



Time to Let Go of the Past! Effect of Clean Slate Scheme on Employment and Earnings

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AUT School of Economics Seminar

September 4, 2020

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Outline

Disclaimer

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Statistics NZ Disclaimer

The results in this paper are not official statistics, they have been created for research purposes from the Integrated Data Infrastructure (IDI) managed by Statistics New Zealand. The opinions, findings, recommendations and conclusions expressed in this paper are those of the author(s) not Statistics NZ.

Access to the anonymised data used in this study was provided by Statistics NZ in accordance with security and confidentiality provisions of the Statistics Act 1975. Only people authorised by the Statistics Act 1975 are allowed to see data about a particular person, household, business or organisation and the results in this paper have been confidentialised to protect these groups from identification.

Careful consideration has been given to the privacy, security and confidentiality issues associated with using administrative and survey data in the IDI. Further detail can be found in the Privacy impact assessment for the Integrated Data Infrastructure available from www.stats.govt.nz.

Research highlight

Highlights

- The Criminal Records Act (2004) allows automatic concealment of criminal records 7 years after the last committed crime.
- An apparent research question: What are the labor market implications of this intervention?
 - We look at employment and monthly earnings.
- Link Ministry of Justice data to Inland Revenue's monthly tax records to prepare sample.
- Use difference-in-differences (DiD) framework to identify causal mechanisms.
- No statistically discernible impact on employment.
- However, we observe a statistically significant 2-percent (approx.) rise in monthly earnings for employed workers.

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Background

International Literature

- Crime imposes substantial social costs (McCollister et al., 2010).
 - In 2003, the total estimated cost of crime in NZ was NZ\$9.1 billion (Roper & Thompson, 2006).
 - Annual burden of crime in the US has been estimated to be around US\$1 trillion (Anderson, 1999).
 - In 2010, it was estimated that NZ Police spends around NZ\$3.5 billion on courts and corrections (Beehive.govt.nz, 2010).
 - To estimate costs, researchers include opportunity costs of offenders' and victims' time, victim losses, property damage, cost of preventive measures, crime repercussions, etc. (Anderson, 1999).
- Past criminal background and arrest records adversely affect labor market outcomes (Grogger 1992, 1995; Borland & Hunter, 2000; Lam & Harcourt, 2003; Dobbie et al., 2018).
- Major life-course transitions into marriage or employment (sometimes defined as "turning points") can deter future crime and recidivism (Uggen, 2000; Laub & Sampson 2001)

Public policy-based incentives for criminals- Another shot

- Entry barrier: Past criminal records can hurt employment prospects (Solomon 2012).
 - Underlying mechanism: Background checks by employers (Bushway, 2004; Finlay, 2008; Stoll 2009).
 - US state-level policy - “Ban the Box” reform prohibits employers from making inquiry about criminal history during initial job application.
 - The “Ban the Box” reform may increase the likelihood of employment on an aggregate level (Shoag & Veuger, 2016).
 - However, the reform can also prompt racial discrimination, indicated by employment outcomes of African-American & Hispanics (Doleac & Hansen, 2017, 2020; Agan & Starr, 2018).
- Most EU countries along with Australia & Canada have legislation (policy) that allows criminals to “erase” their criminal records, conditional on certain requirements and restrictions (Loucks et al., 1998 - EU; McAleese & Latimer - Canada; Naylor, 2005 - Australia).
- Erasure of criminal records can be less likely to prompt social discrimination compared to US’s “ban the box” initiative.
- NZ has enacted a similar legislation in 2004, known as the Clean Slate Scheme.

Criminal Records Act of 2004

- New Zealand enacted the Clean Slate scheme as a part of Criminal Records Act of 2004 (NZ Parliamentary Counsel Office).
- The 2004 act allows a formerly convicted individual to wipe their criminal record clean (Minsitry of Justice), provided:
 - No conviction in last 7 years (*'the threshold'*).
 - No custodial sentence (e.g. imprisonment or detention).
 - No sexual offence (defined as 'specified offence').
 - Fully paid all monetary obligations associated with convictions.
 - No disqualification of driver's license.
 - Never been admitted to rehabilitative facilities for mental conditions as per court order.
- The provisions of the act do not apply to immigration-based assessments and certain public services related to law enforcements.
- The act came into force in November 29, 2004.

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Research motivation

- Scant economic literature on how state-administered interventions regarding availability of criminal records affect criminals' employability (Selbi, McCrary, & Epstein, 2018).
- No empirical evidence so far on the effect of NZ's clean slate scheme on labor market outcomes.
 - Over 543,000 annual requests were processed by the Ministry of Justice in 2018-2019.
- Is the seven-year threshold sufficiently effective to ensure better labor market wellbeing for former convicts?

Data & Identification

- We use data the Integrated Data Infrastructure (IDI).
 - Comparable set of individuals with prior convictions were identified from Ministry of Justice's court charges data (MoJ sample).
 - For labour market outcomes of employment and earnings, the selected MoJ sample was linked to Inland Revenue's tax records (IR data).
 - Socio-demographic controls on age, ethnicity, and education were obtained from Department of Internal Affairs, Personal Details file, and Census 2013.
- Analysis is at the monthly-level spanning from January 2000 to December 2009.
- Sample includes prime aged (25-64) males (Van Ours 2007; Greenstone & Looney 2011).

MOJ Sample Selection

- Selection of MoJ sample was performed based on legislative provisions:

Sample of Male Convicts	Number of Individuals
Individuals with court charges in 1992-2003	296085
Not deceased (identified from DIA death data)	275154
Last court charge had conviction	146658
No custodial sentence/ driving restrictions	61839
No sexual/ violence-related offence	57915

- Analysis restricted to individuals inside NZ (using MBIE's overseas spell).
- Monthly earnings estimates are inflation-adjusted.

Identification strategy - DID analysis

- The MOJ sample is linked with the monthly IR tax records along with other individual-level covariates.
- We have a longitudinal sample defined at individual-month level from 2000 January to 2009 December.

The difference-in-differences specification is given by:

$$Y_{it} = \alpha_0 + \rho.(Post_t * Treat_i) + \alpha_1.Post_t + \alpha_2.Treat_i + X'_{it}.\alpha_3 + \lambda_t + \kappa.age_i + Age_i * t + \epsilon_{it} \quad (1)$$

where

$$Post_t = \begin{cases} 1, & \text{if time} \geq \text{December 2004.} \\ 0, & \text{if time} < \text{December 2004.} \end{cases} \quad (2)$$

and

$$Treat_i = \begin{cases} 1, & \text{if elapsed time since last conviction} \geq 7 \text{ years.} \\ 0, & \text{if elapsed time since last conviction} < 7 \text{ years} \end{cases} \quad (3)$$

- For comparability, we restrict our analysis to former convicts whose elapsed time since last conviction is 5-9 years.

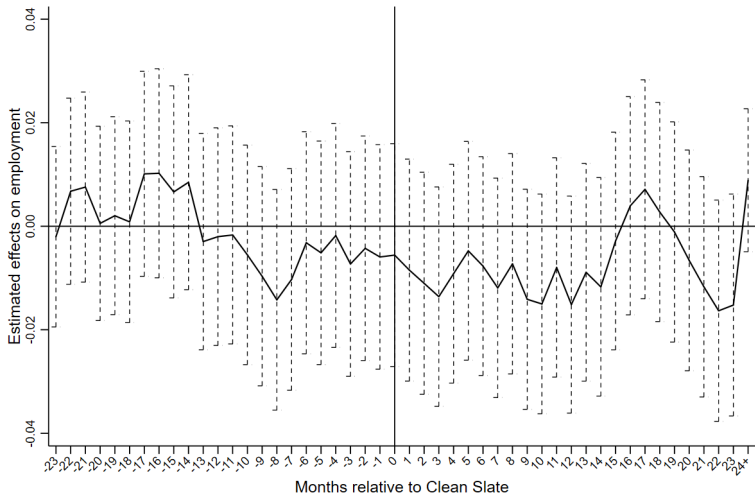
Key Findings

DID analysis - Labor market outcomes of former convicts

Table 1: DiD estimation with employment & log earnings

Variables	Employment			Log wages		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Sample mean	0.565	0.643	0.565	4840.04	4925.91	4840.04
Policy effect	0.003 (0.005)	-0.003 (0.006)	-0.003 (0.003)	0.022*** (0.009)	0.022** (0.005)	0.021*** (0.003)
Treat	-0.003 (0.003)	0.008** (0.004)	0.001 (0.002)	0.010** (0.005)	0.005 (0.006)	-0.011** (0.003)
Post	0.173*** (0.057)	0.174*** (0.057)	0.001 (0.003)	0.294*** (0.071)	0.293*** (0.075)	-0.011** (0.005)
Observations	1264863	883101	1264863	676176	531126	676176
Demographic	Y	Y	N	Y	Y	N
Education	N	Y	N	N	Y	N
Time FE	Y	Y	Y	Y	Y	Y
Age FE	Y	Y	Y	Y	Y	Y
Age LTT	Y	Y	Y	Y	Y	Y
Individual FE	N	N	Y	N	N	Y

Parallel trends assumption - Dynamic effects on employment

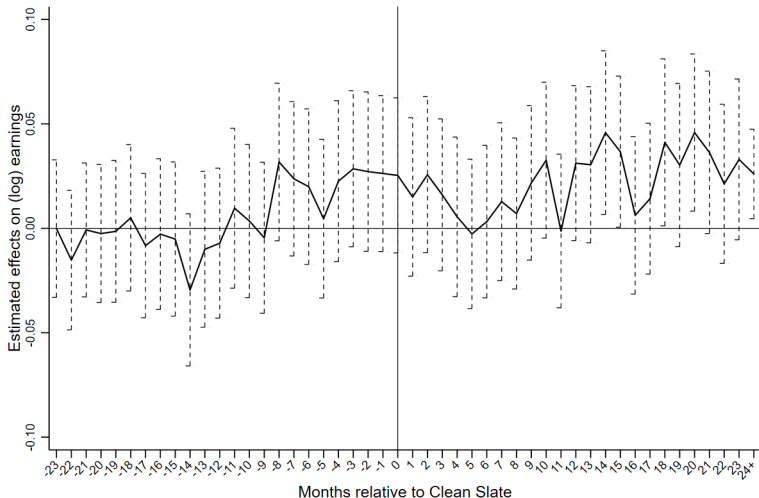


Notes: Joint F (sum of leads) = 0.02 (P = 0.90)

Joint F (sum of lags) = 0.89 (P = 0.34)

Joint F (sum of lags from 12months post-intervention) = 0.25 (P = 0.62)

Parallel trends assumption - Dynamic effects on earnings



Notes: Joint F (sum of leads) = 0.18 (P = 0.68)

Joint F (sum of lags) = 3.44 (P = 0.06)

Joint F (sum of lags from 12months post-intervention) = 5.22 (P = 0.02)

DID estimation - Alternative samples

Table 2: Robustness checks

EMPLOYMENT					
VARIABLES	Restricted 18 months (+/-)	Restricted 12 months (+/-)	Traffic crimes only	Dangerous acts only	Removing GFC effect
	(1)	(2)	(3)	(4)	(5)
Policy	-0.000 (0.005)	-0.002 (0.004)	0.017 (0.014)	-0.006 (0.008)	-0.006 (0.006)
Observations	976287	667971	184119	532974	1072968
LOG EARNINGS					
	Restricted 18 months (+/-)	Restricted 12 months (+/-)	Traffic crimes only	Dangerous acts only	Removing GFC effect
	(1)	(2)	(3)	(4)	(5)
Policy	0.017** (0.008)	0.012* (0.007)	0.030 (0.022)	0.025** (0.012)	0.020** (0.010)
Observations	561456	384036	100665	336660	616113

Triple difference (DDD) strategy

- A random sample of never convicted, non-deceased individuals were chosen from the IDI ($\approx 25K$).
- Third group of individuals who are not going to be affected by the clean slate act.

The DDD specification is given by:

$$Y_{it} = \beta_0 + \delta.(Post_t * Treat_i * Convict_i) + \beta_1.(Post_t * Treat_i) + \beta_2.(Post_t * Convict_i) + \beta_3.(Treat_i * Convict_i) + \beta_4.Post_t + \beta_5.Treat_i + \beta_6.Convict_i + \mathbf{X}'_{it}.\beta_7 + \lambda_t + \gamma.Age_i + Age_i * t + v_{it} \quad (4)$$

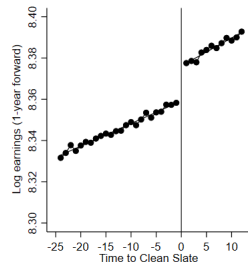
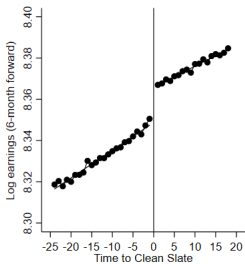
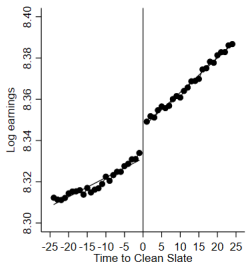
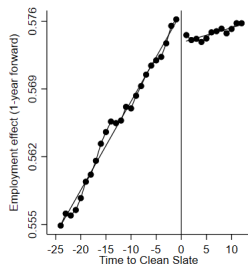
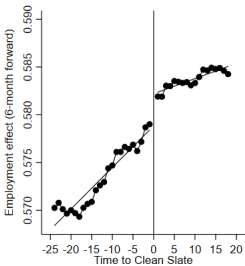
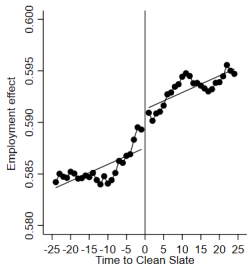
where

$$Convict_i = \begin{cases} 1, & \text{if was ever convicted of a crime} \\ 0, & \text{otherwise} \end{cases} \quad (5)$$

Table 3: Triple differences estimation

VARIABLES	EMPLOYED		LOG EARNINGS	
	Model 1	Model 2	Model 1	Model 2
Triple differences	0.004 (0.007)	0.010 (0.008)	0.022** (0.011)	0.021* (0.012)
Observations	3129291	2347674	1813494	1524669
Demographic	Y	Y	Y	Y
Education	N	Y	N	Y
Time FE	Y	Y	Y	Y
Age FE	Y	Y	Y	Y
Age LTT	Y	Y	Y	Y

RDD estimation



Discussion

Our Contribution

- First NZ-specific study to provide comprehensive evidence on how concealment of criminal records affect labor market.
- A novelty of this study lies in the data used for analysis.
 - Administrative information allows population-level analysis.
 - Data allows us to effectively identify comparable samples.
- The 7-year threshold is not effective in improving employment of former convicts.
- There is a moderate but statistically significant wage effects.
 - Can be driven by effects of being attached to the employer (e.g. loyalty reward or bargaining power).
 - We do not observe any significant effect w.r.t switching main employers or industry.
 - Results hold in survey-based design of the data as well.
- Limitations: Can't distinctly identify individuals who are in the labor force or ones who own businesses.

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Thank you very much for your time.

Working draft will be coming up soon.

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