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Does Supervision After Release From Prison Reduce Re-offending?

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Currently, in England and Wales, adult prisoners serving a sentence of 12 months or more are supervised by the Probation Service "on licence" upon release from custody, whilst those serving a sentence of less than 12 months are not. This paper summarises work exploring the use of a Regression Discontinuity Design to assess the impact of this supervision on re-offending rates. The analysis compares the re-offending rates of offenders either side of the 12 month licence supervision threshold. It is based on offenders with one or no previous convictions and sentenced to around a year in custody.

Key findings

- For offenders with one or no previous convictions, the one-year re-offending rate is between 14 and 17 percentage points lower for offenders on licence than similar offenders not on licence.
- Extending the analysis to a two-year re-offending rate increased the difference between the offenders on licence and offenders not on licence to between 16 and 20 percentage points.
- These estimates are statistically significant at the 5% level. Whilst none of the results relating to the three-year re-offending rate were statistically significant at the 5% level, the size of the re-offending reductions are only a little smaller in absolute terms than for the one and two year re-offending reductions. More generally, the estimates are less reliable and subject to more uncertainty the longer the time period from release.
- The analysis suggests that a period of probation supervision after release from custody reduces the re-offending rate of offenders sentenced to around one year in custody and with one or no previous convictions.

Introduction

In England and Wales, an individual sentenced to custody is usually automatically released at the mid-point of their sentence.¹ Currently, if the sentence length is less than 12 months, adult offenders are not supervised by the Probation Service upon release. In contrast, prisoners with a sentence length of 12 months and over will serve the remainder of their sentence in the community under the supervision of the Probation Service. This is commonly referred to as being “on licence”.

The purposes of supervision are:²

1. Protection of the public;
2. prevention of re-offending;
3. securing the successful re-integration of the prisoner into the community.

It is therefore expected that being on licence should have a beneficial impact on re-offending.

Research Aims

This study aimed to assess the impact of supervision on re-offending rates. It does this by comparing the re-offending rates of offenders either side of the 12 month sentencing threshold for post-release supervision.

Methodology

The study uses a Regression Discontinuity Design (RDD) as the analytical framework to analyse groups of offenders sentenced to up to three months either side of the 12 month sentencing threshold to establish the extent to which being on licence has an impact on rates of re-offending.

RDD uses a threshold above which an intervention is assigned, and by comparing data points lying closely on either side of the threshold, it is possible to estimate the average impact of the intervention.

In the context of this analysis, the threshold is set at a sentence length of 365 days, above which prisoners are supervised and below which they are not. The analysis applies regression techniques to estimate the impact of supervision by observing the re-offending rates above and below the sentencing threshold.

Data

The analysis draws on data from the Police National Computer (PNC). This dataset contains administrative information on the offences and offenders that have been dealt with by the criminal justice system in England and Wales. Five cohorts of the PNC were analysed:³ 2000, 2002, 2003, 2004 and 2005. Those aged under-18 were excluded because the youth justice system is different from the adult justice system. The dataset was matched with prison discharge data which measures the length of offenders’ custodial sentence in days. The combined dataset contains approximately 37,500 entries of offenders sentenced to between 9 and 15 months.

The three outcomes considered in the analysis are one-year, two-year and three-year re-offending rates, which measure the proportion of released prisoners who committed at least one offence that resulted in another record on the PNC during the specified period after release.

¹ Automatic release usually occurs once half the original sentence length has been served. There are a number of reasons why release might be later: 1) because the offender was sentenced under the Criminal Justice Act 1991 provisions i.e. before automatic release at the half way point was applied; 2) because offenders subject to licence conditions and who breach those conditions may be recalled to custody - potentially to the end of their sentence; 3) because some offenders will have added days for bad behaviour; 4) because some offenders will spend longer on remand than the sentence they receive.

² There are six standard licence conditions: not undermine the purpose of supervision (i.e. to protect the public, prevent re-offending and to help re-settle into the community); keep in touch with the supervisor; receive visits from the supervisor at place of residence; to reside in the address approved by the supervisor; only undertake work approved by supervisor; and not to travel outside the UK without permission. There may also be additional licence conditions imposed by the supervising officer: contact and residency conditions, programme attendance conditions to address behavioural issues related to offending, curfew and exclusion conditions and non-association conditions.

³ Data for 2001 is not available due to a problem with archived data on court orders.

Results

Initial Analysis

For RDD to provide robust results in this setting, sentence length, and no other variables, must be the only driver as to whether an offender is supervised or not. Initial analysis showed that criminal history information (previous offences, previous court convictions and previous prison sentences) differed substantially across offenders above and below the 12 month threshold and appeared to have a large effect on whether an offender is supervised on licence or not.⁴ This difference was dealt with by restricting the sample to those with only one or no previous convictions. As a result, the sample size fell from around 37,500 to 8,500 entries. Any conclusions from this analysis are restricted to this type of offender.

Other observed offender characteristics which might differ across the offenders either side of the threshold were controlled for in the analysis.⁵ This enabled a comparison to be drawn between groups that were sufficiently similar. In reality there may also be some unobservable characteristics in the data which were observable to the sentencer which cannot be controlled for. This could mean there are differences between offenders receiving supervision and those that do not which are not accounted for in the analysis. This is a common problem in RDD analysis and creates some uncertainty in interpreting findings. However, the analysis presented below still provides a useful indication of the impact of supervision on re-offending.

Analysis of sample of offenders with one or no previous convictions

Results from the regression analysis are presented in Table 1. A range of different models were investigated during the analysis and the two sets of estimates represent the most robust models available. They estimate the average impact of supervision for offenders sentenced to between 9–15 and 11–13 months (“3 months” and “1 month” distance from the 12 month licence threshold respectively). Both control for a range of observed offender characteristics in the data.

Table 1: Estimated effect size of licence supervision for offenders with one or no previous convictions

	Distance in months from 12 month licence threshold	
	3 months	1 month
Difference in 1yr re-offending rate	-0.17** (0.07)	-0.14** (0.07)
Difference in 2yr re-offending rate	-0.20** (0.09)	-0.16** (0.08)
Difference in 3yr re-offending rate	-0.15 (0.10)	-0.13 (0.08)
Sample size	8,356	4,419

** Statistically significant results at the 5% level. The standard errors are in the parenthesis.

Results are similar and suggest that being on licence reduced the one-year re-offending rate by between 14 and 17 percentage points, the two-year re-offending rate by between 16 and 20 percentage points and the three-year re-offending rate by between 13 and 15 percentage points.

Whilst none of the three-year re-offending rate models report statistically significant results at the 5% level, the magnitudes of the re-offending reductions were only a little smaller in absolute terms than for the one and two year re-offending rate reductions. However, the estimates become less reliable the longer the time period from release (i.e. standard errors become larger) and there is less certainty about the effect size.

Conclusions

The analysis applied a Regression Discontinuity Design as the analytical framework to groups of offenders sentenced to either side of the one year sentencing threshold in order to estimate the extent to which being on licence impacts rates of re-offending in England and Wales.

The analysis suggests that a period of probation supervision after release from custody reduces the proportion of offenders re-offending in the short-term. In particular, the analysis estimates that the effect of being on licence for offenders with one or no previous convictions and sentenced to around one year in custody is somewhere between 14 and 20 percentage points.

References

Ministry of Justice (2013) *Offender Management Statistics Quarterly*. Ministry of Justice. Available at: <https://www.gov.uk/government/publications/offender-management-statistics-quarterly--2>

⁴ National Statistics on the prison population also show that the number of previous convictions and cautions differ by sentence length, Ministry of Justice (2013).

⁵ Variables included age, gender, ethnicity, index offence, previous offences, previous court convictions and previous prison sentences.