Does Cash Bail Deter Misconduct?
Online Appendix
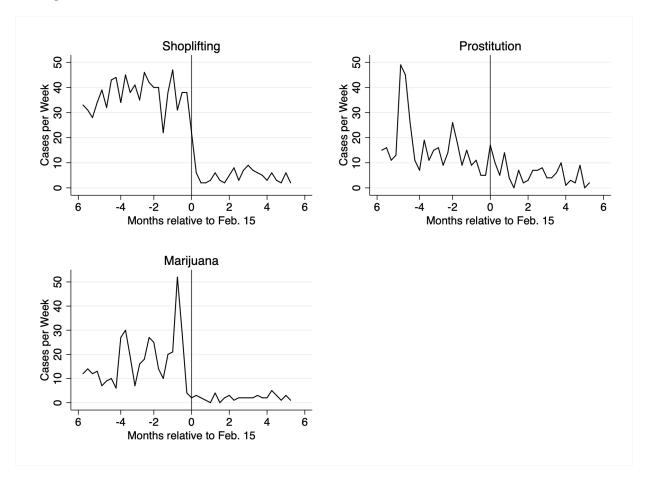
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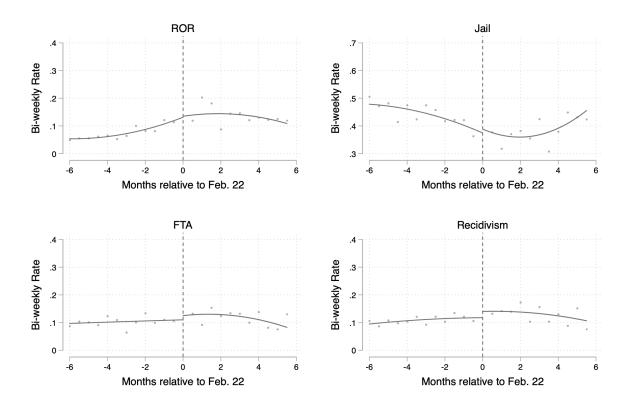[†]University of Virginia School of Law, mstevenson@law.virginia.edu

Additional figures and tables

Figure A.1: Changes in the weekly number of cannabis, prostitution and shoplifting cases after the Feb. 15th announcement not to prosecute these kinds of cases anymore. For all of our analyses, we drop these cases.

These figures document a decline in the number of cases filed for shoplifting, prostitution and marijuana offenses that occurred due to changes in prosecutorial policy around the same time as the No-Cash-Bail reform. We drop these cases from our analysis. Data source: court dockets from the Pennsylvania Unified Judicial System.

Figure A.2: Time trend in ROR, pretrial detention, FTA and recidivism for ineligible cases, dropping cases where the lead charge is ineligible but some secondary charges were eligible for the No-Cash-Bail policy.

Note: Each dot represents the mean value in a two-week time period. The vertical line represents the Feb. 22 date of the No-Cash-Bail policy. The lines are quadratic fits, before and after Feb. 22. ROR (released on own recognizance) means that a defendant is released with no monetary or supervisory conditions. Pretrial detention is defined as spending at least 3 nights in jail immediately after their initial bail hearing. FTA means failure to appear in court. Recidivism (new criminal charges) is measured within 6 months after one's initial court hearing. Data source: court dockets from the Pennsylvania Unified Judicial System.
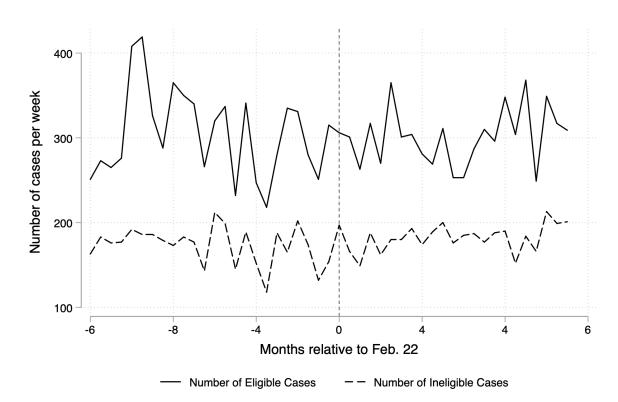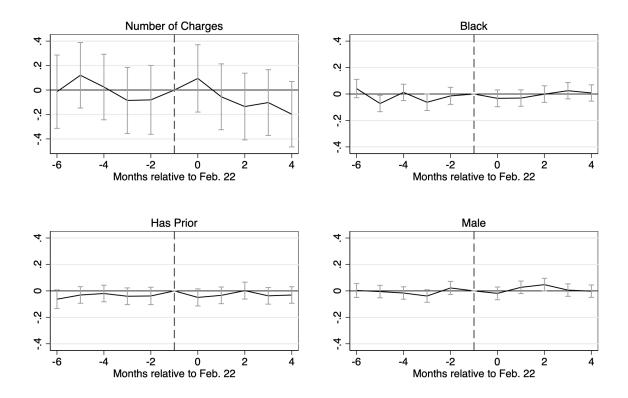
Figure A.3: Trends in the weekly number of eligible and ineligible cases
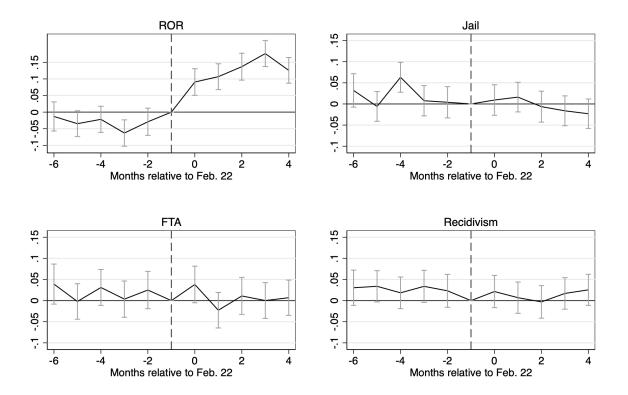

This figure presents trends in the weekly number of cases filed that were eligible for the No-Cash-Bail reform as well as those that were ineligible. The vertical line represents the Feb. 22 date of the No-Cash-Bail policy. Data source: court dockets from the Pennsylvania Unified Judicial System.

Figure A.4: Balance check: Difference-in-differences estimates with leads and lags for how the No-Cash-Bail policy affected case composition

Note: This figure plots the difference-in-difference coefficients obtained from estimating a single equation with monthly leads and lags (Equation 2), with the 95% confidence interval of the coefficient estimate. The treatment group is eligible offenses and the control group is ineligible offenses. The vertical dashed line indicates the month prior to Feb. 22. That month is left out as the comparison category. Data source: court dockets from the Pennsylvania Unified Judicial System.

Figure A.5: Prior year as the comparison group: Difference-in-differences estimates with leads and lags for how the No-Cash-Bail policy affected ROR, jail time, FTA and recidivism
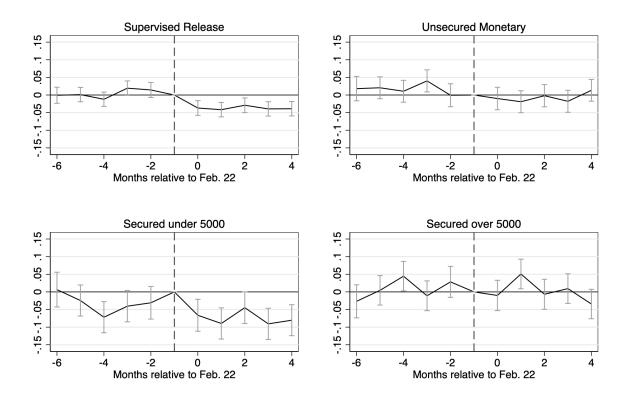

Note: This figure plots the difference-in-difference coefficients obtained from estimating a single equation with monthly leads and lags (Equation 2), with the 95% confidence interval of the coefficient estimate. The treatment group is eligible offenses that were examined 6 months before up to 5 months after Feb. 22, 2018, and the control group is eligible offenses that were examined 6 months before up to 5 months after Feb. 22, 2017. The vertical dashed line indicates the month prior to Feb. 22. That month is left out as the comparison category. Data source: court dockets from the Pennsylvania Unified Judicial System.

Figure A.6: Difference-in-differences estimates with leads and lags for how the No-Cash-Bail policy affected bail types
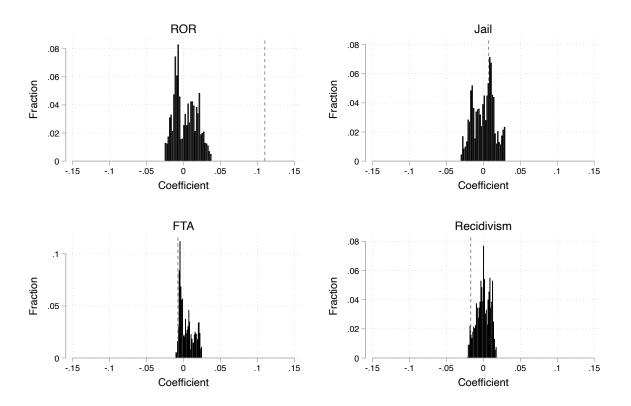

Note: This figure plots the difference-in-difference coefficients obtained from estimating a single equation with monthly leads and lags (Equation 2), with the 95% confidence interval of the coefficient estimate. The treatment group is eligible offenses and the control group is ineligible offenses. The vertical dashed line indicates the month prior to Feb. 22. That month is left out as the comparison category. Data source: court dockets from the Pennsylvania Unified Judicial System.

Figure A.7: Placebo analysis: comparing estimates of the No-Cash-Bail policy on ROR, jail time, FTA and recidivism to placebos policy changes in other years

Note: This figure compares the estimates obtained in our main regression (δ in Equation 1), represented by the dashed line, to a distribution of estimates obtained generating 2,000 "placebo" reform dates between 2013 and 2016. We randomly selected 2,000 "reform" dates in that time period and kept observations 6 months before and 5 months after this placebo reform date. Data source: court dockets from the Pennsylvania Unified Judicial System.

Table A1: Offense category frequency for eligible and ineligible cases

	Panel A: Eligible Cases
Possession with intent to deliver (PWID)	0.28
Drug purchase	0.20
Drug possession	0.18
DUI	0.15
Theft	0.06
Burglary	0.04
Receiving stolen property	0.03
Other	0.03
Observations	7468
	Panel B: Ineligible Cases
Aggravated assault	0.20
Firearm violation	0.12
Robbery	0.10
Simple assault	0.09
Possession with intent to deliver (PWID)	0.09
Possession of weapon	0.06
Domestic violence	0.05
Other	0.17
Observations	4281

Note: This table shows the most frequent offense categories for eligible and ineligible cases. While PWID in general are eligible offenses, PWID cases for which the defendant had a PWID in the past 6 months are not eligible. Data source: court dockets from the Pennsylvania Unified Judicial System.

Table A2: Testing for changes in case composition at time of reform

	Charges per case (1)	Has Prior (2)	Male (3)	Black (4)
Eligible*Post 02/21	-0.058	0.0054	0.020	0.0078
	(0.047)	(0.016)	(0.011)	(0.015)
Mean Dep. Var.	2.456	0.574	0.839	0.478
N	22589	22589	22589	22589

Note: This table presents estimates of δ in Equation 1. Eligible offenses are the treatment group, and ineligible offenses are the control group. The outcomes are number of charges per case (Column 1), a dummy equal to 1 for having a prior (Column 2), for being male (Column 3) or for being Black (Column 4). 'Mean Dep. Var.' is the mean of the dependent variable for eligible cases before the No-Cash-Bail policy. Data source: court dockets from the Pennsylvania Unified Judicial System. Standard errors, clustered at the offense level, are in parentheses.

Table A3: Difference-in-difference estimates of the effect of No-Cash-Bail policy on ROR, jail, FTA and Recidivism, showing coefficients on Post and Eligible Offenses

	ROR	Jail	FTA	Recidivism
	(1)	(2)	(3)	(4)
Eligible*Post 02/21	0.11	0.0072	-0.0084	-0.019
	(0.021)	(0.016)	(0.011)	(0.011)
Post 02/21	0.034	-0.045	0.021	0.029
	(0.019)	(0.015)	(0.014)	(0.0076)
Eligible Offense	0.070	-0.080	0.0091	-0.031
	(0.086)	(0.089)	(0.057)	(0.030)
Controls	Yes	Yes	Yes	Yes
Mean Dep. Var.	0.505	0.169	0.247	0.171
N	22589	22589	22589	22589

Note: This table presents estimates of δ, β and λ in Equation 1. Eligible offenses are the treatment group, and ineligible offenses are the control group. Controls are for offense statute and class, age, gender, day of week, shift, presence and number of past offenses and past FTAs, and initial bail commissioner. ROR (released on own recognizance) means that a defendant is released with no monetary or supervisory conditions. Pretrial detention is defined as spending at least 3 nights in jail immediately after their initial bail hearing. FTA means failure to appear in court. Recidivism (new criminal charges) is measured within 6 months after one's initial court hearing. "Mean Dep. Var." is the mean of the dependent variable for eligible cases before the No-Cash-Bail policy. Data source: court dockets from the Pennsylvania Unified Judicial System. Standard errors, clustered at the offense level, are in parentheses.

Table A4: Robustness checks

	ROR				FTA			
	Ever (1)	12 weeks (2)	Donut (3)	Weekly (4)	Total (5)	12 weeks (6)	Donut (7)	Weekly (8)
Eligible*Post 02/21	0.11	0.11	0.11	0.12	-0.017	-0.027	-0.0047	-0.0049
	(0.021)	(0.023)	(0.021)	(0.017)	(0.017)	(0.010)	(0.011)	(0.010)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mean Dep. Var.	0.512	0.515	0.505	0.510	0.330	0.253	0.246	0.249
N	22175	10680	20736	96	22175	10680	20736	96

Note: This table presents estimates of δ in Equation 1. Eligible offenses are the treatment group, and ineligible offenses are the control group. Columns 1-4 present robustness tests for ROR, and Columns 5-8 present robustness tests for FTA. In Column 1, Ever ROR is a dummy equal to 1 if a person gets an ROR at any point during the pretrial period, instead of just the initial bail hearing. In Column 5, total FTA is the total number of FTA incidents, instead of the likelihood of having an FTA. Columns 2 and 6 limit our sample to 12 weeks before and after Feb. 21. Columns 3 and 7 exclude the week of the policy, and the weeks just before and after. Columns 4 and 8 are collapsed to one observation per week. Controls are for offense statute and class, age, gender, day of week, shift, presence and number of past offenses and past FTAs, and initial bail commissioner. ROR means released on own recognizance. FTA is failure to appear in court. 'Mean Dep. Var.' is the mean of the dependent variable for eligible cases before the No-Cash-Bail policy. Data source: court dockets from the Pennsylvania Unified Judicial System. Standard errors, clustered at the offense level, are in parentheses.

Table A5: Difference-in-difference estimates of the effect of No-Cash-Bail policy on ROR, jail, FTA and Recidivism, using cases on the same calendar day of the past year as the control group

	(1) ROR	(2) Jail	(3) FTA	(4) Recidivism
Panel A: Full sample				
2018*Post 02/21	0.16	-0.022	-0.0100	-0.0096
	(0.024)	(0.017)	(0.019)	(0.013)
Mean Dep. Var.	0.483	0.197	0.236	0.158
N	31427	31427	31427	31427
Panel B: Cash Bail				
2018*Post 02/21	0.15	-0.026	-0.037	0.0033
	(0.040)	(0.025)	(0.014)	(0.0035)
Mean Dep. Var.	0.292	0.296	0.197	0.136
N	17736	17736	17736	17736
Controls	Yes	Yes	Yes	Yes

Note: This table presents estimates of δ in Equation 1. Eligible offenses 6 months before and 5 months after February 21, 2018 are the treatment group, and Eligible offenses 6 months before and 5 months after February 21, 2017 are the control group. Panel A presents results for the full sample. In Panel B, we subset eligible offenses to only include offenses that are most likely to have had cash bail (and not pretrial supervision) before the No-Cash-Bail reform, as defined in Table 5. Controls are for offense statute and class, age, gender, day of week, shift, presence and number of past offenses and past FTAs, and initial bail commissioner. ROR means released on own recognizance. FTA is failure to appear in court. 'Mean Dep. Var.' is the mean of the dependent variable for eligible cases before the No-Cash-Bail policy. Data source: court dockets from the Pennsylvania Unified Judicial System. Standard errors, clustered at the offense level, are in parentheses.

Table A6: Difference-in-difference estimates of the effects of No-Cash-Bail, dropping ineligible cases that have secondary charges that were eligible for the No-Cash-Bail reform.

	(1) ROR	(2) Jail	(3) FTA	(4) Recidivism
Panel A: Full sample				
Eligible*Post 02/21	0.11	0.0029	-0.0041	-0.019
	(0.020)	(0.015)	(0.011)	(0.010)
Mean Dep. Var.	0.505	0.169	0.247	0.171
N	20758	20758	20758	20758
Panel B: Cash Bail				
Eligible*Post 02/21	0.12	-0.014	-0.019	-0.016
	(0.026)	(0.018)	(0.0099)	(0.0085)
Mean Dep. Var.	0.287	0.271	0.202	0.149
N	14285	14285	14285	14285
Controls	Yes	Yes	Yes	Yes

Note: This table presents estimates of δ in Equation 1, removing ineligible cases that had some secondary charges that were eligible for the No-Cash-Bail reform. Eligible cases are the treatment group, and ineligible cases that had no eligible secondary charge are the control group. Panel A presents results for the full sample. In Panel B, we subset eligible offenses to only include offenses that are most likely to have had cash bail (and not pretrial supervision) before the No-Cash-Bail reform, as defined in Table 5. Pretrial detention is defined as spending at least 3 nights in jail immediately after their initial bail hearing. Cash is giving a defendant cash bail as a condition of release – either secured or unsecured. FTA means failure to appear in court. Recidivism (new criminal charges) is measured within 6 months after one's initial court hearing. Controls are for offense statute and class, age, gender, day of week, shift, presence and number of past offenses and past FTAs, and initial bail commissioner. "Mean Dep. Var." is the mean of the dependent variable for eligible cases before the No-Cash-Bail policy. Data source: court dockets from the Pennsylvania Unified Judicial System. Standard errors, clustered at the offense level, are in parentheses.

Table A7: Regression discontinuity in time estimates of the No-Cash-Bail policy, for eligible offenses

	(1) ROR	(2) Jail	(3) FTA	(4) Recidivism
Panel A: Full sample				
Post 02/21	0.104	-0.0356	0.0102	0.0394
	(0.0282)	(0.0204)	(0.0268)	(0.0227)
Mean Dep. Var.	0.531	0.154	0.255	0.160
Effective RD observations	3475	4437	4730	4633
Bandwidth for estimation	41	52	57	56
Bandwidth for bias	61	78	86	84
Panel B: Cash Bail				
Post 02/21	0.140	-0.0526	-0.0530	0.0170
	(0.0379)	(0.0319)	(0.0366)	(0.0265)
Pre-reform mean	0.351	0.239	0.200	0.141
Effective RD observations	1880	2678	2270	3150
Bandwidth for estimation	40	58	48	68
Bandwidth for bias	59	89	80	103

Note: This table presents regression discontinuity in time estimates of the effect of the No-Cash-Bail policy, for eligible offenses, following **?**. Panel A presents results for the full sample. In Panel B, we subset eligible offenses to only include offenses that are most likely to have had cash bail (and not pretrial supervision) before the No-Cash-Bail reform, as defined in Table 5. 'Mean Dep. Var.' is the mean of the dependent variable for eligible cases before the No-Cash-Bail policy. Data source: court dockets from the Pennsylvania Unified Judicial System.

Table A8: Robustness checks: different clustering schemes

	(1) ROR	(2) Jail	(3) FTA	(4) Recidivism
Eligible*Post 02/21	0.11	0.01	-0.01	-0.02
	(0.069, 0.15)	(-0.024, 0.038)	(-0.030, 0.013)	(-0.040, 0.0023)
	{0.093, 0.13}	{-0.013, 0.027}	{-0.029, 0.012}	{-0.038, 0.00026}
	[0.049, 0.19]	[-0.022, 0.028]	[-0.029, 0.014]	[-0.064, 0.027]
Mean Dep. Var.	0.505	0.169	0.247	0.171
N	22589	22589	22589	22589

Note: This table presents estimates of δ in Equation 1. Eligible offenses are the treatment group, and ineligible offenses are the control group. Columns 1-4 present robustness tests for ROR, and Columns 5-8 present robustness tests for FTA. Confidence intervals in parentheses are clustered at the offense level, as in our main specifications. Confidence intervals in curly brackets are not clustered. Confidence intervals in brackets are obtained using a wild cluster bootstrap, clustering at the judge level. Controls are for offense statute and class, age, gender, day of week, shift, presence and number of past offenses and past FTAs, and initial bail commissioner. ROR means released on own recognizance. FTA is failure to appear in court. 'Mean Dep. Var.' is the mean of the dependent variable for eligible cases before the No-Cash-Bail policy. Data source: court dockets from the Pennsylvania Unified Judicial System. Standard errors, clustered at the offense level, are in parentheses.

Table A9: Difference-in-difference estimates of the effect of No-Cash-Bail policy on jail: different lengths of jail time

	Spent at least x nights in jail, with x equal to...						
	1	2	3	4	5	6	7
Eligible*Post 02/21	0.0049	0.0070	0.0074	0.013	0.014	0.015	0.013
	(0.017)	(0.017)	(0.016)	(0.015)	(0.016)	(0.016)	(0.016)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mean Dep. Var.	0.190	0.175	0.169	0.164	0.159	0.157	0.155
N	22589	22589	22589	22589	22589	22589	22589

Note: This table presents estimates of δ in Equation 1. Eligible offenses are the treatment group, and ineligible offenses are the control group. The outcome in each column is being detained pretrial for at least x nights after the bail hearing – Column 1 is at least 1 night, Column 2 is at least 2 nights, and so on. Controls are for offense statute and class, age, gender, day of week, shift, presence and number of past offenses and past FTAs, and initial bail commissioner. "Mean Dep. Var." is the mean of the dependent variable for eligible cases before the No-Cash-Bail policy. Data source: court dockets from the Pennsylvania Unified Judicial System. Standard errors, clustered at the offense level, are in parentheses.

Table A10: Robustness for difference-in-difference estimates of the effect of No-Cash-Bail policy on FTA and recidivism: different time windows

	FTA within...			Recidivism within...		
	1 month	3 months	10 months	1 month	3 months	10 months
	(1)	(2)	(3)	(4)	(5)	(6)
Eligible*Post 02/21	0.0057	0.0029	-0.0041	-0.0026	-0.0081	-0.025
	(0.0056)	(0.0064)	(0.010)	(0.0049)	(0.0081)	(0.0093)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Mean Dep. Var.	0.035	0.085	0.157	0.046	0.108	0.235
N	22589	22589	20524	22589	22589	20524

Note: This table presents estimates of δ in Equation 1. Eligible offenses are the treatment group, and ineligible offenses are the control group. The outcome in Columns 1-3 is FTA and in Columns 4-6 is recidivism. They are defined as having missed one's court date or failed to appear in court within 1 month (Columns 1 and 4), 3 months (Columns 2 and 5) or 10 months (Columns 3 and 6) within one's initial court hearing. In Columns 3 and 6, we limit our sample to defendants for whom we observe outcomes for at least 10 months after their initial court hearing. Controls are for offense statute and class, age, gender, day of week, shift, presence and number of past offenses and past FTAs, and initial bail commissioner. "Mean Dep. Var." is the mean of the dependent variable for eligible cases before the No-Cash-Bail policy. Data source: court dockets from the Pennsylvania Unified Judicial System. Standard errors, clustered at the offense level, are in parentheses.

Table A11: Testing balance in judge case characteristics

	(1) Felony	(2) Black	(3) Age	(4) Male	(5) Past FTA	(6) Past charges
Judge 1	0.0048	-0.030	-0.31	-0.0034	0.00055	0.015
	(0.012)	(0.012)	(0.28)	(0.0090)	(0.0089)	(0.012)
Judge 2	0.014	0.0083	-0.044	-0.0051	-0.0078	0.00055
	(0.011)	(0.011)	(0.27)	(0.0085)	(0.0084)	(0.011)
Judge 3	0.00021	0.0045	-0.079	0.013	0.015	0.0059
	(0.012)	(0.012)	(0.27)	(0.0086)	(0.0085)	(0.012)
Judge 4	-0.0075	-0.0087	-0.22	-0.0042	-0.00070	0.013
	(0.012)	(0.012)	(0.27)	(0.0088)	(0.0086)	(0.012)
Judge 5	0.014	-0.00053	-0.30	0.0078	-0.0052	0.00032
	(0.011)	(0.011)	(0.26)	(0.0083)	(0.0082)	(0.011)
Mean DV	0.532	0.559	34.061	0.834	0.160	0.558
N	21527	21527	21527	21527	21527	21527
Pval joint F test	0.361	0.037	0.793	0.259	0.141	0.691

Note: This table tests whether cases are quasi-randomly assigned to bail magistrates. To do so, we regress observable case characteristics on dummies for bail magistrates, while controlling for day of the week, shift, and quarter in the year. We drop cases that are not examined by judges who see at least 100 cases a year. "Mean Dep. Var." is the mean of the dependent variable for eligible cases before the No-Cash-Bail policy. "Pval joint F test" presents the p-value of a joint F-test, testing the null hypothesis that the judge coefficients are equal to 0. Data source: court dockets from the Pennsylvania Unified Judicial System. Standard errors, clustered at the offense level, are in parentheses.

Table A12: Difference-in-difference estimates of the effect of No-Cash-Bail policy on ROR, jail, FTA and Recidivism, dropping PWID cases

	ROR	Jail	FTA	Recidivism
	(1)	(2)	(3)	(4)
Eligible*Post 02/21	0.099	0.013	-0.0079	-0.017
	(0.021)	(0.016)	(0.013)	(0.014)
Controls	Yes	Yes	Yes	Yes
Mean Dep. Var.	0.684	0.084	0.194	0.156
N	17952	17952	17952	17952

Note: This table presents estimates of δ in Equation 1, dropping PWID (possession with intent to deliver) cases. Eligible offenses are the treatment group, and ineligible offenses are the control group. ROR (released on own recognizance) means that a defendant is released with no monetary or supervisory conditions. Pretrial detention is defined as spending at least 3 nights in jail immediately after their initial bail hearing. FTA means failure to appear in court. Recidivism (new criminal charges) is measured within 6 months after one's initial court hearing. Controls are for offense statute and class, age, gender, day of week, shift, presence and number of past offenses and past FTAs, and initial bail commissioner. "Mean Dep. Var." is the mean of the dependent variable for eligible cases before the No-Cash-Bail policy. Data source: court dockets from the Pennsylvania Unified Judicial System. Standard errors, clustered at the offense level, are in parentheses.