The Effects of Post-Release Supervision on Crime and Recidivism
Abigail R. Banan
Purdue University

**Justice Reinvestment Act of 2011**
- Crime Committed Before December 1, 2011: Individuals were released from prison without supervision or restrictions
- Crime Committed On or After December 1, 2011: Individuals were automatically given nine months of post-release supervision
  - If they violated the terms of their supervision, they were sent back to prison for three to nine months depending on the severity of their violation
  - These violations could be technical violations or criminal violations

**Research Questions**
- How does post-release supervision impact recidivism?
- Which types of crimes, if any, are affected by post-release supervision?
- Does post-release supervision create incapacitation and/or deterrent effects?
- Is the post-release supervision program cost effective?

**Empirical Approach**
Regression Discontinuity in Time Model:

\[ \text{Outcome}_i = \alpha + \beta \text{PRS}_i + f(\text{Crime Date}_i) \times X_i + \epsilon_i \]

- \( \text{Outcome}_i \) is the criminal outcome for individual \( i \) upon their release from prison.
- \( \text{PRS}_i \) indicates whether the individual was given post-release supervision.
- \( f(\text{Crime Date}_i) \) is a polynomial function of the crime date.
- \( X_i \) is a set of controls that include race, gender, age, prior record level, crime category, felony crime classification, and special sanctions.
- Standard errors are clustered at the crime date level.

**First Stage Results: Changes to Sentencing**

**Main Results: Recidivism**

**Table 2. Regression Discontinuity Recidivism Results**

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Return to Prison</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any Reason</td>
<td>0.000**</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>Technical Violation</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>Violent</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>Property</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
</tbody>
</table>

**Mechanisms: Incapacitation & Deterrence**

**Table 3. Bounding Exercise to Estimate Potential Mechanisms**

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper Bound</td>
<td>0.158</td>
<td>0.109</td>
<td>0.136</td>
</tr>
<tr>
<td>Lower Bound</td>
<td>0.010</td>
<td>0.109</td>
<td>0.109</td>
</tr>
<tr>
<td>Actual Difference</td>
<td>0.048</td>
<td>0.009</td>
<td>0.027</td>
</tr>
</tbody>
</table>

- **Key Takeaway:** Post-release supervision causes individuals to return to prison more, but this is driven by technical violations. Supervision reduces crime during the period of supervision; specifically, violent crime and property crime.

**Program Cost-Benefit Analysis**

**Key Takeaway:** Post-release supervision creates larger deterrent effects relative to incapacitation effects.

**Contact**
Abigail R. Banan
Purdue University
Email: abanan@purdue.edu
Website: www.abigailbanan.com
Phone: (765) 513-4022

**To read the paper:**
1. Point smart phone camera at the QR code.
2. Tap the link.