# Online Appendix <br> The Effects of Pre-Trial Detention on Conviction, Future Crime, and Employment: Evidence from Randomly Assigned Judges 

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## Online Appendix A: Additional Results

Appendix Table A1: Descriptive Statistics by Prior Offense

|  | No Prior Offense |  | Prior Offense |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Detained | Released | Detained | Released |
| Panel A: Bail Type | (1) | (2) | (3) | (4) |
| Release on Recognizance | 0.019 | 0.393 | 0.015 | 0.264 |
| Non-Monetary Bail | 0.038 | 0.195 | 0.039 | 0.311 |
| Monetary Bail | 0.942 | 0.412 | 0.946 | 0.425 |
| Bail Amount (in thousands) | 54.369 | 10.884 | 36.628 | 18.364 |
| Panel B: Subsequent Bail Outcomes |  |  |  |  |
| Bail Modification Petition | 0.450 | 0.066 | 0.400 | 0.088 |
| Released in 14 Days | 0.110 | 1.000 | 0.078 | 1.000 |
| Released Before Trial | 0.431 | 1.000 | 0.374 | 1.000 |
| Panel C: Defendant Characteristics |  |  |  |  |
| Male | 0.870 | 0.777 | 0.887 | 0.814 |
| White | 0.384 | 0.432 | 0.381 | 0.399 |
| Black | 0.605 | 0.547 | 0.611 | 0.588 |
| Age at Bail Decision | 33.997 | 33.845 | 33.797 | 31.963 |
| Prior Offense in Past Year | 0.000 | 0.000 | 1.000 | 1.000 |
| Baseline Earnings | 4.845 | 7.823 | 3.943 | 4.818 |
| Baseline Employed | 0.331 | 0.440 | 0.301 | 0.357 |
| Baseline Any Income | 0.753 | 0.811 | 0.806 | 0.826 |
| Panel D: Charge Characteristics |  |  |  |  |
| Number of Offenses | 3.915 | 2.556 | 3.352 | 2.262 |
| Felony Offense | 0.635 | 0.326 | 0.606 | 0.326 |
| Misdemeanor Only | 0.365 | 0.674 | 0.394 | 0.674 |
| Any Drug Offense | 0.271 | 0.400 | 0.305 | 0.501 |
| Any DUI Offense | 0.026 | 0.128 | 0.022 | 0.071 |
| Any Violent Offense | 0.325 | 0.210 | 0.231 | 0.115 |
| Any Property Offense | 0.321 | 0.180 | 0.384 | 0.205 |
| Panel E: Outcomes |  |  |  |  |
| Any Guilty Offense | 0.547 | 0.461 | 0.633 | 0.585 |
| Guilty Plea | 0.415 | 0.194 | 0.489 | 0.257 |
| Any Incarceration | 0.274 | 0.134 | 0.345 | 0.192 |
| Failure to Appear in Court | 0.114 | 0.167 | 0.134 | 0.227 |
| Rearrest in 0-2 Years | 0.377 | 0.348 | 0.620 | 0.608 |
| Earnings (thousands) in 1-2 Years | 5.769 | 8.648 | 4.297 | 4.971 |
| Employed in 1-2 Years | 0.408 | 0.535 | 0.326 | 0.407 |
| Any Income in 1-2 Years | 0.455 | 0.539 | 0.463 | 0.453 |
| Earnings (thousands) in 3-4 Years | 6.405 | 9.026 | 4.971 | 5.713 |
| Employed in 3-4 Years | 0.401 | 0.502 | 0.338 | 0.401 |
| Any Income in 3-4 Years | 0.479 | 0.527 | 0.429 | 0.428 |
| Observations | 120,488 | 187,352 | 66,450 | 46,775 |

Note: This table reports descriptive statistics by bail decision. The sample is described in the notes to Table 1. See the data appendix for additional details on the sample and variable construction.

Appendix Table A2: Descriptive Statistics by Race

|  | Black |  | White |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Detained | Released | Detained | Released |
| Panel A: Bail Type | (1) | (2) | (3) | (4) |
| Release on Recognizance | 0.021 | 0.353 | 0.031 | 0.349 |
| Non-Monetary Bail | 0.048 | 0.247 | 0.061 | 0.245 |
| Monetary Bail | 0.931 | 0.400 | 0.908 | 0.406 |
| Bail Amount (in thousands) | 60.069 | 12.231 | 44.185 | 21.133 |
| Panel B: Subsequent Bail Outcomes |  |  |  |  |
| Bail Modification Petition | 0.466 | 0.064 | 0.467 | 0.065 |
| Released in 14 Days | 0.074 | 1.000 | 0.080 | 1.000 |
| Released Before Trial | 0.431 | 1.000 | 0.420 | 1.000 |
| Panel C: Defendant Characteristics |  |  |  |  |
| Male | 0.880 | 0.802 | 0.876 | 0.771 |
| White | 0.000 | 0.000 | 0.974 | 0.956 |
| Black | 1.000 | 1.000 | 0.000 | 0.000 |
| Age at Bail Decision | 33.897 | 34.018 | 35.219 | 34.182 |
| Prior Offense in Past Year | 0.393 | 0.252 | 0.387 | 0.221 |
| Baseline Earnings | 3.875 | 5.773 | 5.094 | 7.213 |
| Baseline Employed | 0.301 | 0.381 | 0.324 | 0.401 |
| Baseline Any Income | 0.803 | 0.832 | 0.758 | 0.820 |
| Panel D: Charge Characteristics |  |  |  |  |
| Number of Offenses | 3.639 | 2.381 | 2.828 | 2.289 |
| Felony Offense | 0.657 | 0.376 | 0.583 | 0.331 |
| Misdemeanor Only | 0.343 | 0.624 | 0.417 | 0.669 |
| Any Drug Offense | 0.295 | 0.443 | 0.282 | 0.390 |
| Any DUI Offense | 0.021 | 0.100 | 0.025 | 0.108 |
| Any Violent Offense | 0.295 | 0.185 | 0.205 | 0.202 |
| Any Property Offense | 0.345 | 0.196 | 0.369 | 0.196 |
| Panel E: Outcomes |  |  |  |  |
| Any Guilty Offense | 0.612 | 0.530 | 0.655 | 0.526 |
| Guilty Plea | 0.487 | 0.262 | 0.537 | 0.243 |
| Any Incarceration | 0.352 | 0.193 | 0.323 | 0.167 |
| Failure to Appear in Court | 0.155 | 0.246 | 0.176 | 0.225 |
| Rearrest in 0-2 Years | 0.527 | 0.451 | 0.466 | 0.371 |
| Earnings (thousands) in 1-2 Years | 4.443 | 6.525 | 6.067 | 7.964 |
| Employed in 1-2 Years | 0.346 | 0.471 | 0.399 | 0.488 |
| Any Income in 1-2 Years | 0.463 | 0.497 | 0.467 | 0.508 |
| Earnings (thousands) in 3-4 Years | 4.963 | 6.948 | 6.768 | 8.585 |
| Employed in 3-4 Years | 0.344 | 0.443 | 0.393 | 0.462 |
| Any Income in 3-4 Years | 0.467 | 0.458 | 0.484 | 0.498 |
| Observations | 81,643 | 67,634 | 52,861 | 53,911 |

Note: This table reports descriptive statistics by bail decision. The sample is described in the notes to Table 1. See the data appendix for additional details on the sample and variable construction.

Appendix Table A3: Descriptive Statistics by Baseline Employment

|  | Employed |  | Non-Employed |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Detained | Released | Detained | Released |
| Panel A: Bail Type | (1) | (2) | (3) | (4) |
| Release on Recognizance | 0.022 | 0.376 | 0.016 | 0.361 |
| Non-Monetary Bail | 0.039 | 0.193 | 0.040 | 0.241 |
| Monetary Bail | 0.939 | 0.431 | 0.944 | 0.398 |
| Bail Amount (in thousands) | 45.966 | 10.966 | 49.972 | 15.079 |
| Panel B: Subsequent Bail Outcomes |  |  |  |  |
| Bail Modification Petition | 0.454 | 0.061 | 0.425 | 0.077 |
| Released in 14 Days | 0.114 | 1.000 | 0.091 | 1.000 |
| Released Before Trial | 0.441 | 1.000 | 0.409 | 1.000 |
| Panel C: Defendant Characteristics |  |  |  |  |
| Male | 0.889 | 0.796 | 0.875 | 0.788 |
| White | 0.402 | 0.438 | 0.349 | 0.407 |
| Black | 0.589 | 0.544 | 0.641 | 0.574 |
| Age at Bail Decision | 31.939 | 31.827 | 34.851 | 34.901 |
| Prior Offense in Past Year | 0.334 | 0.169 | 0.398 | 0.240 |
| Baseline Earnings | 14.129 | 17.065 | 0.000 | 0.000 |
| Baseline Employed | 1.000 | 1.000 | 0.000 | 0.000 |
| Baseline Any Income | 1.000 | 1.000 | 1.000 | 1.000 |
| Panel D: Charge Characteristics |  |  |  |  |
| Number of Offenses | 3.819 | 2.558 | 3.643 | 2.426 |
| Felony Offense | 0.631 | 0.320 | 0.633 | 0.333 |
| Misdemeanor Only | 0.369 | 0.680 | 0.367 | 0.667 |
| Any Drug Offense | 0.278 | 0.382 | 0.296 | 0.465 |
| Any DUI Offense | 0.030 | 0.151 | 0.022 | 0.090 |
| Any Violent Offense | 0.308 | 0.217 | 0.281 | 0.164 |
| Any Property Offense | 0.334 | 0.177 | 0.344 | 0.188 |
| Panel E: Outcomes |  |  |  |  |
| Any Guilty Offense | 0.575 | 0.460 | 0.586 | 0.518 |
| Guilty Plea | 0.439 | 0.201 | 0.445 | 0.215 |
| Any Incarceration | 0.288 | 0.140 | 0.317 | 0.155 |
| Failure to Appear in Court | 0.121 | 0.153 | 0.125 | 0.203 |
| Rearrest in 0-2 Years | 0.446 | 0.360 | 0.523 | 0.460 |
| Earnings (thousands) in 1-2 Years | 11.152 | 13.727 | 0.961 | 1.502 |
| Employed in 1-2 Years | 0.616 | 0.735 | 0.206 | 0.261 |
| Any Income in 1-2 Years | 0.596 | 0.676 | 0.358 | 0.352 |
| Earnings (thousands) in 3-4 Years | 11.551 | 13.706 | 1.498 | 2.158 |
| Employed in 3-4 Years | 0.575 | 0.670 | 0.225 | 0.264 |
| Any Income in 3-4 Years | 0.596 | 0.641 | 0.357 | 0.352 |
| Observations | 59,861 | 99,095 | 84,429 | 91,558 |

Note: This table reports descriptive statistics by bail decision. The sample is described in the notes to Table 1. See the data appendix for additional details on the sample and variable construction.

Appendix Table A4: Descriptive Statistics by Baseline Income in Zip Code

|  | Above Median Zip Code |  | Below Median Zip Code |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Detained | Released | Detained | Released |
| Panel A: Bail Type | (1) | (2) | (3) | (4) |
| Release on Recognizance | 0.020 | 0.415 | 0.014 | 0.361 |
| Non-Monetary Bail | 0.041 | 0.186 | 0.030 | 0.219 |
| Monetary Bail | 0.939 | 0.399 | 0.955 | 0.421 |
| Bail Amount (in thousands) | 44.894 | 20.632 | 48.054 | 9.920 |
| Panel B: Subsequent Bail Outcomes |  |  |  |  |
| Bail Modification Petition | 0.456 | 0.065 | 0.433 | 0.071 |
| Released in 14 Days | 0.104 | 1.000 | 0.106 | 1.000 |
| Released Before Trial | 0.417 | 1.000 | 0.434 | 1.000 |
| Panel C: Defendant Characteristics |  |  |  |  |
| Male | 0.877 | 0.793 | 0.875 | 0.782 |
| White | 0.530 | 0.655 | 0.335 | 0.359 |
| Black | 0.461 | 0.324 | 0.653 | 0.621 |
| Age at Bail Decision | 34.391 | 33.411 | 32.793 | 33.272 |
| Prior Offense in Past Year | 0.354 | 0.164 | 0.349 | 0.208 |
| Baseline Earnings | 4.962 | 9.660 | 4.358 | 6.575 |
| Baseline Employed | 0.349 | 0.492 | 0.323 | 0.409 |
| Baseline Any Income | 0.784 | 0.840 | 0.781 | 0.812 |
| Panel D: Charge Characteristics |  |  |  |  |
| Number of Offenses | 3.434 | 2.508 | 4.055 | 2.546 |
| Felony Offense | 0.576 | 0.277 | 0.656 | 0.333 |
| Misdemeanor Only | 0.424 | 0.723 | 0.344 | 0.667 |
| Any Drug Offense | 0.255 | 0.361 | 0.295 | 0.439 |
| Any DUI Offense | 0.044 | 0.179 | 0.025 | 0.106 |
| Any Violent Offense | 0.252 | 0.187 | 0.323 | 0.191 |
| Any Property Offense | 0.364 | 0.190 | 0.328 | 0.182 |
| Panel E: Outcomes |  |  |  |  |
| Any Guilty Offense | 0.596 | 0.480 | 0.561 | 0.491 |
| Guilty Plea | 0.459 | 0.193 | 0.418 | 0.206 |
| Any Incarceration | 0.284 | 0.145 | 0.308 | 0.144 |
| Failure to Appear in Court | 0.131 | 0.167 | 0.121 | 0.179 |
| Rearrest in 0-2 Years | 0.446 | 0.320 | 0.454 | 0.420 |
| Earnings (thousands) in 1-2 Years | 5.246 | 9.932 | 5.001 | 7.284 |
| Employed in 1-2 Years | 0.406 | 0.571 | 0.376 | 0.494 |
| Any Income in 1-2 Years | 0.463 | 0.565 | 0.440 | 0.505 |
| Earnings (thousands) in 3-4 Years | 6.086 | 10.538 | 5.638 | 7.750 |
| Employed in 3-4 Years | 0.405 | 0.540 | 0.378 | 0.470 |
| Any Income in 3-4 Years | 0.468 | 0.545 | 0.442 | 0.494 |
| Observations | 28,429 | 45,771 | 130,057 | 171,199 |

Note: This table reports descriptive statistics by bail decision. The sample is described in the notes to Table 1. See the data appendix for additional details on the sample and variable construction.

Appendix Table A5: Pair-Wise Correlation of Judge Leniency Over Time

|  | Leniency <br> in t-2 | Leniency <br> in $\mathrm{t}-1$ | Leniency <br> in t | Leniency <br> in $\mathrm{t}+1$ | Leniency <br> in $\mathrm{t}+2$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| (1) Leniency in $\mathrm{t}-2$ | 1.000 | $(2)$ | $(3)$ | $(4)$ | $(5)$ |
| (2) Leniency in $\mathrm{t}-1$ | 0.6505 | 1.000 |  |  |  |
| (3) Leniency in t | 0.3706 | 0.5129 | 1.0000 |  |  |
| (4) Leniency in $\mathrm{t}+1$ | 0.5086 | 0.5655 | 0.4952 | 1.0000 |  |
| (5) Leniency in $\mathrm{t}+2$ | 0.3650 | 0.4212 | 0.3543 | 0.6383 | 1.0000 |

Note: This table reports pairwise correlations between judge leniency measures over time. The correlations are estimated on the sample as described in the notes to Table 1. Judge leniency is estimated using data from other cases assigned to a bail judge the same year following the procedure described in Section III.

Appendix Table A6: Additional First Stage Results

|  | $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Leniency in t | $0.641^{* * *}$ | $0.607^{* * *}$ | $0.585^{* * *}$ | $0.582^{* * *}$ | $0.615^{* * *}$ | $0.541^{* * *}$ |
|  | $(0.062)$ | $(0.048)$ | $(0.043)$ | $(0.039)$ | $(0.048)$ | $(0.035)$ |
| Leniency in t-2 |  | $0.169^{* * *}$ |  |  |  | $0.076^{* * *}$ |
|  |  | $(0.034)$ |  |  |  | $(0.029)$ |
| Leniency in t-1 |  |  | $0.234^{* * *}$ |  |  | $0.151^{* * *}$ |
|  |  |  | $(0.041)$ |  |  | $(0.031)$ |
| Leniency in $\mathrm{t}+1$ |  |  |  | $0.241^{* * *}$ |  | $0.157^{* * *}$ |
| Leniency in t+2 |  |  |  | $(0.055)$ |  | $(0.033)$ |
|  |  |  |  |  | $0.129^{* * *}$ | $0.051^{* *}$ |
|  |  |  |  |  | $(0.043)$ | $(0.025)$ |
| Court x Time FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Baseline Controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Observations | 421,065 | 421,065 | 421,065 | 421,065 | 421,065 | 421,065 |

Note: This table reports OLS estimates of pre-trial release on residualized judge leniency measures calculated in each year. The regressions are estimated on the sample as described in the notes to Table 1. Judge leniency is estimated using data from other cases assigned to a bail judge the same year following the procedure described in Section III. ${ }^{* * *}=$ significant at 1 percent level, ${ }^{* *}=$ significant at 5 percent level, ${ }^{*}=$ significant at 10 percent level.

Appendix Table A7: Predictors of Pre-Trial Release

|  | $(1)$ | $(2)$ | $(3)$ | $(4)$ |
| :--- | :---: | :---: | :---: | :---: |
| Residualized ROR Rate | 0.017 |  |  |  |
|  | $(0.067)$ |  |  |  |
| Residualized Non-Monetary Rate |  | $0.147^{* * *}$ |  |  |
| Residualized Monetary Rate |  | $(0.057)$ |  |  |
| Residualized Monetary Amount |  |  | $\left(0.477^{* * *}\right.$ |  |
| Observations |  |  |  | $-0.002^{* * *}$ |
| Onyyy |  | 421,065 | 421,065 | 421,065 |

Note: This table reports OLS estimates of pre-trial release on residualized judge leniency measures separately calculated for each bail type. The regressions are estimated on the sample as described in the notes to Table 1. Judge leniency is estimated using data from other cases assigned to a bail judge the same year following the procedure described in Section III. ${ }^{* * *}=$ significant at 1 percent level, ${ }^{* *}=$ significant at 5 percent level, ${ }^{*}=$ significant at 10 percent level.

Appendix Table A8: Reduced Form Effect of Judge Leniency

|  | Detained Mean | OLS Results | esults |
| :---: | :---: | :---: | :---: |
|  | (1) | (2) | (3) |
| Any Guilty Offense | 0.578 | $-0.079^{* * *}$ | $-0.090^{* * *}$ |
|  | (0.494) | (0.029) | (0.027) |
| Guilty Plea | 0.441 | -0.060* | $-0.070^{* *}$ |
|  | (0.497) | (0.034) | (0.031) |
| Any Incarceration | 0.300 | 0.004 | -0.008 |
|  | (0.458) | (0.019) | (0.020) |
| Failure to Appear in Court | 0.121 | $0.146^{* * *}$ | $0.143^{* * *}$ |
|  | (0.326) | (0.039) | (0.039) |
| Rearrest in 0-2 Years | 0.462 | 0.014 | 0.009 |
|  | (0.499) | (0.035) | (0.035) |
| Rearrest Prior to Disposition | 0.155 | $0.111^{* * *}$ | $0.107^{* * *}$ |
|  | (0.362) | (0.024) | (0.025) |
| Rearrest After Disposition | 0.343 | $-0.066^{*}$ | -0.069* |
|  | (0.475) | (0.037) | (0.036) |
| Employed in 1-2 Years | 0.378 | 0.040 | 0.022 |
|  | (0.485) | (0.028) | (0.024) |
| Any Income in 1-2 Years | 0.458 | $0.083^{* *}$ | 0.068** |
|  | (0.498) | (0.037) | (0.033) |
| Employed in 3-4 Years | 0.378 | 0.062* | 0.057 |
|  | (0.485) | (0.035) | (0.037) |
| Any Income in 3-4 Years | 0.461 | $0.078^{* *}$ | 0.065* |
|  | (0.498) | (0.035) | (0.035) |
| Court x Time FE | - | Yes | Yes |
| Baseline Controls | - | No | Yes |
| Observations | 186,938 | 421,065 | 421,065 |

Note: This table reports reduced form OLS estimates of case outcomes on our residualized judge leniency measure described in Section III. The regressions are estimated on the sample as described in the notes to Table 1. The dependent variable is listed in each row. All specifications control for court-by-time fixed effects. Robust standard errors two-way clustered at the individual and judge level are reported in parentheses in columns $2-4$. ${ }^{* * *}=$ significant at 1 percent level, ${ }^{* *}=$ significant at 5 percent level, ${ }^{*}=$ significant at 10 percent level.

Appendix Table A9: First Stage Results by Case Characteristics

|  | Crime Severity |  | Crime Type |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Misd. | Felony | Drug | DUI | Property | Violent |
| Panel A: Initial Release Released in 3 Days | (1) | (2) | (3) | (4) | (5) | (6) |
|  | $0.834^{* * *}$ | $0.441^{* * *}$ | $0.687^{* * *}$ | $1.257^{* *}$ | $0.848^{* * *}$ | 0.091 |
|  | (0.105) | (0.072) | (0.118) | (0.501) | (0.165) | (0.079) |
|  | [0.692] | [0.395] | [0.645] | [0.854] | [0.401] | [0.489] |
| Panel B: Subsequent Bail Outcomes |  |  |  |  |  |  |
| Bail Modification Petition | $-0.500^{* * *}$ | $-0.283^{*}$ | $-0.446^{* * *}$ | $-0.662^{* * *}$ | $-0.970^{* * *}$ | -0.002 |
|  | (0.059) | (0.149) | (0.072) | (0.244) | (0.077) | (0.068) |
|  | [0.136] | [0.301] | [0.179] | [0.135] | [0.269] | [0.227] |
| Released in 14 Days | $0.818^{* * *}$ | $0.437^{* * *}$ | $0.653^{* * *}$ | $1.145^{* * *}$ | $0.833^{* * *}$ | 0.180*** |
|  | (0.088) | (0.061) | (0.101) | (0.429) | (0.141) | (0.069) |
|  | [0.725] | [0.452] | [0.679] | [0.877] | [0.438] | [0.552] |
| Released Before Trial | $0.692^{* * *}$ | $0.292^{* * *}$ | $0.522^{* * *}$ | $0.352^{* * *}$ | $0.615^{* * *}$ | 0.125** |
|  | (0.054) | (0.057) | (0.065) | (0.102) | (0.086) | (0.058) |
|  | [0.792] | [0.675] | [0.816] | [0.967] | [0.625] | [0.742] |
| Court x Time FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Baseline Controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Observations | 227,837 | 193,228 | 115,473 | 20,796 | 78,931 | 72,950 |

Note: This table reports first stage results for selected case types. The regressions are estimated on the sample as described in the notes to Table 1. Judge leniency is estimated using all cases assigned to a bail judge in the same year following the procedure described in Section III. All specifications control for court-by-time fixed effects. Robust standard errors two-way clustered at the individual and judge level are reported in parentheses and the mean of the dependent variable is reported in brackets in all specifications. ${ }^{* * *}=$ significant at 1 percent level, ${ }^{* *}=$ significant at 5 percent level, ${ }^{*}=$ significant at 10 percent level.
Appendix Table A10: First Stage Results by Defendant Characteristics

| Panel A: Initial Release Released in 3 Days | No Prior | Prior | Black | White | Employed | Non-Emp. | High SES | Low SES |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
|  | $0.596^{* * *}$ | $0.755^{* * *}$ | $0.627^{* * *}$ | $0.543^{* * *}$ | $0.594^{* * *}$ | $0.676^{* * *}$ | $0.718^{* * *}$ | $0.645^{* * *}$ |
|  | (0.042) | (0.152) | (0.056) | (0.076) | (0.052) | (0.082) | (0.064) | (0.076) |
|  | [0.609] | [0.413] | [0.457] | [0.500] | [0.623] | [0.520] | [0.617] | [0.568] |
| Panel B: Subsequent Bail Outcomes |  |  |  |  |  |  |  |  |
| Bail Modification Petition | $-0.369^{* * *}$ | $-0.532^{* * *}$ | $-0.380^{* * *}$ | $-0.546^{* * *}$ | $-0.425^{* * *}$ | $-0.396^{* * *}$ | $-0.543^{* * *}$ | $-0.372^{* * *}$ |
|  | (0.076) | (0.091) | (0.068) | (0.053) | (0.047) | (0.062) | (0.075) | (0.056) |
|  | [0.196] | [0.246] | [0.254] | [0.221] | [0.186] | [0.221] | [0.183] | [0.213] |
| Released in 14 Days | $0.583^{* * *}$ | $0.755^{* * *}$ | $0.648^{* * *}$ | $0.559^{* * *}$ | $0.559^{* * *}$ | $0.665^{* * *}$ | $0.687^{* * *}$ | $0.627^{* * *}$ |
|  | (0.034) | (0.135) | (0.054) | (0.071) | (0.049) | (0.079) | (0.061) | (0.065) |
|  | [0.652] | [0.459] | [0.498] | [0.540] | [0.666] | [0.564] | [0.657] | [0.614] |
| Released Before Trial | $0.453^{* * *}$ | $0.602^{* * *}$ | $0.497^{* * *}$ | $0.438^{* * *}$ | $0.433^{* * *}$ | $0.527^{* * *}$ | $0.543^{* * *}$ | $0.473^{* * *}$ |
|  | (0.035) | (0.070) | (0.037) | (0.043) | (0.035) | (0.052) | (0.045) | (0.040) |
|  | [0.777] | [0.632] | [0.692] | [0.709] | [0.790] | [0.716] | [0.777] | [0.755] |
| Court x Time FE | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Baseline Controls | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Observations | 307,840 | 113,225 | 153,014 | 103,035 | 158,956 | 175,987 | 74,200 | 301,256 |

Note: This table reports first stage results for selected defendant types. The regressions are estimated on the sample as described in the notes to Table 1. Judge leniency is estimated using all cases assigned to a bail judge in the same year following the procedure described in Section III. All specifications control for court-by-time fixed effects. Robust standard errors two-way clustered at the individual and judge level are reported in parentheses and the mean of the dependent variable is reported in brackets in all specifications. ${ }^{* * *}=$ significant at 1 percent level, ${ }^{* *}=$ significant at 5 percent level, ${ }^{*}=$ significant at 10 percent level.
Appendix Table A11: Additional Case and Crime Results

| Panel A: Case Outcomes | Detained Mean | OLS Results |  |  | 2SLS Results |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (1) | (2) | (3) | (4) | (5) | (6) |
| Number of Guilty Offenses | 0.936 | $-0.241^{* * *}$ | $-0.089^{* * *}$ | $-0.084^{* * *}$ | -0.131 | $-0.158^{* *}$ |
|  | (1.755) | (0.014) | (0.010) | (0.007) | (0.080) | (0.072) |
| Guilty Plea to Time Served | 0.215 | $-0.143^{* * *}$ | $-0.063^{* * *}$ | $-0.058^{* * *}$ | -0.106 | -0.112 |
|  | (0.411) | (0.004) | (0.003) | (0.005) | (0.086) | (0.082) |
| Offense Charged Down | 0.464 | 0.021 | $0.061^{* * *}$ | 0.049*** | 0.088* | 0.101** |
|  | (0.499) | (0.014) | (0.006) | (0.008) | (0.053) | (0.051) |
| Days to Case Decision | 196.475 | $16.103^{* * *}$ | $35.196^{* * *}$ | $36.581^{* * *}$ | $45.607^{* * *}$ | 40.920** |
|  | (247.361) | (6.230) | (3.957) | (4.341) | (16.055) | (16.600) |
| Panel B: Crime Outcomes |  |  |  |  |  |  |
| Number of Counts in 0-2 Years | 2.595 | $-0.475^{* * *}$ | $-0.080^{*}$ | $0.210^{* * *}$ | 0.417 | 0.352 |
|  | (4.619) | (0.078) | (0.046) | (0.043) | (0.351) | (0.320) |
| Number of Counts Prior to Disposition | 0.773 | 0.111** | 0.269*** | $0.494^{* * *}$ | $1.114^{* * *}$ | $1.085^{* * *}$ |
|  | (2.799) | (0.044) | (0.043) | (0.047) | (0.257) | (0.254) |
| Number of Counts After Disposition | 1.822 | $-0.586^{* * *}$ | $-0.349^{* * *}$ | $-0.284^{* * *}$ | $-0.697^{* *}$ | $-0.733^{* * *}$ |
|  | (3.825) | (0.046) | (0.018) | (0.026) | (0.287) | (0.260) |
| Court x Time FE | - | Yes | Yes | Yes | Yes | Yes |
| Baseline Controls | - | No | Yes | Yes | No | Yes |
| Complier Weights | - | No | No | Yes | No | No |
| Observations | 186,938 | 421,065 | 421,065 | 421,065 | 421,065 | 421,065 |

Note: This table reports additional OLS and two-stage least squares results of the impact of pre-trial release. The regressions are estimated on the sample as described in the notes to Table 1. The dependent variable is listed in each row. Two-stage least squares models instrument for pre-trial detention S II All a in Section III. All specifications control for court-by-time fixed effects. Robust standard errors two-way clustered at the individual and judge level ar reported in parentheses in columns $2-6 . .^{* * *}=$ significant at 1 percent level, ${ }^{* *}=$ significant at 5 percent level, ${ }^{*}=$ significant at 10 percent level.
Appendix Table A12: Pre-Trial Release and Number of Days Detained

|  | Detained Mean |  | OLS Results |  | 2SLS | Results |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (1) | (2) | (3) | (4) | (5) | (6) |
| Days Detained Prior to Disposition | 36.989 | $-32.629^{* * *}$ | $-32.986^{* * *}$ | $-29.068^{* * *}$ | $-13.262^{* *}$ | $-14.092^{* * *}$ |
|  | (84.796) | (1.803) | (1.951) | (1.640) | (5.580) | (5.341) |
| Days Detained After Disposition | 316.680 | $-277.366^{* * *}$ | $-141.642^{* * *}$ | $-124.989^{* * *}$ | 5.025 | 0.028 |
|  | (735.902) | (14.577) | (5.156) | (4.792) | (44.721) | (47.270) |
| Days Detained Ever | 353.669 | $-309.995^{* * *}$ | $-174.629^{* * *}$ | $-154.057^{* * *}$ | -8.238 | -14.064 |
|  | (754.274) | (15.046) | (5.963) | (6.054) | (47.453) | (49.697) |
| Court x Time FE | - | Yes | Yes | Yes | Yes | Yes |
| Baseline Controls | - | No | Yes | Yes | No | Yes |
| Complier Weights | - | No | No | Yes | No | No |
| Observations | 172,956 | 385,255 | 385,255 | 385,255 | 385,255 | 385,255 |

Note: This table reports additional OLS and two-stage least squares results of the impact of pre-trial release. The regressions are estimated on the sample as described in the notes to Table 1. The dependent variable is listed in each row. Two-stage least squares models instrument for pre-trial detention using a judge leniency measure that is estimated using data from other cases assigned to a bail judge in the same year following the procedure described reported in parentheses in columns $2-6$. . $^{* * *}=$ significant at 1 percent level, $*^{*}=$ significant at 5 percent level, $*^{*}=$ significant at 10 percent level.
Appendix Table A13: Additional IRS Results

| Panel A: Years 1-2 | Detained |  |  |  | 2SLS Results |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (1) | (2) | (3) | (4) | (5) | (6) |
| Married | 0.178 | -0.003 | $-0.003^{* *}$ | -0.002 | -0.045 | -0.060 |
|  | (0.383) | (0.003) | (0.002) | (0.002) | (0.063) | (0.048) |
| Any Move | 0.769 | $-0.152^{* * *}$ | $-0.131^{* * *}$ | $-0.129^{* * *}$ | $-0.150^{* *}$ | $-0.133^{*}$ |
|  | (0.422) | (0.006) | (0.007) | (0.004) | (0.066) | (0.070) |
| Move To Higher Income Area | 0.492 | $-0.117^{* * *}$ | $-0.105^{* * *}$ | $-0.104^{* * *}$ | $-0.134^{*}$ | -0.128* |
|  | (0.500) | (0.006) | (0.007) | (0.005) | (0.070) | (0.072) |
| Move To Lower Income Area | 0.308 | $-0.039^{* * *}$ | $-0.030^{* * *}$ | $-0.028^{* *}$ | $-0.025$ | -0.014 |
|  | (0.462) | (0.003) | (0.003) | (0.004) | (0.066) | (0.065) |
| Panel B: Years 3-4 |  |  |  |  |  |  |
| Married | 0.163 | -0.002 | $-0.005^{* *}$ | -0.001 | 0.030 | 0.011 |
|  | (0.369) | (0.003) | (0.002) | (0.002) | (0.065) | (0.045) |
| Any Move | 0.802 | $-0.123^{* * *}$ | $-0.111^{* * *}$ | $-0.111^{* * *}$ | $-0.037$ | -0.021 |
|  | (0.399) | (0.006) | (0.007) | (0.004) | (0.049) | (0.052) |
| Move To Higher Income Area | 0.516 | $-0.098^{* * *}$ | $-0.091^{* * *}$ | $-0.093^{* * *}$ | -0.041 | -0.030 |
|  | (0.500) | (0.006) | (0.007) | (0.004) | (0.065) | (0.069) |
| Move To Lower Income Area | 0.321 | $-0.030^{* * *}$ | $-0.024^{* * *}$ | $-0.024^{* * *}$ | -0.001 | 0.004 |
|  | (0.467) | (0.002) | (0.002) | (0.004) | (0.071) | (0.073) |
| Court x Time FE | - | Yes | Yes | Yes | Yes | Yes |
| Baseline Controls | - | No | Yes | Yes | No | Yes |
| Complier Weights | - | No | No | Yes | No | No |
| Observations | 144,290 | 334,943 | 334,943 | 334,943 | 334,943 | 334,943 | Note: This table reports additional OLS and two-stage least squares results of the impact of pre-trial release. The regressions are estimated on the sample as described in the notes to Table 1. The dependent variable is listed in each row. Two-stage least squares models instrument for pre-trial detention

 reported in parentheses in columns $2-6 .^{* * *}=$ significant at 1 percent level, ${ }^{* *}=$ significant at 5 percent level, ${ }^{*}=$ significant at 10 percent level.

Appendix Table A14: Results by Crime Characteristics

|  | Crime Severity |  | Crime Type |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Misd. | Felony | Drug | DUI | Property | Violent |
| Any Guilty Offense | (1) | (2) | (3) | (4) | (5) | (6) |
|  | $-0.183^{* * *}$ | -0.066 | -0.099 | 0.076 | -0.109* | -0.818 |
|  | (0.066) | (0.090) | (0.066) | (0.107) | (0.059) | (0.950) |
|  | [0.508] | [0.549] | [0.677] | [0.527] | [0.559] | [0.289] |
| Guilty Plea | -0.168** | -0.001 | $-0.077$ | -0.020 | -0.087 | -0.365 |
|  | (0.083) | (0.084) | (0.072) | (0.058) | (0.058) | (0.496) |
|  | [0.214] | [0.425] | [0.355] | [0.263] | [0.420] | [0.198] |
| Any Incarceration | 0.019 | -0.074 | -0.099* | 0.099 | 0.045 | -0.474 |
|  | (0.017) | (0.083) | (0.058) | (0.124) | (0.051) | (0.607) |
|  | [0.112] | [0.334] | [0.259] | [0.429] | [0.228] | [0.147] |
| Failure to Appear in Court | $0.123^{* *}$ | $0.212^{* * *}$ | 0.202 | 0.102 | $0.140 * * *$ | 0.147 |
|  | (0.058) | (0.033) | (0.143) | (0.068) | (0.041) | (0.141) |
|  | [0.201] | [0.101] | [0.237] | [0.182] | [0.186] | [0.082] |
| Rearrest in 0-2 Years | -0.043 | 0.100 | 0.002 | 0.106 | -0.085 | 0.191 |
|  | (0.055) | (0.105) | (0.077) | (0.153) | (0.107) | (0.432) |
|  | [0.427] | [0.428] | [0.482] | [0.277] | [0.518] | [0.334] |
| Rearrest Prior to Disposition | $0.156^{* * *}$ | $0.243^{* * *}$ | $0.147^{*}$ | 0.093 | $0.199^{* * *}$ |  |
|  | (0.028) | (0.083) | (0.076) | (0.119) | $(0.072)$ | $(0.463)$ |
|  | [0.167] | [0.225] | [0.223] | [0.179] | [0.205] | [0.139] |
| Rearrest After Disposition | $-0.145^{* * *}$ | -0.094 | -0.120 | 0.051 | -0.182* | -0.076 |
|  | (0.054) | (0.088) | (0.077) | (0.109) | (0.099) | (0.353) |
|  | [0.317] | [0.252] | [0.325] | [0.139] | [0.372] | [0.231] |
| Employed in 1-2 Years | 0.036 | 0.034 | $0.163^{*}$ | $-0.061^{* *}$ | -0.025 | 0.514 |
|  | (0.042) | (0.079) | (0.091) | (0.025) | (0.076) | (0.448) |
|  | [0.481] | [0.418] | [0.425] | [0.601] | [0.396] | [0.491] |
| Any Income in 1-2 Years | $0.117^{*}$ | 0.104 | 0.145* | $-0.031$ | 0.063 | 0.679* |
|  | (0.068) | (0.092) | (0.088) | (0.038) | (0.095) | (0.410) |
|  | [0.509] | [0.476] | [0.455] | [0.591] | [0.481] | [0.524] |
| Employed in 3-4 Years | 0.088 | 0.105 | 0.133 | -0.061 | -0.149 | 0.877* |
|  | (0.058) | (0.106) | (0.106) | (0.185) | (0.118) | (0.527) |
|  | [0.458] | [0.414] | [0.408] | [0.568] | [0.385] | [0.469] |
| Any Income in 3-4 Years | 0.067 | 0.159 | 0.027 | -0.198** | 0.086 | 0.638 |
|  | (0.054) | (0.126) | (0.090) | (0.099) | (0.120) | (0.485) |
|  | [0.493] | [0.482] | [0.458] | [0.556] | [0.473] | [0.499] |
| Court x Time FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Baseline Controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Observations | 227,837 | 193,228 | 115,473 | 20,796 | 72,950 | 34,482 |

Note: This table reports two-stage least squares results of the impact of pre-trial release for selected case types. The regressions are estimated on the judge sample as described in the notes to Table 1. The dependent variable is listed in each row. Two-stage least squares models instrument for pre-trial detention using a judge leniency measure that is estimated using data from other cases assigned to a bail judge in the same year following the procedure described in Section III. All specifications control for court-by-time fixed effects and baseline controls. Robust standard errors two-way clustered at the individual and judge level are reported in parentheses and the mean of the dependent variable is reported in brackets in all specifications. ${ }^{* * *}=$ significant at 1 percent level, ${ }^{* *}=$ significant at 5 percent level, ${ }^{*}=$ significant at 10 percent level.

Appendix Table A15: Results by Other Defendant Characteristics

| Any Guilty Offense | Black | White | Not Emp. | Employed | High SES | Low SES |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (1) | (2) | (3) | (4) | (5) | (6) |
|  | -0.092 | $-0.242^{* * *}$ | -0.081 | $-0.170^{* *}$ | $-0.206^{* * *}$ | $-0.123^{* * *}$ |
|  | (0.059) | (0.090) | (0.067) | (0.067) | (0.075) | (0.043) |
| Guilty Plea | [0.574] | [0.592] | [0.550] | [0.504] | [0.525] | [0.521] |
|  | $-0.120^{*}$ | $-0.180^{* *}$ | -0.093 | -0.093 | $-0.231^{* * *}$ | -0.048 |
|  | (0.068) | (0.092) | (0.071) | (0.065) | (0.075) | (0.052) |
| Any Incarceration | [0.383] | [0.392] | [0.325] | [0.290] | [0.295] | [0.297] |
|  | -0.040 | -0.011 | -0.002 | -0.053 | -0.064 | -0.005 |
|  | (0.051) | (0.066) | (0.047) | (0.051) | (0.058) | (0.032) |
| Failure to Appear in Court | [0.280] | [0.244] | [0.233] | [0.196] | [0.198] | [0.215] |
|  | $0.214^{* * *}$ | 0.165 | $0.141^{* * *}$ | $0.123^{* * *}$ | $0.175^{* * *}$ | $0.143^{* * *}$ |
|  | (0.049) | (0.105) | (0.053) | (0.040) | (0.035) | (0.049) |
| Rearrest in 0-2 Years | [0.201] | [0.209] | [0.170] | [0.143] | [0.156] | [0.156] |
|  | $-0.162^{*}$ | 0.134 | 0.038 | -0.053 | -0.050 | 0.076 |
|  | (0.097) | (0.146) | (0.094) | (0.069) | (0.121) | (0.080) |
| Rearrest Prior to Disposition | [0.491] | [0.428] | [0.491] | [0.393] | [0.371] | [0.435] |
|  | 0.050 | $0.257^{* *}$ | $0.153^{* *}$ | $0.210^{* * *}$ | $0.158^{* *}$ | $0.178^{* * *}$ |
|  | (0.078) | (0.114) | (0.069) | (0.055) | (0.080) | (0.055) |
| Rearrest After Disposition | [0.194] | [0.162] | [0.212] | [0.188] | [0.168] | [0.206] |
|  | $-0.150^{*}$ | -0.049 | -0.073 | $-0.218^{* * *}$ | -0.152 | -0.069 |
|  | (0.088) | (0.107) | (0.088) | (0.064) | (0.102) | (0.075) |
| Employed in 1-2 Years | [0.349] | [0.307] | [0.341] | [0.255] | [0.245] | [0.289] |
|  | 0.072 | 0.034 | 0.032 | 0.033 | -0.049 | 0.074 |
|  | (0.077) | (0.098) | (0.063) | (0.053) | (0.094) | (0.061) |
| Any Income in 1-2 Years | [0.404] | [0.444] | [0.235] | [0.690] | [0.510] | [0.444] |
|  | 0.125* | 0.256 | 0.082 | 0.149** | 0.042 | 0.119 |
|  | (0.075) | (0.161) | (0.088) | (0.061) | (0.086) | (0.084) |
|  | [0.478] | [0.488] | [0.355] | [0.646] | [0.527] | [0.478] |
| Employed in 3-4 Years | 0.013 | 0.008 | 0.090 | 0.101 | 0.110 | $0.129^{* *}$ |
|  | (0.101) | (0.147) | (0.072) | (0.082) | (0.133) | (0.054) |
|  | [0.389] | [0.425] | [0.246] | [0.635] | [0.490] | [0.432] |
| Any Income in 3-4 Years | -0.018 | 0.364* | 0.082 | 0.158* | 0.081 | 0.124* |
|  | (0.109) | (0.204) | (0.073) | (0.083) | (0.137) | (0.075) |
|  | [0.462] | [0.492] | [0.354] | [0.624] | [0.517] | [0.473] |
| Court x Time FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Baseline Controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Observations | 153,014 | 103,035 | 175,987 | 158,956 | 74,200 | 301,256 |

Note: This table reports two-stage least squares results of the impact of pre-trial release for selected defendant types. The regressions are estimated on the judge sample as described in the notes to Table 1. The dependent variable is listed in each row. Two-stage least squares models instrument for pre-trial detention using a judge leniency measure that is estimated using data from other cases assigned to a bail judge in the same year following the procedure described in Section III. All specifications control for court-by-time fixed effects and baseline controls. Robust standard errors two-way clustered at the individual and judge level are reported in parentheses and the mean of the dependent variable is reported in brackets in all specifications. ${ }^{* * *}=$ significant at 1 percent level, ${ }^{* *}=$ significant at 5 percent level, ${ }^{*}=$ significant at 10 percent level.

Appendix Table A16: First Stage Results by Release Type

|  | Sample <br> Mean | Judge Leniency |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | No Conditions | Non-Mon. Conditions | Monetary Conditions |
|  | (1) | (2) | (3) | (4) |
| Released with No Conditions | 0.204 | $0.930^{* * *}$ | $-0.046^{* * *}$ | -0.009 |
|  | (0.403) | (0.012) | (0.008) | (0.014) |
| Released with Non-Monetary Conditions | 0.121 | $-0.122^{* * *}$ | 0.881*** | $-0.058^{* * *}$ |
|  | (0.327) | (0.025) | (0.032) | (0.015) |
| Released with Monetary Conditions | 0.230 | $-0.181^{* * *}$ | $-0.183^{* * *}$ | $0.413^{* * *}$ |
|  | (0.421) | (0.028) | (0.021) | (0.042) |
| Court x Time FE | - | Yes | Yes | Yes |
| Baseline Controls | - | Yes | Yes | Yes |
| Observations | 421,065 | 421,065 | 421,065 | 421,065 |

Note: This table reports additional first stage results for two types of pre-trial release: release ROR with no conditions and release with conditions. The regressions are estimated on the sample as described in the notes to Table 1. The dependent variable is listed in each row. Estimates in columns 2-4 are from the same OLS specification. Judge leniency is estimated using data from other cases assigned to a bail judge in the same year following the procedure described in Section III. All specifications control for court-by-time fixed effects and baseline controls. Robust standard errors two-way clustered at the individual and judge level are reported in parentheses in all specifications. ${ }^{* * *}=$ significant at 1 percent level, ${ }^{* *}=$ significant at 5 percent level, ${ }^{*}=$ significant at 10 percent level.
Appendix Table A17: Results by Release Type

|  | Detained Mean | OLS Results |  |  | 2SLS Results |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | No Conditions | Non-Mon. Conditions | Monetary Conditions | No Conditions | Non-Mon. Conditions | Monetary Conditions |
|  | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| Any Guilty Offense | $\begin{gathered} 0.578 \\ (0.494) \end{gathered}$ | $\begin{gathered} -0.075^{* * *} \\ (0.013) \end{gathered}$ | $\begin{gathered} -0.011 \\ (0.012) \end{gathered}$ | $\begin{gathered} -0.070^{* * *} \\ (0.008) \end{gathered}$ | $\begin{gathered} -0.183^{* * *} \\ (0.051) \end{gathered}$ | $\begin{gathered} -0.166^{* * *} \\ (0.050) \end{gathered}$ | $\begin{gathered} -0.274^{* *} \\ (0.111) \end{gathered}$ |
| Guilty Plea | $\begin{gathered} 0.441 \\ (0.497) \end{gathered}$ | $\begin{gathered} -0.145^{* * *} \\ (0.015) \end{gathered}$ | $\begin{gathered} -0.101^{* * *} \\ (0.009) \end{gathered}$ | $\begin{gathered} -0.079^{* * *} \\ (0.010) \end{gathered}$ | $\begin{gathered} -0.168^{* * *} \\ (0.057) \end{gathered}$ | $\begin{gathered} -0.156^{* * *} \\ (0.057) \end{gathered}$ | $\begin{gathered} -0.346^{* * *} \\ (0.125) \end{gathered}$ |
| Any Incarceration | $\begin{gathered} 0.300 \\ (0.458) \end{gathered}$ | $\begin{gathered} -0.110^{* * *} \\ (0.006) \end{gathered}$ | $\begin{gathered} -0.091^{* * *} \\ (0.006) \end{gathered}$ | $\begin{gathered} -0.107^{* * *} \\ (0.007) \end{gathered}$ | $\begin{gathered} -0.000 \\ (0.040) \end{gathered}$ | $\begin{gathered} -0.017 \\ (0.038) \end{gathered}$ | $\begin{gathered} -0.028 \\ (0.082) \end{gathered}$ |
| Failure to Appear in Court | $\begin{gathered} 0.121 \\ (0.326) \end{gathered}$ | $\begin{aligned} & 0.083^{* * *} \\ & (0.004) \end{aligned}$ | $\begin{aligned} & 0.096^{* * *} \\ & (0.004) \end{aligned}$ | $\begin{gathered} -0.046^{* * *} \\ (0.012) \end{gathered}$ | $\begin{aligned} & 0.209^{* * *} \\ & (0.063) \end{aligned}$ | $\begin{aligned} & 0.181^{* * *} \\ & (0.060) \end{aligned}$ | $\begin{gathered} 0.221^{* *} \\ (0.112) \end{gathered}$ |
| Rearrest in 0-2 Years | $\begin{gathered} 0.462 \\ (0.499) \end{gathered}$ | $\begin{gathered} -0.046^{* * *} \\ (0.009) \end{gathered}$ | $\begin{aligned} & 0.030^{* * *} \\ & (0.010) \end{aligned}$ | $\begin{gathered} -0.021^{* * *} \\ (0.006) \end{gathered}$ | $\begin{gathered} 0.009 \\ (0.077) \end{gathered}$ | $\begin{aligned} & -0.011 \\ & (0.074) \end{aligned}$ | $\begin{gathered} -0.105 \\ (0.151) \end{gathered}$ |
| Rearrest Prior to Disposition | $\begin{gathered} 0.155 \\ (0.362) \end{gathered}$ | $\begin{aligned} & 0.053^{* * *} \\ & (0.009) \end{aligned}$ | $\begin{aligned} & 0.100^{* * *} \\ & (0.012) \end{aligned}$ | $\begin{aligned} & 0.057^{* * *} \\ & (0.007) \end{aligned}$ | $\begin{aligned} & 0.205^{* * *} \\ & (0.048) \end{aligned}$ | $\begin{aligned} & 0.197^{* * *} \\ & (0.048) \end{aligned}$ | $\begin{gathered} 0.229^{* *} \\ (0.102) \end{gathered}$ |
| Rearrest After Disposition | $\begin{gathered} 0.343 \\ (0.475) \end{gathered}$ | $\begin{gathered} -0.078^{* * *} \\ (0.004) \end{gathered}$ | $\begin{gathered} -0.016^{* * *} \\ (0.004) \end{gathered}$ | $\begin{gathered} -0.052^{* * *} \\ (0.003) \end{gathered}$ | $\begin{gathered} -0.135^{* *} \\ (0.068) \end{gathered}$ | $\begin{gathered} -0.148^{* *} \\ (0.067) \end{gathered}$ | $\begin{gathered} -0.243^{*} \\ (0.137) \end{gathered}$ |
| Employed in 1-2 Years | $\begin{gathered} 0.378 \\ (0.485) \end{gathered}$ | $\begin{aligned} & 0.052^{* * *} \\ & (0.003) \end{aligned}$ | $\begin{aligned} & 0.041^{* * *} \\ & (0.003) \end{aligned}$ | $\begin{aligned} & 0.053^{* * *} \\ & (0.003) \end{aligned}$ | $\begin{gathered} 0.024 \\ (0.061) \end{gathered}$ | $\begin{gathered} 0.020 \\ (0.058) \end{gathered}$ | $\begin{gathered} -0.036 \\ (0.129) \end{gathered}$ |
| Any Income in 1-2 Years | $\begin{gathered} 0.458 \\ (0.498) \end{gathered}$ | $\begin{aligned} & 0.033^{* * *} \\ & (0.002) \end{aligned}$ | $\begin{aligned} & 0.016^{* * *} \\ & (0.003) \end{aligned}$ | $\begin{aligned} & 0.045^{* * *} \\ & (0.003) \end{aligned}$ | $\begin{aligned} & 0.183^{* *} \\ & (0.076) \end{aligned}$ | $\begin{aligned} & 0.179^{* *} \\ & (0.076) \end{aligned}$ | $\begin{aligned} & 0.417^{* * *} \\ & (0.157) \end{aligned}$ |
| Employed in 3-4 Years | $\begin{gathered} 0.378 \\ (0.485) \end{gathered}$ | $\begin{aligned} & 0.040^{* * *} \\ & (0.003) \end{aligned}$ | $\begin{aligned} & 0.018^{* * *} \\ & (0.003) \end{aligned}$ | $\begin{aligned} & 0.033^{* * *} \\ & (0.002) \end{aligned}$ | $\begin{gathered} 0.047 \\ (0.084) \end{gathered}$ | $\begin{gathered} 0.065 \\ (0.080) \end{gathered}$ | $\begin{gathered} -0.025 \\ (0.178) \end{gathered}$ |
| Any Income in 3-4 Years | $\begin{gathered} 0.461 \\ (0.498) \\ \hline \end{gathered}$ | $\begin{aligned} & 0.030^{* * *} \\ & (0.003) \end{aligned}$ | $\begin{aligned} & 0.016^{* * *} \\ & (0.003) \end{aligned}$ | $\begin{aligned} & 0.035^{* * *} \\ & (0.004) \\ & \hline \end{aligned}$ | $\begin{gathered} 0.114 \\ (0.094) \\ \hline \end{gathered}$ | $\begin{gathered} 0.151^{*} \\ (0.091) \\ \hline \end{gathered}$ | $\begin{gathered} 0.280 \\ (0.220) \\ \hline \end{gathered}$ |
| Court x Time FE | - | Yes | Yes | Yes | Yes | Yes | Yes |
| Baseline Controls | - | Yes | Yes | Yes | Yes | Yes | Yes |
| Observations | 186,938 | 421,065 | 421,065 | 421,065 | 421,065 | 421,065 | 421,065 |

Note: This table reports OLS and two-stage least squares results of the impact of two types of pre-trial release: release ROR with no conditions and release with conditions. The regressions are estimated on the sample as described in the notes to Table 1. The dependent variable is listed in each row. Estimates in columns 2-4 are from the same OLS specification, and estimates in columns 5-7 are from the same two-stage least squares specification. All specifications control for court-by-time fixed effects and baseline controls. Robust standard errors two-way clustered at the individual and judge level are reported in parentheses. ${ }^{* * *}=$ significant at 1 percent level, ${ }^{* *}=$ significant at 5 percent level, ${ }^{*}=$ significant at 10 percent level.

Appendix Table A18: First Stage Results for Number of Days Detained Before Trial

|  | Length of Stay |  |
| :--- | :---: | :---: |
|  | $(1)$ | $(2)$ |
| Judge Leniency for Bail Met | -4.810 | $-7.827^{* *}$ |
|  | $(9.858)$ | $(3.595)$ |
| Judge Leniency for Days Detained |  | -0.061 |
|  |  | $(0.058)$ |
| Exclude 0 Length of Stay | Yes | No |
| Court x Time FE | Yes | Yes |
| Baseline Controls | Yes | Yes |
| Dep. Variable Mean | 61.132 | 17.827 |
| Observations | 122,792 | 421,065 |

Note: This table reports additional first stage results for the length of stay in detention. The sample for column 1 is all defendants who are detained for one or more days before trial. The sample for column 2 is all defendants regardless of length of stay. Judge leniency is estimated using data from other cases assigned to a bail judge in the same year following the procedure described in Section III. All specifications control for court-by-time fixed effects and baseline controls. Robust standard errors two-way clustered at the individual and judge level are reported in parentheses in all specifications. ${ }^{* * *}=$ significant at 1 percent level, ${ }^{* *}=$ significant at 5 percent level, ${ }^{*}=$ significant at 10 percent level.

Appendix Table A19: Robustness of Two-Stage Least Squares Results

|  | Judge Leniency |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | Crime | Crime | Release | Release | Non-Money |
|  | Severity | Type | 14 Days | Ever | Bail |
|  | $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ |
| Any Guilty Offense | $-0.115^{* *}$ | $-0.163^{* * *}$ | $-0.154^{* * *}$ | $-0.258^{* * *}$ | $-0.074^{* * *}$ |
|  | $(0.045)$ | $(0.049)$ | $(0.043)$ | $(0.055)$ | $(0.024)$ |
| Guilty Plea | $-0.117^{* *}$ | $-0.137^{*}$ | $-0.131^{* *}$ | $-0.266^{* * *}$ | -0.042 |
|  | $(0.052)$ | $(0.073)$ | $(0.053)$ | $(0.067)$ | $(0.030)$ |
| Any Incarceration | 0.040 | -0.022 | -0.011 | -0.027 | -0.006 |
|  | $(0.035)$ | $(0.040)$ | $(0.032)$ | $(0.041)$ | $(0.016)$ |
| Failure to Appear in Court | $0.116^{* * *}$ | $0.146^{* *}$ | $0.173^{* * *}$ | $0.241^{* * *}$ | $0.082^{* * *}$ |
|  | $(0.032)$ | $(0.059)$ | $(0.056)$ | $(0.068)$ | $(0.019)$ |
| Rearrest in 0-2 Years | 0.040 | 0.043 | -0.001 | 0.023 | 0.039 |
|  | $(0.062)$ | $(0.057)$ | $(0.069)$ | $(0.084)$ | $(0.039)$ |
| Rearrest Prior to Disposition | $0.169^{* * *}$ | $0.184^{* * *}$ | $0.195^{* * *}$ | $0.287^{* * *}$ | $0.118^{* * *}$ |
|  | $(0.040)$ | $(0.038)$ | $(0.046)$ | $(0.056)$ | $(0.026)$ |
| Rearrest After Disposition | -0.073 | -0.075 | $-0.144^{* *}$ | $-0.202^{* * *}$ | $-0.062^{*}$ |
|  | $(0.054)$ | $(0.080)$ | $(0.059)$ | $(0.074)$ | $(0.034)$ |
| Employed in 1-2 Years | 0.033 | 0.019 | 0.041 | -0.045 | 0.023 |
|  | $(0.030)$ | $(0.038)$ | $(0.050)$ | $(0.065)$ | $(0.019)$ |
| Any Income in 1-2 Years | $0.081^{*}$ | 0.056 | $0.120^{*}$ | 0.110 | 0.003 |
|  | $(0.043)$ | $(0.043)$ | $(0.068)$ | $(0.073)$ | $(0.025)$ |
| Employed in 3-4 Years | 0.012 | 0.054 | 0.093 | 0.079 | $0.075^{* *}$ |
|  | $(0.049)$ | $(0.039)$ | $(0.068)$ | $(0.087)$ | $(0.030)$ |
| Any Income in 3-4 Years | 0.060 | 0.028 | $0.123^{*}$ | $0.147^{*}$ | 0.044 |
|  | $(0.044)$ | $(0.043)$ | $(0.064)$ | $(0.084)$ | $(0.031)$ |
| Court x Time FE | Yes | Yes | Yes | Yes | Yes |
| Baseline Controls | Yes | Yes | Yes | Yes | Yes |
| Observations | 421,065 | 421,065 | 421,065 | 421,065 | 421,065 |

Note: This table reports robustness checks of our two-stage least squares results. The regressions are estimated on the sample as described in the notes to Table 1. The dependent variable is listed in each row. Column 1 allows judge leniency to vary across felonies and misdemeanors. Column 2 allows judge leniency to vary across the 5 mutually exclusive crime types. Column 3 uses an indicator for released within 14 days of the bail hearing to calculate judge leniency. Column 4 uses an indicator for ever being released before trial to calculate judge leniency. Column 5 uses an indicator for the assignment of non-monetary bail. All specifications control for court-by-time fixed effects and baseline controls. Robust standard errors two-way clustered at the individual and judge level are reported in parentheses. ${ }^{* * *}=$ significant at 1 percent level, ${ }^{* *}=$ significant at 5 percent level, ${ }^{*}=$ significant at 10 percent level.

Appendix Table A20: Additional Robustness of Two-Stage Least Squares Results

|  | Judge Leniency |  |  |  |  | Judge FE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Non Residualized | Pooled <br> Years | Bootstrap Cluster | Split Sample | Scheduled Judge |  |
|  | (1) | (2) | (3) | (4) | (5) | (6) |
| Any Guilty Offense | $\begin{gathered} -0.136^{* * *} \\ (0.041) \end{gathered}$ | $\begin{gathered} -0.185^{* * *} \\ (0.070) \end{gathered}$ | $\begin{gathered} -0.140^{* * *} \\ (0.054) \end{gathered}$ | $\begin{gathered} -0.182^{* *} \\ (0.084) \end{gathered}$ | $\begin{gathered} -0.129^{* * *} \\ (0.048) \end{gathered}$ | $\begin{gathered} -0.190^{* * *} \\ (0.051) \end{gathered}$ |
| Guilty Plea | $\begin{gathered} -0.104^{* *} \\ (0.051) \end{gathered}$ | $\begin{gathered} -0.120 \\ (0.080) \end{gathered}$ | $\begin{gathered} -0.108 \\ (0.067) \end{gathered}$ | $\begin{gathered} -0.151 \\ (0.094) \end{gathered}$ | $\begin{gathered} -0.118^{* *} \\ (0.052) \end{gathered}$ | $\begin{gathered} -0.162^{* *} \\ (0.066) \end{gathered}$ |
| Any Incarceration | $\begin{gathered} -0.015 \\ (0.030) \end{gathered}$ | $\begin{gathered} -0.004 \\ (0.037) \end{gathered}$ | $\begin{gathered} -0.012 \\ (0.038) \end{gathered}$ | $\begin{gathered} 0.011 \\ (0.052) \end{gathered}$ | $\begin{gathered} -0.015 \\ (0.031) \end{gathered}$ | $\begin{gathered} -0.043^{* *} \\ (0.022) \end{gathered}$ |
| Failure to Appear in Court | $\begin{aligned} & 0.148^{* * *} \\ & (0.044) \end{aligned}$ | $\begin{aligned} & 0.104^{* * *} \\ & (0.020) \end{aligned}$ | $\begin{aligned} & 0.156^{* * *} \\ & (0.048) \end{aligned}$ | $\begin{aligned} & 0.135^{* * *} \\ & (0.040) \end{aligned}$ | $\begin{aligned} & 0.120^{* * *} \\ & (0.045) \end{aligned}$ | $\begin{aligned} & 0.098^{* * *} \\ & (0.014) \end{aligned}$ |
| Rearrest in 0-2 Years | $\begin{gathered} 0.023 \\ (0.063) \end{gathered}$ | $\begin{gathered} 0.130 \\ (0.110) \end{gathered}$ | $\begin{gathered} 0.015 \\ (0.074) \end{gathered}$ | $\begin{gathered} 0.221^{*} \\ (0.126) \end{gathered}$ | $\begin{gathered} 0.016 \\ (0.073) \end{gathered}$ | $\begin{gathered} 0.003 \\ (0.047) \end{gathered}$ |
| Rearrest Prior to Disposition | $\begin{aligned} & 0.176^{* * *} \\ & (0.043) \end{aligned}$ | $\begin{aligned} & 0.175^{* * *} \\ & (0.054) \end{aligned}$ | $\begin{aligned} & 0.189^{* * *} \\ & (0.049) \end{aligned}$ | $\begin{aligned} & 0.198^{* * *} \\ & (0.065) \end{aligned}$ | $\begin{aligned} & 0.190^{* * *} \\ & (0.043) \end{aligned}$ | $\begin{aligned} & 0.116^{* * *} \\ & (0.033) \end{aligned}$ |
| Rearrest After Disposition | $\begin{gathered} -0.099^{*} \\ (0.055) \end{gathered}$ | $\begin{gathered} 0.008 \\ (0.105) \end{gathered}$ | $\begin{gathered} -0.121^{* *} \\ (0.062) \end{gathered}$ | $\begin{gathered} 0.097 \\ (0.133) \end{gathered}$ | $\begin{gathered} -0.108^{*} \\ (0.065) \end{gathered}$ | $\begin{array}{r} -0.076 \\ (0.050) \end{array}$ |
| Employed in 1-2 Years | $\begin{gathered} 0.030 \\ (0.041) \end{gathered}$ | $\begin{gathered} -0.024 \\ (0.051) \end{gathered}$ | $\begin{gathered} 0.036 \\ (0.061) \end{gathered}$ | $\begin{array}{r} -0.044 \\ (0.071) \end{array}$ | $\begin{gathered} 0.048 \\ (0.046) \end{gathered}$ | $\begin{gathered} 0.027 \\ (0.035) \end{gathered}$ |
| Any Income in 1-2 Years | $\begin{gathered} 0.115^{*} \\ (0.066) \end{gathered}$ | $\begin{gathered} 0.049 \\ (0.058) \end{gathered}$ | $\begin{gathered} 0.113 \\ (0.093) \end{gathered}$ | $\begin{gathered} 0.026 \\ (0.060) \end{gathered}$ | $\begin{aligned} & 0.146^{* *} \\ & (0.065) \end{aligned}$ | $\begin{gathered} 0.060 \\ (0.041) \end{gathered}$ |
| Employed in 3-4 Years | $\begin{gathered} 0.099^{*} \\ (0.057) \end{gathered}$ | $\begin{gathered} 0.059 \\ (0.072) \end{gathered}$ | $\begin{gathered} 0.094 \\ (0.078) \end{gathered}$ | $\begin{gathered} 0.023 \\ (0.104) \end{gathered}$ | $\begin{gathered} 0.080 \\ (0.065) \end{gathered}$ | $\begin{gathered} 0.077^{*} \\ (0.045) \end{gathered}$ |
| Any Income in 3-4 Years | $\begin{gathered} 0.121^{* *} \\ (0.056) \end{gathered}$ | $\begin{gathered} 0.083 \\ (0.060) \end{gathered}$ | $\begin{gathered} 0.107 \\ (0.081) \\ \hline \end{gathered}$ | $\begin{gathered} 0.115 \\ (0.089) \end{gathered}$ | $\begin{gathered} 0.121^{*} \\ (0.070) \end{gathered}$ | $\begin{gathered} 0.041 \\ (0.047) \\ \hline \end{gathered}$ |
| Court x Time FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Baseline Controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Observations | 421,065 | 421,065 | 421,065 | 315,808 | 421,065 | 421,065 |

Note: This table reports robustness checks of our two-stage least squares results. The regressions are estimated on the sample as described in the notes to Table 1. The dependent variable is listed in each row. Column 1 calculates judge leniency using a simple leave-out measure that does not condition on court-by-time fixed effects. Column 2 calculates judge leniency pooling cases across all years. Column 3 presents bootstrap-clustered standard errors from 500 simulations. This procedure involves sampling at the judge level, with replacement, and then generating the judge leniency measure and outcome variables within this sampled data. Column 4 calculates judge leniency using a 25 percent random subset of the data and estimates the treatment effects in the opposing subset of data. Column 5 uses the scheduled bail judge to calculate judge leniency. Column 6 uses an exhaustive set of judge fixed effects as instruments (first stage F -statistic $=3245.5$ ). All specifications control for court-by-time fixed effects and baseline controls. Robust standard errors two-way clustered at the individual and judge level are reported in parentheses. $* * *$ $=$ significant at 1 percent level, ${ }^{* *}=$ significant at 5 percent level, ${ }^{*}=$ significant at 10 percent level.

Appendix Table A21: Test of Randomization with Non-Residualized Judge IV

|  | Pre-Trial Release | Judge <br> Leniency |
| :---: | :---: | :---: |
|  | (1) | (2) |
| Male | $-0.11781 * *$ | 0.00010 |
|  | (0.00716) | (0.00016) |
| Black | $-0.03941^{* * *}$ | 0.00007 |
|  | (0.00362) | (0.00017) |
| Age at Bail Decision | $\begin{gathered} -0.01287^{* * *} \\ (0.00236) \end{gathered}$ | $-0.00005$ <br> (0.00006) |
| Prior Offense in Past Year | -0.15492*** | 0.00019 |
|  | (0.00739) | (0.00012) |
| Number of Offenses | -0.02409 *** | -0.00000 |
|  | (0.00120) | (0.00002) |
| Felony Offense | $-0.25575^{* * *}$ | 0.00008 |
|  | (0.01821) | (0.00010) |
| Any Drug Offense | $0.12528^{* * *}$ | 0.00017 |
|  | (0.00909) | (0.00020) |
| Any DUI Offense | $0.10966^{* * *}$ | 0.00024 |
|  | (0.01679) | (0.00025) |
| Any Violent Offense | -0.01740 | 0.00013 |
|  | (0.01838) | (0.00017) |
| Any Property Offense | 0.01097 | -0.00013 |
|  | (0.01688) | (0.00017) |
| Matched to IRS Data | $0.00868^{* * *}$ | -0.00004 |
|  | (0.00194) | (0.00013) |
| Baseline Earnings | $0.00113^{* * *}$ | -0.00001* |
|  | (0.00009) | (0.00000) |
| Baseline UI | 0.00279*** | -0.00001 |
|  | (0.00048) | (0.00002) |
| Baseline EITC | $0.01233{ }^{* * *}$ | 0.00002 |
|  | (0.00087) | (0.00008) |
| Baseline Filed Return | $0.05136^{* * *}$ | -0.00022 |
|  | (0.00387) | (0.00017) |
| Baseline Employed | $0.02523^{* * *}$ | 0.00020 |
|  | (0.00272) | (0.00014) |
| Baseline Any EITC | $-0.01856^{* * *}$ | 0.00001 |
|  | (0.00418) | (0.00022) |
| Baseline Any Income | 0.00000 | 0.00000 |
|  | (0.00000) | (0.00000) |
| Baseline Any UI | 0.02431*** | 0.00030 |
|  | (0.00363) | (0.00029) |
| Joint F-Test | [0.00000] | [0.71874] |
| Observations | 421,065 | 421,065 |

Note: This table reports reduced form results testing the random assignment of cases to bail judges. Judge leniency is estimated using data from other cases assigned to a bail judge in the same year. Column 1 reports estimates from an OLS regression of pre-trial release on the variables listed and court-by-time fixed effects. Column 2 reports estimates from an OLS regression of judge leniency on the variables listed and court-by-time fixed effects. Robust standard errors two-way clustered at the individual and judge level are reported in parentheses. The p-value reported at the bottom of columns $1-2$ is for a F-test of the joint significance of the variables listed in the rows with the standard errors two-way clustered at the individual and judge by year level. ${ }^{* * *}=$ significant at 1 percent level, ${ }^{* *}$ $=$ significant at 5 percent level, ${ }^{*}=$ significant at 10 percent level. See the data appendix for additional details on the sample and variable construction.

Appendix Table A22: Robustness of Two-Stage Least Squares Results to Sample Restrictions

|  | Judge Leniency |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | First | IRS | Phl | Miami |
|  | Case | Sample | Only | Only |
| Any Guilty Offense | $(1)$ | $(2)$ | $(3)$ | $(4)$ |
|  | $-0.192^{* * *}$ | $-0.124^{* *}$ | $-0.116^{* * *}$ | $-0.165^{* *}$ |
| Guilty Plea | $(0.054)$ | $(0.048)$ | $(0.026)$ | $(0.079)$ |
|  | $-0.134^{* *}$ | $-0.098^{*}$ | -0.033 | $-0.198^{* *}$ |
| Any Incarceration | $(0.062)$ | $(0.055)$ | $(0.041)$ | $(0.080)$ |
|  | 0.037 | -0.025 | -0.006 | -0.009 |
| Failure to Appear in Court | $(0.034)$ | $(0.036)$ | $(0.029)$ | $(0.056)$ |
|  | 0.056 | $0.132^{* * *}$ | $0.156^{* * *}$ | $0.156^{* * *}$ |
| Rearrest in 0-2 Years | $(0.080)$ | $(0.046)$ | $(0.046)$ | $(0.046)$ |
|  | -0.020 | -0.010 | 0.013 | -0.002 |
| Rearrest Prior to Disposition | $(0.080)$ | $(0.060)$ | $(0.075)$ | $(0.104)$ |
|  | $0.188^{* * *}$ | $0.180^{* * *}$ | $0.204^{* * *}$ | $0.192^{* * *}$ |
| Rearrest After Disposition | $(0.046)$ | $(0.049)$ | $(0.056)$ | $(0.065)$ |
|  | $-0.171^{* * *}$ | $-0.144^{* * *}$ | $-0.180^{* * *}$ | -0.094 |
| Employed in 1-2 Years | $(0.058)$ | $(0.054)$ | $(0.041)$ | $(0.090)$ |
|  | 0.084 | 0.036 | -0.001 | 0.087 |
| Any Income in 1-2 Years | $(0.053)$ | $(0.042)$ | $(0.020)$ | $(0.100)$ |
|  | $0.120^{*}$ | $0.113^{*}$ | -0.028 | $0.357^{* * *}$ |
| Employed in 3-4 Years | $(0.064)$ | $(0.064)$ | $(0.029)$ | $(0.130)$ |
|  | $0.173^{* * *}$ | 0.094 | $0.167^{* * *}$ | -0.032 |
| Any Income in 3-4 Years | $(0.066)$ | $(0.057)$ | $(0.040)$ | $(0.113)$ |
|  | $0.214^{* * *}$ | $0.107^{*}$ | 0.072 | 0.175 |
|  | $(0.076)$ | $(0.056)$ | $(0.048)$ | $(0.135)$ |
| Court x Time FE | Yes | Yes | Yes | Yes |
| Baseline Controls | Yes | Yes | Yes | Yes |
| Observations | 209,393 | 334,943 | 327,707 | 93,358 |

Note: This table reports robustness checks of our two-stage least squares results across different samples. The dependent variable is listed in each row. Column 1 restricts the sample to each defendant's first observed case. Column 2 restricts the sample to cases matched to the IRS data. Column 3 restricts the sample to Philadelphia. Column 4 restricts the sample to Miami-Dade. All specifications control for court-by-time fixed effects and baseline controls. Robust standard errors two-way clustered at the individual and judge level are reported in parentheses. $* * *$ $=$ significant at 1 percent level, ${ }^{* *}=$ significant at 5 percent level, ${ }^{*}=$ significant at 10 percent level.
Appendix Table A23: Effects on Joint Probabilities of Rearrest and Employment

|  | Detained <br> Mean | OLS Results |  |  | 2SLS Results |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Panel A: Years 1-2 | (1) | (2) | (3) | (4) | (5) | (6) |
| Rearrested and Employed | 0.120 | $0.010^{* * *}$ | 0.003* | $0.011^{* * *}$ | -0.006 | -0.018 |
|  | (0.325) | (0.002) | (0.002) | (0.002) | (0.027) | (0.028) |
| Rearrested and Not Employed | 0.232 | $-0.054^{* * *}$ | $-0.018^{* * *}$ | -0.004 | 0.003 | 0.008 |
|  | (0.422) | (0.007) | (0.004) | (0.003) | (0.031) | (0.030) |
| Not Rearrested and Employed | 0.156 | $0.084^{* * *}$ | $0.035^{* * *}$ | $0.019^{* * *}$ | 0.045 | 0.037 |
|  | (0.363) | (0.006) | (0.002) | (0.002) | (0.032) | (0.028) |
| Not Rearrested and Not Employed | 0.210 | $-0.040^{* * *}$ | $-0.020^{* *}$ | $-0.027^{* * *}$ | -0.042 | -0.027 |
|  | (0.407) | (0.006) | (0.004) | (0.004) | (0.037) | (0.037) |
| Panel B: Years 3-4 |  |  |  |  |  |  |
| Rearrested and Employed | 0.102 | $0.007^{* * *}$ | 0.002 | $0.009^{* * *}$ | 0.026 | 0.016 |
|  | (0.303) | (0.003) | (0.002) | (0.003) | (0.029) | (0.029) |
| Rearrested and Not Employed | 0.210 | $-0.042^{* * *}$ | $-0.010^{* * *}$ | 0.001 | -0.038 | -0.035 |
|  | (0.408) | (0.005) | (0.002) | (0.002) | (0.035) | (0.035) |
| Not Rearrested and Employed | 0.143 | $0.060^{* * *}$ | $0.018^{* * *}$ | $0.006^{* * *}$ | 0.027 | 0.020 |
|  | (0.350) | (0.004) | (0.002) | (0.002) | (0.025) | (0.025) |
| Not Rearrested and Not Employed | 0.193 | $-0.025^{* * *}$ | $-0.010^{* * *}$ | $-0.017^{* * *}$ | $-0.015$ | -0.001 |
|  | (0.395) | (0.004) | (0.003) | (0.003) | (0.033) | (0.035) |
| Court x Time FE | - | Yes | Yes | Yes | Yes | Yes |
| Baseline Controls | - | No | Yes | Yes | No | Yes |
| Complier Weights | - | No | No | Yes | No | No |
| Observations | 144,290 | 334,943 | 334,943 | 334,943 | 334,943 | 334,943 | Note: This table reports additional OLS and two-stage least squares results of the impact of pre-trial release on the joint probability of rearrest and employment. The regressions are estimated on the sample as described in the notes to Table 1. The dependent variable is listed in each row. Two-stage least squares models instrument for pre-trial detention using a judge leniency measure that is estimated using data from other cases assigned to a bail judge in the same year following the procedure described in Section III. All specifications control for court-by-time fixed effects and baseline controls. Robust standard errors two-way clustered at the individual and judge level are reported in parentheses. ${ }^{* * *}=$ significant at 1 percent level, ${ }^{* *}=$ significant at 5 percent level, $*^{*}=$ significant at 10 percent level.

Appendix Table A24: Effects on Joint Probabilities of Conviction and Employment

| Panel A: Years 1-2 | Detained |  |  |  | 2SLS Results |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (1) | (2) | (3) | (4) | (5) | (6) |
| Guilty and Employed | 0.190 | $0.027^{* * *}$ | -0.003 | -0.003 | -0.060* | $-0.079^{* *}$ |
|  | (0.392) | (0.006) | (0.005) | (0.003) | (0.035) | (0.035) |
| Guilty and Not Employed | 0.338 | $-0.097^{* * *}$ | $-0.048^{* * *}$ | $-0.040^{* * *}$ | -0.050 | -0.043 |
|  | (0.473) | (0.007) | (0.004) | (0.005) | (0.039) | (0.036) |
| Not Guilty and Employed | 0.149 | 0.093 ${ }^{* * *}$ | 0.049*** | $0.040^{* * *}$ | $0.104^{* *}$ | $0.099^{* * *}$ |
|  | (0.356) | (0.007) | (0.005) | (0.003) | (0.042) | (0.038) |
| Not Guilty and Not Employed | 0.220 | $-0.023^{* * *}$ | 0.003 | 0.004 | 0.006 | 0.023 |
|  | (0.414) | (0.006) | (0.005) | (0.005) | (0.030) | (0.029) |
| Panel B: Years 3-4 |  |  |  |  |  |  |
| Guilty and Employed | 0.140 | 0.009** | $-0.008^{* *}$ | $-0.010^{* * *}$ | -0.007 | -0.019 |
|  | (0.347) | (0.003) | (0.003) | (0.002) | (0.031) | (0.030) |
| Guilty and Not Employed | 0.240 | $-0.054^{* * *}$ | $-0.022^{* * *}$ | $-0.020^{* * *}$ | -0.013 | -0.009 |
|  | (0.427) | (0.005) | (0.003) | (0.004) | (0.035) | (0.033) |
| Not Guilty and Employed | 0.105 | $0.059^{* * *}$ | $0.028^{* * *}$ | $0.026^{* * *}$ | 0.059* | 0.054* |
|  | (0.307) | (0.005) | (0.003) | (0.003) | (0.031) | (0.030) |
| Not Guilty and Not Employed | 0.163 | $-0.013^{* *}$ | 0.002 | 0.004 | $-0.040$ | $-0.027$ |
|  | (0.369) | (0.005) | (0.003) | (0.005) | (0.028) | (0.028) |
| Court x Time FE | - | Yes | Yes | Yes | Yes | Yes |
| Baseline Controls | - | No | Yes | Yes | No | Yes |
| Complier Weights | - | No | No | Yes | No | No |
| Observations | 144,290 | 334,943 | 334,943 | 334,943 | 334,943 | 334,943 | Note: This table reports additional OLS and two-stage least squares results of the impact of pre-trial release on the joint probability of conviction and employment. The regressions are estimated on the sample as described in the notes to Table 1. The dependent variable is listed in each row. Two-stage judge in the same year following the procedure described in Section III. All specifications control for court-by-time fixed effects and baseline controls. Robust standard errors two-way clustered at the individual and judge level are reported in parentheses. ${ }^{* * *}=$ significant at 1 percent level, ${ }^{* *}=$ significant at 5 percent level, $*^{*}=$ significant at 10 percent level.


Note: This figure illustrates the bail guidelines in Philadelphia. The guidelines classify defendants into 40 possible categories and suggest four basic types of release options. Charge seriousness ranges from one to 10 , with 10 the most serious. Risk level ranges from one to four, with four the highest risk, and is based on the risk of a defendant failing to appear in court and committing new offenses. ROR is release on recognizance. ROSC is release on special conditions.

Appendix Figure A3: Distribution of Alternative Judge Leniency Measures


Note: These figures report the distribution of various judge leniency measures that are estimated using data from cases assigned to a bail judge in other dates following the procedure described in Section III.

Appendix Figure A4: Judge Leniency by Defendant and Case Characteristics


Note: These figures show the correlation between our residualized measure of judge leniency for different groups of defendants. DUI cases are only available in Philadelphia. We take the average leniency for each group over all available years of data. The solid line shows the best linear fit estimated using OLS relating each judge leniency measure.

Appendix Figure A5: Probability of Individual and Household Earnings Above Threshold


Note: This figure reports two-stage least squares estimates and corresponding 95 percent confidence intervals for the impact of pre-trial release on the probability of having earnings above each income threshold. Two-stage least squares models instrument for pre-trial detention using a judge leniency measure that is estimated using data from other cases assigned to a bail judge in the same year following the procedure described in Section III. All specifications control for court-by-time fixed effects and baseline controls.

Appendix Figure A6: Probability of Incarceration by Days Since Bail


Note: This figure reports two-stage least squares estimates and corresponding 95 percent confidence intervals for the impact of pre-trial release on the probability of either pre- or post-disposition incarceration at different points in time after the bail hearing. Two-stage least squares models instrument for pre-trial detention using a judge leniency measure that is estimated using data from other cases assigned to a bail judge in the same year following the procedure described in Section III. All specifications control for court-by-time fixed effects and baseline controls.

## Online Appendix B: Data Appendix

## A. Match to the IRS Data

We match the court data to administrative tax data from the IRS using first and last name, date of birth, gender, zip code, and state of residence. Defendants were first matched to Social Security records on the basis of their date of birth, gender, and the first four letters of their last name. Duplicate matches were iteratively pruned based on (1) whether the defendant ever filed a tax return or received an information return reporting residence in the state of residence, (2) whether the first three letters of the defendant's first name matched a first name reported on a tax return or other informational return, and (3) whether the defendant's zip code matched a zip code reported with a tax return or informational return. Remaining duplicates were dropped from the sample. Because the filing of tax and information returns may be related to pre-trial release, we restrict the matching process to tax information submitted before the year of the defendant's arrest.

We are only able to match individuals who file a tax return or for whom someone else (e.g., an employer) file an information return relating to them (e.g., a W-2 relating to their employment) in any year prior to the year in which the individual first appears in the administrative court data. Thus, an individual who never files a tax return and for whom an information return is never filed will generally be excluded from our sample. The one exception to this general rule is that if a court record has only one potential match in the social security data based on date of birth, gender, and the first four letters of the individual's last name, the individual is treated as matched, even though no information from an information return or tax return is used.

Unfortunately, we cannot distinguish between records in the court data that do not match to the tax data for any of the following three reasons: (1) the individual in the court data has never filed a tax return or been formally employed; (2) the record in the court data contains a mistake; and (3) the tax return or information return contains a mistake. For example an individual's first name may have been spelled differently in the tax return than in the court record. In this case, we would not match the court record to the tax data, and we would be unable to tell whether the cause of the non-match was a spelling mistake or a history of never filing a return.

In total, our match rate in Philadelphia is 81 percent and our match rate in Miami-Dade is 73 percent. Our match rates are higher than match rates in most prior studies linking criminal court records to administrative UI records using name, date of birth, and social security number, which typically range around 60 to 70 percent (Travis, Western, and Redburn 2014). Importantly, the probability of being matched to the IRS data is not significantly related to judge leniency (see Table ??). For outcomes contained in the IRS data, we limit our estimation sample to these matched cases.

## B. Data Dictionary

Judge Leniency: We calculate judge leniency as the leave-one-out mean residualized pre-trial release decisions of the assigned judge within a bail year. We use the residual pre-trial release decision after removing court-by-time fixed effects. In our main results, we define pre-trial release based on whether a defendant was released within the first three days after the bail hearing.

Release on Recognizance: An indicator for whether the defendant was released on recognizance (ROR), where the defendant secures release on the promise to return to court for his next scheduled hearing. ROR is used for offenders who show minimal risk of flight, no history of failure to appear for court proceedings, and pose no apparent threat of harm to the public.

Non-Monetary Bail: An indicator for whether the defendant was released on non-monetary bail, also known as conditional release. Non-monetary conditions include monitoring, supervision, halfway houses, and treatments of various sorts, among other options.

Monetary Bail: An indicator for whether the defendant was assigned monetary bail. Under monetary bail, a defendant is generally required to post a bail payment to secure release, typically 10 percent of the bail amount, which can be posted directly by the defendant or by sureties such as bail bondsman.

Bail Amount: Assigned monetary bail amount in thousands, set equal to missing for defendants who receive non-monetary bail or ROR.

Race: Information on defendant race is missing for the Philadelphia data prior to 2010.
Prior Offense in Past Year: An indicator for whether the defendant had been charged for a prior offense in the past year of the bail hearing within the same county, set to missing for defendants who we cannot observe for a full year prior to their bail hearing.

Number of Offenses: Total number of charged offenses.
Felony Offense: An indicator for whether the defendant is charged with a felony offense.
Misdemeanor Offense: An indicator for whether the defendant is charged with only misdemeanor offenses.

Any Guilty Offense: An indicator for whether the defendant is found guilty of any charged offense. A defendant is guilty of an offense if found guilty at trial, or if he pleads guilty or nolo contendere (no contest).

Guilty Plea: An indicator for whether the defendant pleads guilty or nolo contendere to any charged offense.

Offense Charged Down: An offense is charged down if the defendant is found not guilty, or if the highest conviction offense is less severe than the highest charged offense.

Any Incarceration: An indicator for whether the defendant receives a term of imprisonment following conviction, equal to zero if a defendant is found not guilty.

Max Days Incarcerated: Maximum days incarcerated calculated by taking the maximum prison sentence across all convicted offenses, equal to zero if a defendant is found not guilty.

Bail Modification Petition: An indicator for whether the defendant petitions for a bail modification.

Days to Case Decision: Number of days from the bail hearing to case disposition, set to missing for cases still pending.

Failure to Appear in Court: An indicator for whether the defendant fails to appear in court, as proxied by the issuance of a bench warrant.

Absconded: An indicator for whether the defendant absconded from the jurisdiction, defined as a case that is still pending but inactive, and for which the defendant failed to appear.

Rearrest: An indicator for whether the defendant was rearrested and charged in the same county at a given point in time.

New Conviction: An indicator for whether the defendant was convicted for another offense in the same county at a given point in time.

Wage Earnings: The individual's wages as reported by the employer to the IRS on Form W-2. This information is available whether or not the individual files a tax return, and is aggregated across jobs if the individual works more than one job during the year. All dollar amounts are in terms of year 2013 dollars and reported in thousands. We top- and bottom-code earnings in each year at the 99th and 1st percentiles, respectively, to reduce the influence of outliers.

Employed: An indicator for whether W-2 wages are greater than zero in a given year.
Adjusted Gross Income (AGI): Total household income from all sources (wage, interest, selfemployment, UI, etc.) as reported on the individual's tax return. This measure is only available if the individual files a tax return. For individuals who did not file a tax return, we impute adjusted gross income to equal W-2 wages + UI income. All dollar amounts are in terms of year 2013 dollars and reported in thousands. We top- and bottom-code earnings in each year at the 99th and 1st percentiles, respectively, to reduce the influence of outliers.

Any Income: An indicator for whether AGI is greater than zero in a given year.
Filed Return: An indicator for whether the individual filed a tax return in the given year.

UI Benefits: Amount of UI benefits the individual receives during the tax year, as reported to the IRS from the state UI agency. This measure is available whether the individual files a tax return or not. All dollar amounts are in terms of year 2013 dollars and reported in thousands. We top- and bottom-code earnings in each year at the 99th and 1st percentiles, respectively, to reduce the influence of outliers.

EITC Benefits: Amount of EITC claimed by the individual (and spouse if filing jointly) on his or her tax return. This measure is only available for individuals who file a tax return. All dollar amounts are in terms of year 2013 dollars and reported in thousands. We top- and bottom-code earnings in each year at the 99th and 1st percentiles, respectively, to reduce the influence of outliers.

Marriage: An indicator for whether an individual reports being married in a given year. We code this variable as missing if there is no tax return in a given year.

Mobility: An indicator for whether the zip code in the arrest data differs from the zip code on a tax return in a given year. Higher- and lower-income zip codes are defined using the IRS data. We code all mobility variables as missing if there is no tax return in a given year.

Matched to IRS data: Indicator for whether the 421,065 cases in our court data are matched to IRS data. We match the court data to administrative tax data from the IRS using first and last name, date of birth, gender, and state of residence. We were able to successfully match approximately 77 percent of individuals in the court data. Our match rate in Philadelphia is 81 percent and our match rate in Miami-Dade is 73 percent.

Missing Race: An indicator for whether defendant race is missing.

## Online Appendix C: Interpreting our LATE

This section includes additional details on how we calculate the number and characteristics of defendants who are always takers, never takers, and compliers in our sample.

Overview: Following Dahl et al. (2014), we define compliers as defendants whose pre-trial release decision would have been different had their case been assigned to the most lenient instead of the most strict judge:

$$
\pi_{c}=\operatorname{Pr}\left(\text { Released }_{i}=1 \mid Z_{i}=\bar{z}\right)-\operatorname{Pr}\left(\text { Released }_{i}=1 \mid Z_{i}=\underline{z}\right)=\operatorname{Pr}\left(\operatorname{Released}_{i}(\bar{z})>\operatorname{Released}_{i}(\underline{z})\right)
$$

where $\bar{z}$ represents the maximum value of our judge instrument (the most lenient judge) and $\underline{z}$ represents the minimum value of our instrument (the most strict judge).

Always takers are defendants who would always be released before trial regardless of the bail judge assigned to their case. Because of the monotonicity and independence assumptions, the fraction of always takers is given by the probability of being released pre-trial for the most strict judge:

$$
\pi_{a}=\operatorname{Pr}\left(\text { Released }_{i}=1 \mid Z_{i}=\underline{z}\right)=\operatorname{Pr}\left(\operatorname{Released}_{i}(\bar{z})=\operatorname{Released}_{i}(\underline{z})=1\right)
$$

Finally, never takers are defendants who would never be released before trial, with the fraction of never takers given by the probability of being detained pre-trial by the most lenient judge:

$$
\pi_{n}=\operatorname{Pr}\left(\text { Released }_{i}=0 \mid Z_{i}=\bar{z}\right)=\operatorname{Pr}\left(\operatorname{Released}_{i}(\bar{z})=\operatorname{Released}_{i}(\underline{z})=0\right)
$$

Number of Compliers: We calculate the shares of defendants in each category by looking at the pretrial release rates for defendants assigned to the "most lenient" and "most strict" judges. Following Dahl et al. (2014), we begin by defining the "most strict" judge as the bottom 1 percentile of judge leniency and the "most lenient" judge as the top 1 percentile of judge leniency.

In the first three columns of Table C.1, we estimate a local linear regression of pre-trial release on our residualized measure of judge leniency controlling for our exhaustive court-by-time fixed effects. Under this more flexible analog to our first stage equation, we find that 13 percent of our sample are compliers, 36 percent are never takers, and 51 percent are always takers.

In the last three columns of Table C.1, we estimate our linear specification of the first stage, given by Equation (4). Under this specification, we can recover $\pi_{c}$ as $\hat{\alpha_{1}}(\bar{z}-\underline{z}), \pi_{a}$ as $\hat{\alpha_{0}}+\hat{\alpha_{1}} \underline{z}$, and $\pi_{n}$ as $1-\hat{\alpha_{0}}-\hat{\alpha_{1}} \bar{z}$ where $\hat{\alpha_{0}}$ and $\hat{\alpha_{1}}$ are the estimated first stage coefficients. Under this linear specification, we find that 11 percent of our sample are compliers, 39 percent are never takers, and 50 percent are always takers. We also explore the sensitivity of the estimated share of compliers, always takers, and never takers to the exact choice of cutoff for the most lenient and most strict judge. Our results are robust to the particular model specification and cutoff.

Table C.1: Sample Share by Compliance Type

| Model Specification: | Local Linear Model |  |  | Linear Model |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Leniency Cutoff: | $1 \%$ | $1.5 \%$ | $2 \%$ | $1 \%$ | $1.5 \%$ | $2 \%$ |
| Compliers | 0.13 | 0.13 | 0.13 | 0.11 | 0.10 | 0.09 |
| Never Takers | 0.36 | 0.36 | 0.36 | 0.39 | 0.39 | 0.40 |
| Always Takers | 0.51 | 0.51 | 0.51 | 0.50 | 0.51 | 0.51 |

Characteristics of Compliers: We also characterize our population of compliers by observable characteristics, which can be recovered by calculating the fraction of compliers in different subsamples (Abadie 2003, Dahl et al. 2014). We find that compliers are significantly more likely to be charged with misdemeanor offenses and less likely to be charged with violent offenses compared to the sample average. Compliers are also somewhat more likely to have a prior offense from the past year.

Table C.2: Characteristics of Marginal Defendants

| White | $P[X=x]$ | $P[X=x \mid$ complier $]$ | $\frac{P[X=x \mid \text { complier }]}{P[X=x]}$ |
| :--- | :---: | :---: | :---: |
|  | 0.402 | 0.375 | 0.931 |
|  | $0.001)$ | $(0.017)$ | $(0.042)$ |
| Drug | 0.598 | 0.624 | 1.047 |
|  | $0.001)$ | $(0.017)$ | $(0.028)$ |
| Non-Drug | 0.274 | 0.301 | 1.099 |
|  | $0.001)$ | $(0.015)$ | $(0.054)$ |
| Violent | 0.726 | 0.699 | 0.963 |
|  | $(0.001)$ | $(0.015)$ | $(0.020)$ |
| Non-Violent | 0.173 | 0.010 | 0.058 |
|  | $(0.001)$ | $(0.012)$ | $(0.068)$ |
| Felony | 0.827 | 0.990 | 1.197 |
|  | $(0.001)$ | $(0.012)$ | $(0.014)$ |
| Misdemeanor | 0.459 | 0.318 | 0.692 |
|  | $(0.001)$ | $(0.016)$ | $(0.036)$ |
| Prior Last Year | 0.541 | 0.682 | 1.261 |
|  | $(0.001)$ | $(0.016)$ | $(0.030)$ |
| No Prior | 0.269 | 0.310 | 1.154 |
|  | $(0.001)$ | $(0.013)$ | $(0.049)$ |
| Employed | 0.731 | 0.690 | 0.943 |
|  | $(0.001)$ | $(0.013)$ | $(0.018)$ |
| Non-Employed | 0.475 | 0.457 | 0.963 |
|  | $(0.001)$ | $(0.017)$ | $(0.036)$ |
|  | 0.525 | 0.543 | 1.033 |
|  | $(0.001)$ | $(0.017)$ | $(0.033)$ |

Note: This table presents the sample distribution, complier distribution, and relative likelihood for different subgroups. Bootstrapped standard errors in parentheses are obtained using 500 replications.

## Online Appendix D: Cost-Benefit Analysis

Table D. 1 below presents our relevant two-stage least squares estimates and lower and upper bounds on each cost.

## A. Social Benefits of Release

Direct Costs of Jail: We estimate the cost savings from jail using marginal costs of incarceration. According to Department of Corrections, the marginal daily cost of keeping someone in jail in Philadephia is $\$ 15$ (compared to an average daily cost of $\$ 95$.) According to the Miami-Dade corrections system, the average daily cost of housing an inmate in jail is $\$ 155$ (see, for example, http://www.miamiherald.com/news/local/community/miami-dade/article1985206.html). We are unable to find any estimates of the marginal daily cost in Miami-Dade, so we use the ratio between marginal and average costs in Philadelphia and assume a marginal daily cost of $\$ 25$. Combining these estimates across cities, we assume an average marginal jail cost of $\$ 20$ per day. Taking our two-stage least squares estimates on the number of days incarcerated, we find that the marginal released defendant spends 14.2 days less in jail, saving taxpayers $\$ 204$ in direct administrative costs.

Costs of Future Crime: We estimate the net impact of crime, which combines short-run incapacitation effects and medium-term criminogenic effects. To capture the fact that the social costs of crime differ across crime type, we separately estimate our net crime results by major crime type. Over the first two years after the bail hearing, the marginal released defendant is rearrested for 0.009 fewer murders, 0.004 more rapes, 0.062 more robberies, 0.066 more assaults, 0.076 more burglaries, 0.053 more thefts, 0.272 fewer drug crimes, and 0.037 more DUIs. Using the social costs by crime type compiled by Mueller-Smith (2015), we estimate a benefit to pre-trial release ranging from $\$ 26,123$ to $\$ 70,104$.

Costs of Decreased Earnings and Social Assistance: Taking our two-stage least squares estimates, the marginal released defendant earns roughly $\$ 948$ per year and has $\$ 293$ more in UI income and $\$ 209$ in EITC income, for a total average annual income gain of $\$ 1,450$, 10.1 percent of mean earnings in the sample. Following Chetty et al. (2014), we assume that the percentage gain in earnings remains constant over the working lifecycle and discount annual earnings at a 3 percent discount rate back to age 34, the mean age in the sample. Under these assumptions, the marginal released defendant gains $\$ 29,001$ over a lifetime relative to the marginal detained defendant.

## B. Social Costs of Release

Failure to Appear: There are very few estimates of the costs of re-apprehending a defendant who misses a required court appearance, but we follow Abrams and Rohlfs (2011) in assuming that the cost is roughly five percent of the bail amount, or approximately $\$ 625$ in our sample, and that the cost of additional bail hearings is roughly $\$ 560$ (Bierie 2007) to equal $\$ 1,185$. Combined with our two-stage least squares estimates which find that the marginal released defendant is 15.6 percentage
points more likely to fail to appear, the expected cost of failing to appear is $\$ 185$ for the marginal released defendant.

## C. Cost-Benefit Calculation

We combine our estimates of the social costs and benefits of pre-trial release with the monetary costs associated with each. Based on these assumptions, the lower-bound net benefit of release for the marginal individual is $\$ 204+\$ 26,123+\$ 29,001-\$ 185=\$ 55,143$. The upper-bound net benefit is $\$ 204+\$ 70,104+\$ 29,001-\$ 185=\$ 99,124$.

Table D.1: Details of Cost-Benefit Calculation

|  | 2SLS <br> Estimate | Lower <br> Bound | Upper Bound |
| :---: | :---: | :---: | :---: |
| Panel A: Days in Jail | (1) | (2) | (3) |
| Days Detained Before Trial | $\begin{array}{r} -10.234 \\ (5.398) \end{array}$ | \$20 | \$20 |
| Panel B: Future Crime (Counts) |  |  |  |
| Murder | $\begin{gathered} -0.009 \\ (0.008) \end{gathered}$ | \$4,301,817 | \$11,559,713 |
| Rape | $\begin{gathered} 0.004 \\ (0.007) \end{gathered}$ | \$187,680 | \$343,859 |
| Robbery | $\begin{gathered} 0.062 \\ (0.026) \end{gathered}$ | \$73,196 | \$333,701 |
| Assault | $\begin{gathered} 0.066 \\ (0.052) \end{gathered}$ | \$41,046 | \$109,903 |
| Burglary | $\begin{gathered} 0.076 \\ (0.061) \end{gathered}$ | \$50,291 | \$50,291 |
| Theft | $\begin{gathered} 0.053 \\ (0.120) \end{gathered}$ | \$9,598 | \$9,974 |
| Drug Crime | $\begin{gathered} -0.272 \\ (0.173) \end{gathered}$ | \$2,544 | \$2,544 |
| DUI | $\begin{gathered} 0.037 \\ (0.026) \end{gathered}$ | \$25,842 | \$25,842 |
| Panel C: Earnings and Social Assistance (Thousands) |  |  |  |
| Earnings | $\begin{gathered} 0.948 \\ (1.128) \end{gathered}$ |  |  |
| UI | $\begin{gathered} 0.293 \\ (0.193) \end{gathered}$ |  |  |
| EITC | $\begin{gathered} 0.209 \\ (0.127) \end{gathered}$ |  |  |
| Panel D: Failure to Appear Failure to Appear | $\begin{gathered} 0.156 \\ (0.046) \\ \hline \end{gathered}$ | \$1,185 | \$1,185 |

