2)	(3)
Post-1986	-.005289	-.0003352	0
	(.0032977)	(.0035489)	(.)
male	-.002261	-.005025	-.005067
	(.0052276)	(.0052387)	(.0052226)
Post-1986 X Male	-.01063*	-.01019	-.009803
	(.0060785)	(.0060993)	(.006084)
Constant	.03995***	.1702***	.1772***
	(.0035914)	(.055465)	(.055372)
Observations	29862	29862	29862
Adjusted R^2	0.001	0.009	0.012
State_yr_FE	N	N	Y
Demographic_controls	N	Y	Y

Standard errors in parentheses

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

Note: Estimates are weighted using CPS October supplement weights. Robust standard errors are clustered at the state level. Controls: age, age-squared, Latino ethnicity, yearly state average unemployment rates, and (binned) family income. The sample is defined as black males and black females aged 30-50 in 1986 who were not incarcerated at the time of the survey. This table is a control experiment for table 3 in Britton (2022).

Table 7: Impact of the Fair Sentencing Act on College Enrollment: DiD Estimates Comparing Black and White Males

	(1)	(2)	(3)
Post-2010	.4353***	.118***	0
	(.009665)	(.009578)	(.)
Black	-.05246***	-.01656**	-.01744***
	(.006599)	(.006433)	(.005625)
Post-2010 X Black	-.03181**	-.04425**	-.04756**
	(.01573)	(.01828)	(.01787)
Constant	.1676***	-.7337***	-.4856***
	(.004781)	(.03113)	(.03253)
Observations	88097	88097	88097
Adjusted R^2	0.203	0.314	0.333
State_yr_FE	N	N	Y
Demographic_controls	N	Y	Y

Standard errors in parentheses

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

Note: Estimates are weighted using CPS October supplement weights. Robust standard errors are clustered at the state level. Controls: age, age-squared, Latino ethnicity, yearly state average unemployment rates, and (binned) family income. The sample is defined as black and white males aged 18-24 in 2010 who were not incarcerated at the time of the survey.

Table 8: Control Experiment Using Males 30-50. Impact of the Anti-Drug Abuse Act on College Enrollment: DiD Estimates Comparing Black and White Males

	(1)	(2)	(3)
Post-2010	.02311***	-.009015***	0
	(.00322)	(.003125)	(.)
Black	-.07884***	-.02725**	-.022**
	(.01646)	(.01038)	(.01006)
Post-2010 X Black	.004482	.02143***	.02182***
	(.006885)	(.006876)	(.006938)
Constant	.5625***	.4458***	.3571***
	(.008551)	(.03948)	(.03413)
Observations	250249	250249	250249
Adjusted R^2	0.003	0.153	0.158
State_yr_FE	N	N	Y
Demographic_controls	N	Y	Y

Standard errors in parentheses

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

Note: Estimates are weighted using CPS October supplement weights. Robust standard errors are clustered at the state level. Controls: age, age-squared, Latino ethnicity, yearly state average unemployment rates, and (binned) family income. The sample is defined as black and white males aged 30-50 in 2010 who were not incarcerated at the time of the survey.

Table 9: Impact of the Fair Sentencing Act on College Enrollment: DiD Estimates Comparing Black Males and Females

	(1)	(2)	(3)
Post-2010	.4314***	.1358***	0
	(.01188)	(.01639)	(.)
male	-.0433***	-.04155***	-.04271***
	(.005242)	(.004334)	(.004167)
Post-2010 X Male	-.02798*	-.04462***	-.04651***
	(.01411)	(.01422)	(.01427)
Constant	.1584***	-.5973***	-.3868***
	(.005505)	(.04161)	(.05295)
Observations	21161	21161	21161
Adjusted R^2	0.202	0.310	0.324
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.

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

Note: Estimates are weighted using CPS October supplement weights. Robust standard errors are clustered at the state level. Controls: age, age-squared, Latino ethnicity, yearly state average unemployment rates, and (binned) family income. The sample is defined as black males and females aged 18-24 in 2010 who were not incarcerated at the time of the survey.

Table 10: Control Experiment Using Black Males and Females 30-50. Impact of the Anti-Drug Abuse Act on College Enrollment: DiD Estimates Comparing Black Males and Females

	(1)	(2)	(3)
Post-2010	.0445***	.01663	0
	(.01103)	(.0105)	(.)
male	-.08054***	-.1045***	-.1055***
	(.007509)	(.007396)	(.00733)
Post-2010 X Male	-.01691	-.01575	-.01579
	(.01091)	(.0101)	(.01009)
Constant	.5642***	.3657***	.4503***
	(.01067)	(.05542)	(.05818)
Observations	53711	53711	53711
Adjusted R^2	0.009	0.123	0.129
State_yr_FE	N	N	Y
Demographic_controls	N	Y	Y

Standard errors in parentheses

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

Note: Estimates are weighted using CPS October supplement weights. Robust standard errors are clustered at the state level. Controls: age, age-squared, Latino ethnicity, yearly state average unemployment rates, and (binned) family income. The sample is defined as black males and females aged 30-50 in 2010 who were not incarcerated at the time of the survey.

Table 11: Impact of the Anti-Drug Abuse Act on College Enrollment: DiD Estimates Comparing Individuals from High and Low Black Adult Drug Arrest States

	(1)	(2)	(3)
Post-1986	.1812***	.006054	0
	(.005789)	(.007973)	(.)
High-drug arrest state (AB)	.03702***	.008256	0
	(.009572)	(.00992)	(.)
Post-1986 X High-drug arrest state	.003087	-.001695	-.003818
	(.01371)	(.01247)	(.01201)
Constant	.175***	-3.087***	-3.483***
	(.003803)	(.1458)	(.2027)
Observations	56237	56237	56237
Adjusted R^2	0.036	0.124	0.133
State_yr_FE	N	N	Y
Demographic_controls	N	Y	Y

Standard errors in parentheses

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

Note: Treated observations are defined as those living in states with a high-drug arrest rate for black adults, where high black adult drug arrest states are defined to be those above the 75th percentile in 1984. Estimates are weighted using CPS October supplement weights. Robust standard errors are clustered at the state level. Controls: age, age-squared, Latino ethnicity, yearly state average unemployment rates, and (binned) family income. The sample is defined as males aged 18-24 in 1986 who were not incarcerated at the time of the survey.

Table 12: Impact of the Anti-Drug Abuse Act on College Enrollment: DiD Estimates Using Normalized Black Adult Drug Arrest Rate as Continuous Treatment

	(1)	(2)	(3)
Post-1986	.2018***	.01122	0
	(.006922)	(.007919)	(.)
Drug arrest rate per 100000	.001364***	.0003137	.0000647
	(.000185)	(.0002429)	(.0003182)
Post-1986 x Drug arrest rate per 100000	-.001218***	-.0002992	-.0001469
	(.0001583)	(.0002144)	(.0003047)
Constant	.163***	-3.094***	-3.483***
	(.0058)	(.1422)	(.2038)
Observations	56237	56237	56237
Adjusted R^2	0.035	0.124	0.133
State_yr_FE	N	N	Y
Demographic_controls	N	Y	Y

Standard errors in parentheses

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

Note: Treatment is continuous. Estimates are weighted using CPS October supplement weights. Robust standard errors are clustered at the state level. Controls: age, age-squared, Latino ethnicity, yearly state average unemployment rates, and (binned) family income. The sample is defined as males aged 18-24 in 1986 who were not incarcerated at the time of the survey.

Table 13: Impact of the Anti-Drug Abuse Act on College Enrollment: DiD Estimates Comparing Individuals from High and Low Juvenile Drug Arrest States

	(1)	(2)	(3)
Post-1986	.5028***	-.0589	0
	(.08815)	(.06804)	(.)
High-drug arrest state (JB)	.1933**	-.1024*	0
	(.08539)	(.05739)	(.)
Post-1986 X High-drug arrest state	.03728	.07949	.008017
	(.1171)	(.121)	(.09196)
Constant	12.57***	-5.588***	-7.29***
	(.04637)	(.7212)	(1.043)
Observations	53145	53145	53145
Adjusted R^2	0.008	0.072	0.087
State_yr_FE	N	N	Y
Demographic_controls	N	Y	Y

Standard errors in parentheses

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

Note: Treated observations are defined as those living in states with a high-drug arrest rate for black juveniles, where high black juvenile drug arrest states are defined to be those above the 75th percentile in 1984. Estimates are weighted using CPS October supplement weights. Robust standard errors are clustered at the state level. Controls: age, age-squared, Latino ethnicity, yearly state average unemployment rates, and (binned) family income. The sample is defined as males aged 18-24 in 1986 who were not incarcerated at the time of the survey.

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

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

Table 15: Control Experiment Using Females: 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	.4596***	-.1552**	0
	(.06968)	(.06106)	(.)
JB Drug arrest rate per 100000	.01351**	-.009207	.01713**
	(.005225)	(.006857)	(.006701)
Post-1986 x Drug arrest rate per 100000	.003457	.01603**	-.005583
	(.004826)	(.006985)	(.003327)
Constant	12.74***	-5.263***	-7.053***
	(.04734)	(.5142)	(.8156)
Observations	57425	57425	57425
Adjusted R^2	0.009	0.086	0.101
State_yr_FE	N	N	Y
Demographic_controls	N	Y	Y

Standard errors in parentheses

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

Table 16: Control Experiment Using Females: 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	.1501**	.3574***	0
	(.06483)	(.09751)	(.)
JB Drug arrest rate per 100000	-.003033	-.02963**	.01794**
	(.006785)	(.01399)	(.007515)
Post-1986 x Drug arrest rate per 100000	.01593**	.03185***	-.007682
	(.007642)	(.01044)	(.005986)
Constant	11.92***	14.21***	14.37***
	(.0588)	(.9072)	(.8076)
Observations	138566	138566	138566
Adjusted R^2	0.001	0.010	0.035
State_yr_FE	N	N	Y
Demographic_controls	N	Y	Y

Standard errors in parentheses

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

Table 17: Impact of the Fair Sentencing Act on College Enrollment: DiD Estimates Comparing Individuals from High and Low Black Adult Drug Arrest States

	(1)	(2)	(3)
Post-2010	.07951***	.009631	0
	(.005554)	(.008421)	(.)
High-drug arrest state (AB)	-.007761	-.009208	0
	(.008853)	(.01089)	(.)
Post-2010 X High-drug arrest state	-.01963*	-.01355	-.01778**
	(.01024)	(.009783)	(.008734)
Constant	.1539***	-1.181***	-.7441***
	(.006186)	(.03982)	(.03472)
Observations	88097	88097	88097
Adjusted R^2	0.009	0.116	0.144
State_yr_FE	N	N	Y
Demographic_controls	N	Y	Y

Standard errors in parentheses

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

Note: Treated observations are defined as those living in states with a high-drug arrest rate for black adults, where high black adult drug arrest states are defined to be those above the 75th percentile in 2008. Estimates are weighted using CPS October supplement weights. Robust standard errors are clustered at the state level. Controls: age, age-squared, Latino ethnicity, yearly state average unemployment rates, and (binned) family income. The sample is defined as males aged 18-24 in 1986 who were not incarcerated at the time of the survey.

Table 18: Impact of the Fair Sentencing Act on College Enrollment: DiD Estimates Using Normalized Black Adult Drug Arrest Rate as Continuous Treatment

	(1)	(2)	(3)
Post-2010	.04558**	-.004946	0
	(.01717)	(.01289)	(.)
Drug arrest rate per 100000	-.001156***	-.0008107**	-5.09e-06
	(.0003718)	(.0003128)	(.0000711)
Post-2010 x Drug arrest rate per 100000	.0002507	-5.69e-06	-.001341***
	(.0005835)	(.0004199)	(.0004249)
Constant	.1981***	-1.144***	-.7251***
	(.01459)	(.04018)	(.03573)
Observations	86842	86842	86842
Adjusted R^2	0.013	0.118	0.144
State_yr_FE	N	N	Y
Demographic_controls	N	Y	Y

Standard errors in parentheses

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

Note: Treatment is continuous. Estimates are weighted using CPS October supplement weights. Robust standard errors are clustered at the state level. Controls: age, age-squared, Latino ethnicity, yearly state average unemployment rates, and (binned) family income. The sample is defined as males aged 18-24 in 2010 who were not incarcerated at the time of the survey.

Table 19: Impact of the Anti-Drug Abuse Act on College Enrollment: Triple DiD

	(1)	(2)	(3)
Post-1986	.01112	.01112	0
	(.01064)	(.01064)	(.)
Black	-.05975***	-.05975***	-.04905***
	(.009885)	(.009885)	(.009733)
High-drug arrest state	.02311**	.02311**	0
	(.009937)	(.009937)	(.)
post_black_interact	.00748	.00748	.005819
	(.01121)	(.01121)	(.01131)
high_drug_black_interact	-.03304*	-.03304*	-.0444**
	(.01924)	(.01924)	(.0197)
Post-1986 X High-drug arrest state	-.04014***	-.04014***	-.04184***
	(.0123)	(.0123)	(.01254)
triple_interact	.03917	.03917	.04255*
	(.02435)	(.02435)	(.02431)
Constant	-.7534***	-.7534***	-.6456***
	(.09496)	(.09496)	(.1231)
Observations	56237	56237	56237
Adjusted R^2	0.072	0.072	0.077
State_yr_FE	N	N	Y
Demographic_controls	N	Y	Y

Standard errors in parentheses

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

Table 20: Imitation of Panel A in Table 3 of Duflo (2001)

	College enrollment			Fam inc		
	Level of drug arrests			Level of drug arrests		
	High	Low	Diff.	High	Low	Diff.
	(1)	(2)	(3)	(4)	(5)	(6)
Aged 18-24 in 1986 and black	-0.93	-0.93	0.00	62144.02	53493.93	8650.09
	(0.10)	(0.10)	(0.03)	(4519.83)	(5181.76)	(1359.73)
Aged 28-34 in 1986	-0.82	-0.89	0.06	70312.94	63625.58	6687.36
	(0.10)	(0.10)	(0.01)	(4861.23)	(5214.90)	(715.54)
Difference	-0.11	-0.04	-0.06	-8168.92	-1.0e+04	1962.73
	(0.01)	(0.02)	(0.02)	(866.90)	(677.34)	(1036.55)

Clustered (state-year) robust standard errors in parentheses

CPS education supplement weights used. Males only