Heterogeneous Impacts of Sentencing Decisions

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IRP - SRW
The combined state and federal imprisonment rate of 419 sentenced prisoners per 100,000 U.S. residents in 2019 was the lowest imprisonment rate since 1995. The imprisonment rate in 2019 marked a 17% decrease from 2009, a 3% decrease from 2018, and the 11th consecutive annual decrease. The imprisonment rate—the portion of U.S. residents who are in prison—is based on prisoners sentenced to more than one year.

Changes in the rate over time

The imprisonment rate rose 23% from 1995 to its peak in 2007 and 2008 (506 sentenced prisoners per 100,000 residents in both years). It then fell back below the 1996 level (which was 427 sentenced prisoners per 100,000 residents) in 2019.

The total prison population in the U.S. declined from 1,464,400 at year-end 2018 to 1,430,800 at year-end 2019, a 2% decrease. This marked the 11th consecutive annual decrease of at least 1% in the prison population. At year-end 2019, the prison population had declined 11% from its peak of 1,615,500 prisoners in 2009.

Imprisonment rate by race/ethnic group

Across the decade from 2009 to 2019, the imprisonment rate fell 29% among black residents, 24% among Hispanic residents, and 12% among white residents. In 2019, the imprisonment rate of black residents was the lowest it has been in 30 years, since 1989.

At year-end 2019, there were 1,096 sentenced black prisoners per 100,000 black residents, 525 sentenced Hispanic prisoners per 100,000 Hispanic residents, and 214 sentenced white prisoners per 100,000 white residents in the U.S. Among sentenced state prisoners at year-end 2018 (the most recent data available), a larger percentage of black (62%) and Hispanic (62%) prisoners than white prisoners (48%) were serving time for a violent offense.

Imprisonment rate by type of crime

An estimated 14% of sentenced state prisoners were serving time for murder or non-negligent manslaughter at year-end 2018, and 13% were serving time for rape or sexual assault. At the end of fiscal-year 2019, 46% of sentenced federal prisoners were serving time for a drug offense (99% for drug trafficking), and 8% were serving time for a violent offense.

Private facilities and juveniles

In 2019, privately operated facilities held 7% of state prisoners and 16% of federal prisoners. Public and private adult prisons held 653 prisoners age 17 or younger at year-end 2019, down 11% from the 730 held at year-end 2018.

The full report (Prisoners in 2019, NCJ 255115), related documents, and additional information about the Bureau of Justice Statistics are available on the BJS website at www.bjs.gov.
Is There Any Public Safety Benefit?

- Aizer and Doyle (2015) - juvenile incarceration in Cook County appears criminogenic
- Rose and Shem-Tov (2018) - adult incarceration induced by mandatory sentencing thresholds reduces recidivism (likely through incapacitation)
- Mueller-Smith (2015) - short run incapacitation but long-run increase in re-offending rates
- Roodman (2017) - survey concludes that beyond incapacitation effect, no clear evidence concerning impacts on re-offending rates.
Focus of Existing Work

Most of previous literature addresses individual behavior

Results do not directly address equilibrium impacts of sentencing policy changes

- Elasticity of criminal supply (?)
- Community spillovers (?)
Our Contribution

Large randomly assigned samples for Cook County, IL allow us to explore heterogeneous responses to treatment

- First vs Repeat offenders
- Drug vs Non-Drug
Key Findings

Clear evidence of incapacitation in all samples

Among first-offenders overall (non-drug in particular) - incapacitation and deterrence.

Among repeat offenders and first-offenders charged with drug crimes - incapacitation but no lasting deterrence.

Among repeat offenders and first-time drug offenders, incarceration now increases the likelihood of being incarcerated 5-7 years later.

Last result may reflect more than impacts of incarceration on recidivism. IL parole officers have police powers and the capacity to bring technical charges that result in parole revocation.
Drug arrests are concentrated among black offenders in high-crime areas of the city? Existing rehabilitation and re-entry programs are not having great success with offenders from disadvantaged communities.

Are differences in recidivism driving heterogeneity in our measured impacts of incarceration, or are differences in policing also important?
Data

1984-2018 : Case records from Clerk of Court Cook County (Criminal Division)
- 70K cases filed at Leighton Criminal Courthouse: 1990-2007
- 44 judges
- All cases randomly assigned by computer program

1990-2015 : Admission and Exit Records from Illinois Department of Corrections
- New court commitments: Cook versus Not Cook
- Mandatory Supervised Release (MSR/Parole) revocations: technical or new case
Important Features of the System

- Drug and other Specialty Courts do not receive randomized cases.
- Convicted offenders must receive a sentence
  - Probation
  - CCDOC Bootcamp (4 month IN, 8 months supervision)
  - IDOC
- An offender on probation returns to the judge that placed him on probation.
- Once an offender enters IDOC system, relationship with sentencing judge is over.
- **Mandatory** Supervised Release is determined by class of offense, 1, 2, or 3 years.
- MSR officers have police powers. Probation officers do not.
- Prison Review Board: parallel justice system for MSR offenders.
Imputations and Missing Records

What we do

- Impute charges for IDOC court commitments from other counties
- Impute prior convictions from IDOC admission or exit

What we cannot do

- Observe charges in other states
- Observe charges in other counties that do not result in prison
- Observe charges in Cook before 1984 with no IDOC record after 1990

We chose not to count Technical MSR or Probation Violations

- IL Probation officers have no police powers
- IDOC spells from technical MSR violations much shorter than MSR/New Charge spells
Empirical Model - 2SLS

\[ \tau_{j(i,t)} = z_{j(i,t)}\delta + x_{it}\gamma + e_{it} \quad \text{1st Stage} \]

\[ y_{ij(i,t)s} = \tau_{j(i,t)}\theta_s + x_{it}\beta_s + v_{its} \quad \text{2nd Stage} \]

- \( j(i, t) \) - returns the judge \( j \) assigned to defendant \( i \) at time \( t \)
- \( \tau_{j(i,t)} \) - the treatment
- \( y_{ij(i,t)s} \) - recidivism outcome for horizon \( s \)
- \( z_{j(i,t)} \) - stringency of judge \( j(i, t) \)
- \( x_{it} \) defendant characteristics
- \( e_{it} \) unobserved factors (sentencing)
- \( v_{its} \) unobserved factors (recidivism)
Stringency Measure

\[ z_{j(i,t)} \] - stringency of judge \( j(i, t) \) is a LOM measure

Our main treatment measure is an indicator for an incarceration sentence.

For each, we

- run the first-stage separately for first vs repeat offenders
- capture the residuals
- form residual LOM = \( z_{j(i,t)} \)
In the first stage, we condition on a full set of class*year interactions.

- Not all judges serve in all 18 years
- Randomization takes place daily
- Determinate sentencing rules are linked to class designations
- Some designation rules change over time
- These interaction terms capture variation in constraints on judicial discretion and possibly how prosecutors charge cases holding constant their characteristics
LOM: FIRST OFFENDERS

![Average Residual vs. Judge Number](chart.png)
LOM: REPEAT OFFENDERS

![Graph showing average residuals vs judge number]
Reduced Form Results

For each specification, we also include Reduced Form (RF) results

\[ y_{ij}(i,t)_s = z_{j(i,t)} \alpha_s + x_{it\pi_s} + u_{its} \]

- results provide another metric to assess power/rank
- they address an interesting counterfactual directly
- in contrast to 2SLS, sampling error in LOM creates a estimated regressor concern about standard errors. So far, we have tried Bootstrapping the LOM measures and creating Bootstrap replication samples of our estimated RF coefficients. Our Bootstrap confidence intervals are smaller than those based on the HAC standard errors we report.
Key Observation About Differential Survivorship

- $a_s$ - age at sentencing
- $a$ - current age
- $n$ - current duration without a new charge
- $\delta$ - sentence, with $\delta = 0$ for probation
- incapacitation is complete during $\delta$
- $s(n, a) = s(a)$ is probability of surviving current period with no charge
  - incarceration history does not matter
  - no indirect impacts of incarceration through $n$
  - only age, $a$, matters
  - $0 < s(a) < 1$
- $S(t|a_s, \delta)$ survivor function at $t > \delta$
If Incapacitation is ONLY Impact of Prison...

\[ \Delta(t|a_s, \delta) = S(t| a_s, \delta > 0) - S(t| a_s, \delta = 0) > 0 \quad \forall t > \delta \]

\[ \Delta(t|a_s, \delta) - \Delta(t + 1|a_s, \delta) > 0 \quad \forall t > \delta \]

1. Incapacitation creates a gap in risk exposure
2. \( 0 < 1 - s(a) < 1 \) creates more new charges w/ larger risk set
3. Size gap between remaining risk sets shrinks w/ time

\[ \Delta(t|a_s, \delta) \text{ weakly increasing w/ } t \implies \text{deterrence (sufficient)} \]
\[ \Delta(t|a_s, \delta) < 0 \implies \text{criminogenic effects (sufficient)} \]

Spoiler alert: we never get negative and statistically significant But, the sample w/ negative estimated impacts contains other “criminogenic” outcomes
Sample Selection Rules

Rules for selecting Analysis Sample

- Case in a regular **call** - No Diversion or Specialty Courts
- Key judge is active. Floaters cover vacations, sick leaves, etc.
- Judge/call case count > 500 during 1990-2007
- Not filed during probation (no new assignment)
- Not filed while in IDOC
- Exclude cases with most severe charge:
  - Fraud against the state (different process)
  - Murder (heater?)
  - Sex Crimes (heater?)
  - Armed Violence (heater?)
  - Traffic, contempt of court, etc
Impact of Incarceration on First Offenders

<table>
<thead>
<tr>
<th>Y</th>
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<th>RF</th>
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</tr>
</thead>
<tbody>
<tr>
<td>New Charge &lt;12m</td>
<td>0.19</td>
<td>-0.158 (0.006) [p&lt;0.01]</td>
<td>-0.291 (0.069) [p&lt;0.01]</td>
<td>-0.356 (0.080) [p&lt;0.01]</td>
</tr>
<tr>
<td>New Charge &lt;24m</td>
<td>0.31</td>
<td>-0.142 (0.010) [p&lt;0.01]</td>
<td>-0.301 (0.097) [p&lt;0.01]</td>
<td>-0.367 (0.107) [p&lt;0.01]</td>
</tr>
<tr>
<td>New Charge &lt;36m</td>
<td>0.38</td>
<td>-0.109 (0.008) [p&lt;0.01]</td>
<td>-0.271 (0.084) [p&lt;0.01]</td>
<td>-0.330 (0.094) [p&lt;0.01]</td>
</tr>
<tr>
<td>New Charge &lt;48m</td>
<td>0.43</td>
<td>-0.081 (0.008) [p&lt;0.01]</td>
<td>-0.250 (0.090) [p&lt;0.01]</td>
<td>-0.303 (0.101) [p&lt;0.01]</td>
</tr>
<tr>
<td>New Charge &lt;60m</td>
<td>0.47</td>
<td>-0.063 (0.008) [p&lt;0.01]</td>
<td><strong>-0.238 (0.102) [p=0.02]</strong></td>
<td><strong>-0.291 (0.116) [p=0.01]</strong></td>
</tr>
<tr>
<td>New Charge &lt;72m</td>
<td>0.50</td>
<td>-0.050 (0.009) [p&lt;0.01]</td>
<td><strong>-0.235 (0.099) [p=0.02]</strong></td>
<td><strong>-0.285 (0.113) [p=0.01]</strong></td>
</tr>
<tr>
<td>New Charge &lt;84m</td>
<td>0.52</td>
<td>-0.040 (0.008) [p&lt;0.01]</td>
<td>-0.182 (0.083) [p=0.03]</td>
<td><strong>-0.222 (0.094) [p=0.02]</strong></td>
</tr>
</tbody>
</table>

\( \bar{\tau} = .19, \text{ Standard Deviation of LOM: .028, F-Statistic: 239, N: 37,080} \)

\( f(s) : 0 \text{(81%)}, (0, 12] \text{(8%)}, (12, 24] \text{(4%)}, (24, 36] \text{(4%)}, (36, 48] \text{(2%)}, (48, 60] \text{(1%)}, [60, \infty) \text{(1%)}) \)

**Bold/Bold Italics - significant differences First v Repeat**

Incapacitation, but 48-72 results suggest deterrence. Bhuller et al (2020) produce a similar result using Norwegian data.
Impact of Incarceration on Repeat Offenders

<table>
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<td>New Charge &lt;12m</td>
<td>0.14</td>
<td>-0.189 (0.007) [p&lt;0.01]</td>
<td>-0.203 (0.068) [p&lt;0.01]</td>
<td>-0.230 (0.074) [p&lt;0.01]</td>
</tr>
<tr>
<td>New Charge &lt;24m</td>
<td>0.31</td>
<td>-0.152 (0.008) [p&lt;0.01]</td>
<td>-0.159 (0.081) [p=0.06]</td>
<td>-0.179 (0.089) [p=0.04]</td>
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<tr>
<td>New Charge &lt;36m</td>
<td>0.44</td>
<td>-0.096 (0.008) [p&lt;0.01]</td>
<td>-0.181 (0.073) [p=0.02]</td>
<td>-0.204 (0.080) [p=0.01]</td>
</tr>
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<td>New Charge &lt;48m</td>
<td>0.52</td>
<td>-0.058 (0.008) [p&lt;0.01]</td>
<td>-0.095 (0.063) [p=0.14]</td>
<td>-0.105 (0.070) [p=0.14]</td>
</tr>
<tr>
<td>New Charge &lt;60m</td>
<td>0.58</td>
<td>-0.039 (0.008) [p&lt;0.01]</td>
<td><strong>-0.009 (0.072) [p=0.90]</strong></td>
<td><strong>-0.007 (0.081) [p=0.93]</strong></td>
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<tr>
<td>New Charge &lt;72m</td>
<td>0.62</td>
<td>-0.022 (0.008) [p&lt;0.01]</td>
<td><strong>-0.002 (0.067) [p=0.98]</strong></td>
<td><strong>0.001 (0.075) [p=0.99]</strong></td>
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<tr>
<td>New Charge &lt;84m</td>
<td>0.65</td>
<td>-0.012 (0.008) [p=0.13]</td>
<td>-0.008 (0.068) [p=0.91]</td>
<td><strong>-0.006 (0.076) [p=0.94]</strong></td>
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$\tau = .66$, Standard Deviation of LOM: .043, F-Statistic: 699, N: 33,515

$f(s) : 0 (34\%), (0,12] (35\%), (12,24] (14\%), (24,36] (10\%), (36,48] (3\%), (48,60] (2\%), [60,\infty) (2\%)$

**Bold/Bold Italics - significant differences First v Repeat**

Patterns do not suggest effective deterrence
### Impact of Incarceration: First Offenders - No Drug

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>New Charge &lt;12m</td>
<td>0.16</td>
<td>-0.138 (0.007)</td>
<td>[p&lt;0.01]</td>
<td>-0.264 (0.068)</td>
<td>[p&lt;0.01]</td>
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<td>-0.339 (0.092)</td>
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<td>New Charge &lt;24m</td>
<td>0.26</td>
<td>-0.121 (0.013)</td>
<td>[p&lt;0.01]</td>
<td>-0.281 (0.088)</td>
<td>[p&lt;0.01]</td>
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<td>-0.360 (0.123)</td>
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<tr>
<td>New Charge &lt;36m</td>
<td>0.34</td>
<td>-0.073 (0.012)</td>
<td>[p&lt;0.01]</td>
<td>-0.237 (0.094)</td>
<td>[p=0.02]</td>
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<td>-0.305 (0.129)</td>
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<tr>
<td>New Charge &lt;48m</td>
<td>0.39</td>
<td>-0.044 (0.011)</td>
<td>[p&lt;0.01]</td>
<td>-0.218 (0.092)</td>
<td>[p=0.02]</td>
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<td>-0.281 (0.124)</td>
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<tr>
<td>New Charge &lt;60m</td>
<td>0.43</td>
<td>-0.024 (0.012)</td>
<td>[p=0.04]</td>
<td>-0.254 (0.092)</td>
<td>[p&lt;0.01]</td>
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<td>-0.332 (0.121)</td>
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<tr>
<td>New Charge &lt;72m</td>
<td>0.45</td>
<td>-0.008 (0.012)</td>
<td>[p=0.50]</td>
<td>-0.308 (0.092)</td>
<td>[p&lt;0.01]</td>
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<td>-0.399 (0.124)</td>
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<tr>
<td>New Charge &lt;84m</td>
<td>0.47</td>
<td>0.002 (0.012)</td>
<td>[p=0.85]</td>
<td>-0.285 (0.078)</td>
<td>[p&lt;0.01]</td>
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<td>-0.371 (0.107)</td>
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\(\bar{\tau} = .23\), Standard Deviation of LOM: .028, F-Statistic: 78, N: 21,528

\(f(s) : 0\ (77\%),\ (0, 12] \ (9\%),\ (12, 24] \ (5\%),\ (24, 36] \ (5\%),\ (36, 48] \ (2\%),\ (48, 60] \ (1\%),\ [60, \infty) \ (1\%)\)
## Impact of Incarceration: First Offenders - Drug

<table>
<thead>
<tr>
<th></th>
<th>(\bar{Y})</th>
<th>OLS</th>
<th>RF</th>
<th>2SLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Charge &lt;12m</td>
<td>0.24</td>
<td>-0.159 (0.009) [p&lt;0.01]</td>
<td>-0.317 (0.108) [p&lt;0.01]</td>
<td>-0.375 (0.107) [p&lt;0.01]</td>
</tr>
<tr>
<td>New Charge &lt;24m</td>
<td>0.37</td>
<td>-0.128 (0.012) [p&lt;0.01]</td>
<td>-0.310 (0.158) [p=0.06]</td>
<td>-0.363 (0.162) [p=0.03]</td>
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<tr>
<td>New Charge &lt;36m</td>
<td>0.45</td>
<td>-0.115 (0.011) [p&lt;0.01]</td>
<td>-0.289 (0.156) [p=0.07]</td>
<td>-0.337 (0.154) [p=0.03]</td>
</tr>
<tr>
<td>New Charge &lt;48m</td>
<td>0.50</td>
<td>-0.092 (0.012) [p&lt;0.01]</td>
<td>-0.268 (0.169) [p=0.12]</td>
<td>-0.307 (0.176) [p=0.08]</td>
</tr>
<tr>
<td>New Charge &lt;60m</td>
<td>0.53</td>
<td>-0.081 (0.012) [p&lt;0.01]</td>
<td>-0.188 (0.190) [p=0.33]</td>
<td>-0.214 (0.208) [p=0.30]</td>
</tr>
<tr>
<td>New Charge &lt;72m</td>
<td>0.56</td>
<td>-0.076 (0.011) [p&lt;0.01]</td>
<td>-0.114 (0.168) [p=0.50]</td>
<td>-0.125 (0.187) [p=0.50]</td>
</tr>
<tr>
<td>New Charge &lt;84m</td>
<td>0.58</td>
<td>-0.070 (0.011) [p&lt;0.01]</td>
<td>-0.024 (0.161) [p=0.88]</td>
<td>-0.022 (0.185) [p=0.91]</td>
</tr>
</tbody>
</table>

\(\bar{\tau} = .13\), Standard Deviation of LOM: .028, F-Statistic: 50, N: 15,552

\(f(s) : 0 (87\%), (0, 12] (6\%), (12, 24] (3\%), (24, 36] (2\%), (36, 48] (1\%), (48, 60] (0\%), [60, \infty) (1\%)\)
### Impact of Incarceration: Repeat Offenders - No Drug

<table>
<thead>
<tr>
<th>New Charge &lt;12m</th>
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</tr>
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<tbody>
<tr>
<td>0.12</td>
<td>-0.203 (0.010)</td>
<td>[p&lt;0.01]</td>
<td>-0.142 (0.075)</td>
<td>[p=0.06]</td>
</tr>
<tr>
<td>New Charge &lt;24m</td>
<td>0.28</td>
<td>-0.168 (0.010)</td>
<td>[p&lt;0.01]</td>
<td>-0.195 (0.086)</td>
</tr>
<tr>
<td>New Charge &lt;36m</td>
<td>0.40</td>
<td>-0.108 (0.011)</td>
<td>[p&lt;0.01]</td>
<td>-0.207 (0.085)</td>
</tr>
<tr>
<td>New Charge &lt;48m</td>
<td>0.49</td>
<td>-0.068 (0.011)</td>
<td>[p&lt;0.01]</td>
<td>-0.155 (0.085)</td>
</tr>
<tr>
<td>New Charge &lt;60m</td>
<td>0.55</td>
<td>-0.043 (0.010)</td>
<td>[p&lt;0.01]</td>
<td>-0.053 (0.084)</td>
</tr>
<tr>
<td>New Charge &lt;72m</td>
<td>0.60</td>
<td>-0.023 (0.010)</td>
<td>[p=0.02]</td>
<td>-0.060 (0.071)</td>
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<tr>
<td>New Charge &lt;84m</td>
<td>0.63</td>
<td>-0.009 (0.010)</td>
<td>[p=0.35]</td>
<td>-0.074 (0.070)</td>
</tr>
</tbody>
</table>

\( \bar{\tau} = 0.70, \) Standard Deviation of LOM: 0.043, F-Statistic: 29, N: 17,959

\( f(s) : 0 (30\%), (0, 12] (32\%), (12, 24] (15\%), (24, 36] (12\%), (36, 48] (5\%), (48, 60] (3\%), [60, \infty) (4\%) \)
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<td>0.16</td>
<td>-0.174 (0.008) [p&lt;0.01]</td>
<td>-0.270 (0.104) [p=0.01]</td>
<td>-0.243 (0.095) [p=0.01]</td>
</tr>
<tr>
<td>New Charge &lt;24m</td>
<td>0.35</td>
<td>-0.130 (0.011) [p&lt;0.01]</td>
<td>-0.118 (0.114) [p=0.30]</td>
<td>-0.104 (0.099) [p=0.29]</td>
</tr>
<tr>
<td>New Charge &lt;36m</td>
<td>0.48</td>
<td>-0.075 (0.011) [p&lt;0.01]</td>
<td>-0.160 (0.100) [p=0.12]</td>
<td>-0.142 (0.085) [p=0.09]</td>
</tr>
<tr>
<td>New Charge &lt;48m</td>
<td>0.56</td>
<td>-0.038 (0.011) [p&lt;0.01]</td>
<td>-0.034 (0.094) [p=0.72]</td>
<td>-0.027 (0.082) [p=0.74]</td>
</tr>
<tr>
<td>New Charge &lt;60m</td>
<td>0.61</td>
<td>-0.026 (0.010) [p=0.02]</td>
<td>0.030 (0.087) [p=0.73]</td>
<td>0.031 (0.078) [p=0.69]</td>
</tr>
<tr>
<td>New Charge &lt;72m</td>
<td>0.65</td>
<td>-0.013 (0.009) [p=0.16]</td>
<td>0.057 (0.089) [p=0.52]</td>
<td>0.057 (0.081) [p=0.48]</td>
</tr>
<tr>
<td>New Charge &lt;84m</td>
<td>0.68</td>
<td>-0.008 (0.009) [p=0.39]</td>
<td>0.064 (0.094) [p=0.50]</td>
<td>0.062 (0.086) [p=0.47]</td>
</tr>
</tbody>
</table>

$\bar{\tau} = .62$, Standard Deviation of LOM: .043, F-Statistic: 56, N: 15,556

$f(s) : 0 (38\%), (0, 12] (39\%), (12, 24] (12\%), (24, 36] (8\%), (36, 48] (2\%), (48, 60] (1\%), [60, \infty) (1\%)$
## Impact of INC on IN-PRISON (5-7): First Offenders

<table>
<thead>
<tr>
<th>Sample</th>
<th>( \bar{Y} )</th>
<th>OLS</th>
<th>RF</th>
<th>IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firsts</td>
<td>0.26</td>
<td>0.133 (0.008) [p&lt;0.01]</td>
<td>0.080 (0.076) [p=0.30]</td>
<td>0.098 (0.096) [p=0.31]</td>
</tr>
<tr>
<td>Firsts Drug</td>
<td>0.26</td>
<td>0.103 (0.011) [p&lt;0.01]</td>
<td>0.251 (0.111) [p=0.03]</td>
<td>0.294 (0.140) [p=0.04]</td>
</tr>
<tr>
<td>Firsts Not Drug</td>
<td>0.25</td>
<td>0.140 (0.009) [p&lt;0.01]</td>
<td>-0.045 (0.092) [p=0.63]</td>
<td>-0.059 (0.119) [p=0.62]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sample</th>
<th>( \bar{Y} )</th>
<th>OLS</th>
<th>RF</th>
<th>IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repeats</td>
<td>0.44</td>
<td>0.114 (0.006) [p&lt;0.01]</td>
<td>0.135 (0.063) [p=0.04]</td>
<td>0.154 (0.072) [p=0.03]</td>
</tr>
<tr>
<td>Repeats Drug</td>
<td>0.41</td>
<td>0.085 (0.009) [p&lt;0.01]</td>
<td>0.196 (0.088) [p=0.03]</td>
<td>0.179 (0.073) [p=0.02]</td>
</tr>
<tr>
<td>Repeats Not Drug</td>
<td>0.46</td>
<td>0.129 (0.009) [p&lt;0.01]</td>
<td>0.069 (0.070) [p=0.33]</td>
<td>0.100 (0.108) [p=0.35]</td>
</tr>
</tbody>
</table>
Fitted Reentry Hazards by MSR Spell Length

60-day Lag Moving Average

Days since MSR start

Reentry Hazard

0.0002 0.0004 0.0006 0.0008 0.001 0.0012

0 0.0002 0.0004 0.0006 0.0008 0.001 0.0012

0 500 1000 1500

1-Year 2-Year 3-Year

1-Year 2-Year 3-Year

MSR as Fly Paper
Proportion of Reentries from Technical MSR Violations

60-day Lag Moving Average

Days since MSR start

Proportion Technical MSR

1-Year 2-Year 3-Year

0 0.1 0.2 0.3 0.4 0.5

0 1000

0 500
Lessons So Far

Separate Models for First versus Repeat Offender

- dynamic selection on unobserved traits
- MSR (at least in IL) shares sentencing power with judge

Prison deters First Offenders (Non-Drug especially)

Prison creates incapacitation and little else among drug offenders and repeat offenders

Initial Prison sentences may promote future time in prison for young persons, especially those involved in drug trade.
Drug Arrests and the Police Powers of Parole Officers may be forms of over-policing that contribute to these outcomes.

- 13% of offenders sent to prison return to prison for a technical violation of parole during initial MSR supervision.
- Rate is three times lower for probationers
- Roughly 40% of new prison admissions in IL involve people on parole
- How many involving new charges would not have occurred with an “extra” set of police?
- Should policing/re-entry and rehabilitation be bundled in one job?

Lofstrom, Raphael, Grattet (2014) results suggest that parole reform is an important police reform agenda.