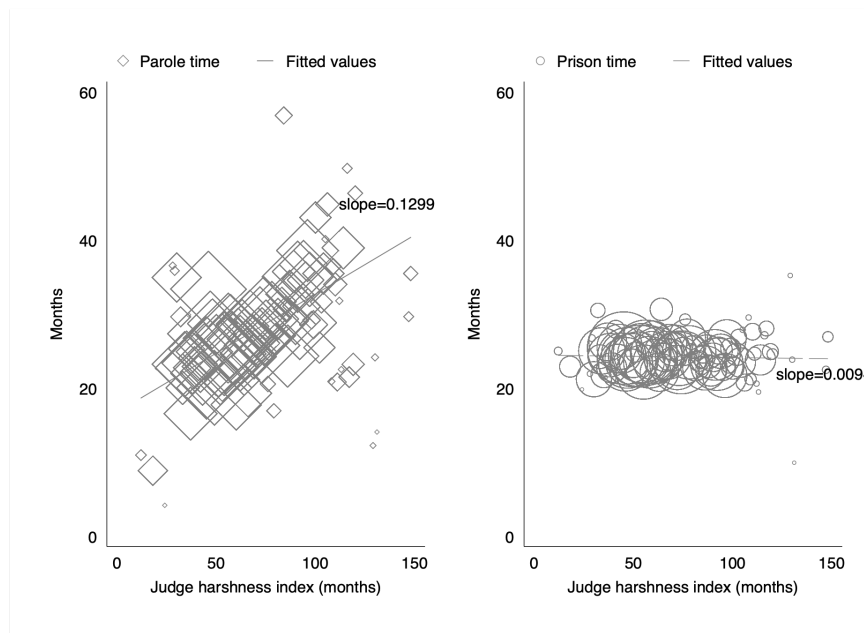# Online Appendix
The Effects of Time in Prison and Time on Parole on Recidivism
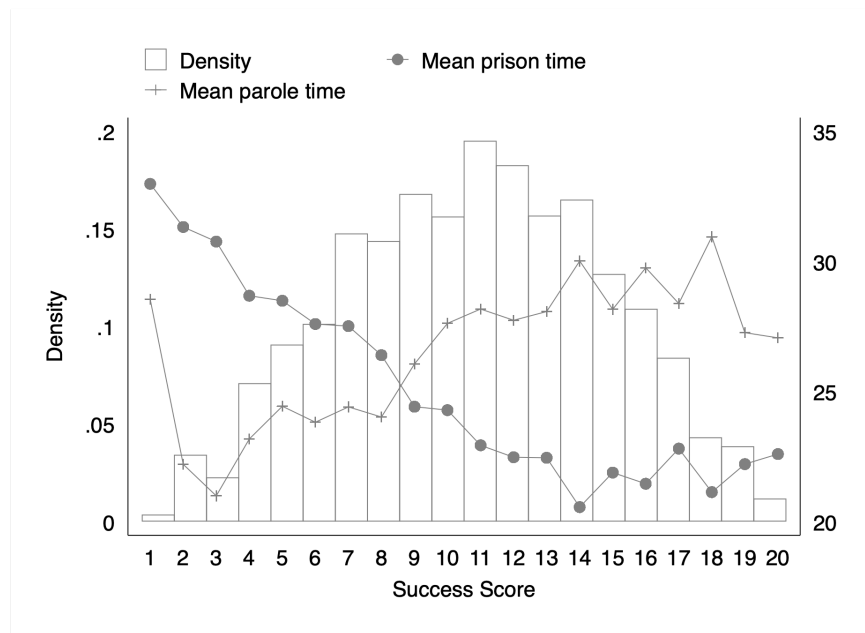
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April 14, 2020

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Figure OA1: Prison and Parole Time by Judge Harshness Index

Note: This figures represent a scatter plot of prison time (right panel) and parole time (left panel) against the judge harshness index, which is defined as a leave-out mean sentence given by the judge over the sample period. The triangles and circles represent the average time served in prison and sentence length, respectively. The size of each circle or triangle corresponds to the number of convicts sentenced by a judge with a specific harshness index. The lines with reported slopes are fitted values for time in prison and time on parole by judge harshness index.

Data source: Data is from the GDC Prison and Conviction data, and includes inmates who meet the sampling restriction described in Section 2 and Table 1.

Figure OA2: Time Served in Prison by Success Points

Note: This figure shows mean prison time and parole time by success score. The right y-axis measures average number of months spent either in prison or on parole while the left y-axis represents density. The red line marked with a circle represents mean time served in prison, while the green line marked with a plus represents mean time served on parole. The histogram shows the distribution of people by success score. The success score is calculated based on the factors listed in Table OA1.
Data source: Data is from the GDC Prison data, and includes inmates who meet the sampling restriction described in Section 2 and Table 1.

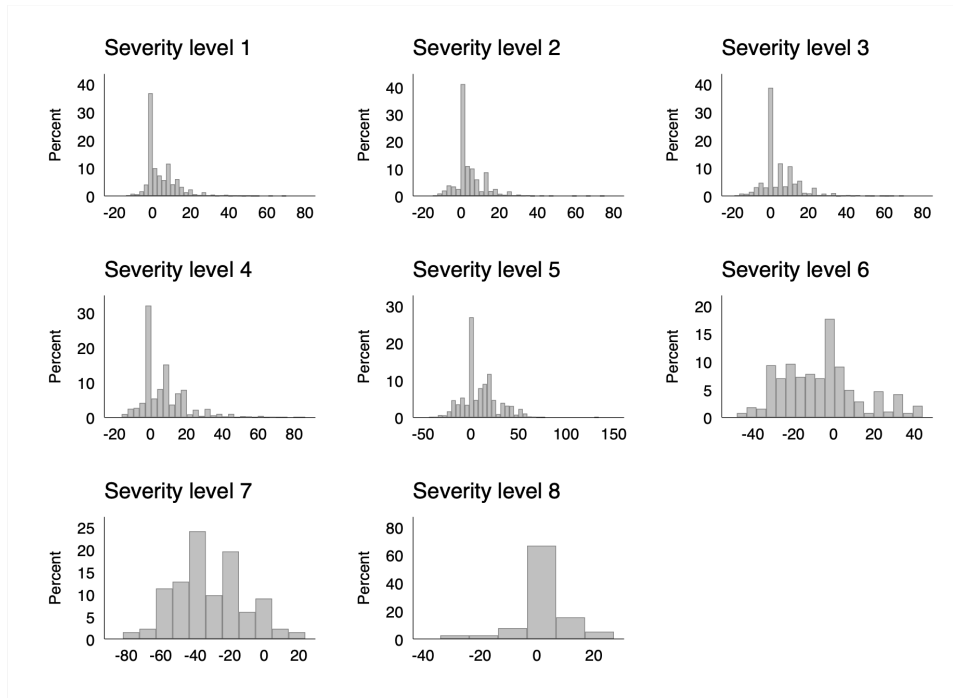Table OA1: Parole Board Guidelines for Calculating Parole Success Score

Success factor		Success points
Age at previous incarceration, if any	26+	5
	22-25	3
	18-21	1
	17-	0
Number of other felony convictions both as a child and an adult	0	3
	1	2
	2-3	1
	4+	0
Times incarcerated for a felony since age of 17	0	2
	1	1
	2	0
Times, if any, of probation or parole revocation	None	4
	Probation only	2
	Parole only	1
	Both	0
Caught with or caught trying to buy heroin, opiate drugs or cocaine	No history	1
	Has history	0
Burglary or forgery current crime	No	2
	Yes	0
Full-time job in the six months before conviction	Yes	1
	No	0
Score on the reading, writing and arithmetic test given by the GDC diagnostic center	Above 8	2
	Below 8	0

Table OA2: Parole Board Guidelines for Crime Severity Levels

LEVEL I
Bad Checks - under $2,000
Burglary - non-dwelling, less than $300, one count
Credit Card Theft
Criminal Interference with Government Property
Escape Custody - no weapon, aiding escape
Forgery II - possession, 10 or fewer counts or less than $1,000
Habitual Violator
Possession/passing forged prescriptions - 1st offense
Possession of tools to commit a crime
Theft - under $1,000
Theft of Vehicle - not to sell; one count, 1st offense
VGCSA - possession, single offense

LEVEL II
Bad Checks - $2,000 or more
Burglary - non-dwelling, $300 to $2,000, one count
Credit Card Fraud - 10 or fewer counts or less than $1,000
Criminal Damage II - $300 to $2,000
Forgery I - 10 or fewer counts or less than $1,000
Possession of Illegal Firearm or Explosives
Possession/Theft - materials to manufacture illegal drugs, 1st offense
Reckless Conduct by HIV Infected Persons
Theft - $1,000 to $4,999
Theft of Vehicle - not for sale, 2nd offense
VGCSA - possession, 2nd offense
VGCSA - sale/intent to sell/distribution, 1st offense

LEVEL III
Burglary - non-dwelling, 2 to 5 counts, or $2,001 to $5,000
Credit Card Fraud - more than 10 counts or $1,000
Criminal Damage - life in danger or over $2,000
Destroying or Injuring Police Dog or Horse
Forgery I - over 10 counts or $1,000 or more
Manufacturing Methamphetamine - 1st offense
Obstruction of Officers - Felony
Possession/Theft - materials to manufacture illegal drugs, 2nd offense
Terroristic Threats
Theft - $5,000 to $10,000
Theft of Vehicle - for sale or 2 to 3 counts without intent to sell or 3rd offense
VGCSA - sale - 2nd offense or 3rd drug possession

LEVEL IV
Arson II - $2,000
Burglary - non-dwelling, over $5,000 or 6 or more counts
Homicide by Vehicle
Manufacturing Methamphetamine - near a child
Serious Injury by Vehicle
Theft of Vehicle - 4 or more counts or 4th or greater offense
Theft - over $10,000
VGCSA - sale/distribution/intent to sell Schedule I or II drugs, 2nd offense
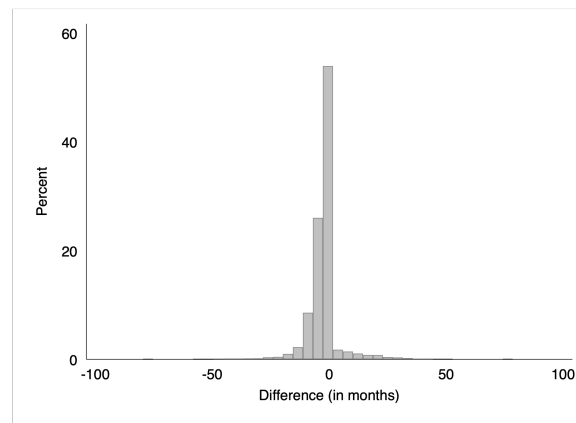
Note: This table illustrates how the Parole Board converts crimes into severity levels. It does not include all possible crimes.

Figure OA3: Difference between guidelines-suggested and parole established TPM

Note: Each histogram shows the difference between the parole-established temporary release month (TPM) and the Parole Guidelines-recommended TPM by crime severity level. The x-axis measured in months is the difference between board-established and guidelines-recommended temporary parole month (TPM).

Figure OA4: Difference between sentence expiration and parole discharge date

Note: This histogram shows the difference between sentence expiration data and parole dicharge date. It is computed based on the main estimation sample with the sampling restriction described in Section 2 and Table 1. In addition, I exclude approximately 2000 people who were still under parole supervision by the end of my sample period because I do not observe their parole discharge date. The x-axis, measured in months, is the difference between sentence expiration and parole discharge date.

Table OA3: Felony Population Nationally and in the State of Georgia by Year of Sentence

	Nationwide			Georgia		
Year	2000	2002	2004	2000	2002	2004
Type of crime						
Violent	34.3	36.5	36.7	25.6	26.2	30.6
Property	34.2	32.1	34.3	34	34.4	33
Drug	21.1	20.4	21.4	30.3	29.6	30.6
Other	10.4	11	7.6	10.4	9.8	9.3
Gender						
Male	93.7	93.7	93.6	89	88	89
Female	6.3	6.3	6.4	11	12	11
Race						
White	33.3	35	35.2	37.3	40.5	42.8
Black	46.5	45.4	40.5	62.2	58.8	56.4
Sentence length (in months)						
Overall mean	55	53	57	60	59	57
Violent	91	84	92	89	87	88
Property	42	41	46	43	40	44
Drug	47	48	51	57	57	58

Note: National statistics on sentence length come from the "Felony Sentences in State Courts Series," published bi-annually by the US Bureau of Justice Statistics `http://www.bjs.gov/index.cfm?ty=pbse&sid=28`, and are calculated based on the sample of all individuals sent to prison for more than a year. The national statistics on prisoner characteristics come from various issues of Prisoners series conducted by BJS, `http://www.bjs.gov/index.cfm?ty=pbse&sid=40`. These data are based on the sample of inmates with a sentence of more than 1 year under the jurisdiction of State correctional authorities. The comparable statistics for Georgia are based on the raw Prison Data with no sampling restrictions described in Section 4. The only restriction applied to the Prison Data is the exclusion of sentences to death or life in prison and those less than one year in order for the statistics to match the national statistics. The differences in race between Georgia and nationwide prison population might be a result of the fact that GDC treats Hispanic as ethnicity while BJS treats it as race. I classify offense type as the major crime type recorded in the Prison data. It is unclear, however, whether the BJS classifies it the same way. Further, GDC counts robbery as a property offense rather than a violent offense, and thus I've adjusted the BJS statistics accordingly to match my classification.

Table OA4: Summary Statistics by Release Date

Variable	Before 2005 Mean	Before 2005 Std. Dev.	After 2005 Mean	After 2005 Std. Dev.
RTP	0.29	0.45	0.13	0.34
Time served in prison	25.98	12.24	35.03	17.75
Sentence length	47.08	20.51	55.40	19.43
Percent of sentence served	62.12	29.11	65.40	26.68
Time on parole	21.11	21.03	20.38	19.23
Demographic and criminal background				
Black	0.60	0.49	0.55	0.50
Female	0.12	0.33	0.11	0.31
Age at release	34.51	10.18	34.87	10.40
Prior convictions	2.49	2.82	2.27	2.83
Current offense				
N of disciplinary infractions	2.09	2.11	2.25	2.12
Drug	0.32	0.47	0.28	0.45
Other	0.16	0.36	0.16	0.36
Property	0.35	0.48	0.33	0.47
Violent	0.17	0.38	0.24	0.42
Parole and judge				
Guidelines-recommended prison time	24.58	11.19	27.32	11.67
Judge harshness index	64.03	20.91	63.99	20.62
Success score	11.25	4.21	11.92	6.36

Note: The table shows summary statistics by people who were released before 2005 and people who were released after 2005. Return to prison (RTP) is the probability that an individual returns to prison in the state of Georgia within 3 years of release. Prison time, parole time, sentence length are measured in months. Judge harshness index is a leave-out mean sentence (in month) given by the judge over the sample period. Guidelines-recommended prison time is the recommend months to serve in prison that is based on the success score and severity level and outlined in Table 2. Severity level measures are defined in Table OA2 and the success score is calculated based on the factors listed in Table OA1.

Data source: Georgia Prison and Conviction Data.

Table OA5: Second Stage Estimates: Prison Time vs. Prison and Parole Time

	(1)	(2)	(3)	(4)
	Recidivism		Recidivism on parole	
Dependant Variable				
Prison time	-0.0058	-0.0032	-0.0104**	-0.0103***
	(0.0048)	(0.0035)	(0.0042)	(0.0028)
Parole time	-0.0048		-0.0002	
	(0.0062)		(0.0054)	
Black	0.0359*	0.0227**	0.0129	0.0123
	(0.0209)	(0.0111)	(0.0182)	(0.0102)
Female	-0.0591***	-0.0580***	-0.0477***	-0.0477***
	(0.0186)	(0.0165)	(0.0163)	(0.0149)
Age at release	-0.0058***	-0.0057***	-0.0040***	-0.0040***
	(0.0006)	(0.0006)	(0.0005)	(0.0005)
Prior conviction	0.0066**	0.0071**	0.0048*	0.0048*
	(0.0031)	(0.0029)	(0.0027)	(0.0026)

Notes: Heteroskedasticity-robust standard errors in parentheses. All estimates are estimated using an IV model. Col. (1) and (3) represent my main results from Table 5, whcih control for both prison and parole time. I control for only prison time in Col. (2) and (4). Besides the variables reported, all regressions control for crime type (violent, property, drug, other), year of sentence, circuit court, success points and severity level fixed effects. The dependent variable is an indicator that equals to one if the inmate returned to prison within three years of his release and zero otherwise. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$