

Walk Like a Man: Do Juvenile Offenders Respond to Being Tried as Adults?

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Introduction

Youth violence and crime continue to be major challenges

7 percent of population commits 20 percent of crimes

More than 60,000 arrests for violent crime in U.S.

Research Question

What is the effect of adult prosecution of youth on juvenile crime?

Take advantage of juvenile transfer court minimum ages in Oregon

Juvenile Transfers to Adult Court

Closely tied to Measure 11
Referendum passed in 1994

Set mandatory minimum punishments

Allowed youth to be tried, convicted, sentenced as an adult if they are

1. Over 15
2. Commit an eligible crime

Table 1

Crime	Minimum sentence
Murder	25 y
1st degree Manslaughter	10 y
2nd degree Manslaughter	6 y, 3 m
1st degree Assault	7 y, 6 m
2nd degree Assault	5 y, 10 m
1st degree Kidnapping	7 y, 6 m
2nd degree Kidnapping	5 y, 10 m
1st degree Rape	8 y, 4 m
2nd degree Rape	6 y, 3 m
1st degree Sodomy	8 y, 4 m
2nd degree Sodomy	6 y, 3 m
1st degree Unlawful sexual penetration	8 y, 4 m
2nd degree Unlawful sexual penetration	6 y, 3 m
1st degree Sexual abuse	6 y, 3 m
1st degree Robbery	7 y, 6 m
2nd degree Robbery	5 y, 10 m

Prior Research

- ▶ Helland and Taborrak (2007)
- ▶ Drago (2008)
- ▶ Levitt (1998)
- ▶ Lee and McCrary (2009)

Age 15 as a Cutoff

Many states have similar cutoffs

- ▶ Does not coincide with

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- ▶ Dropping out (Anderson, 2013)
- ▶ Other stuff (Hansen, 2014)

Data

Oregon Youth Authority (1999-2009)

Date of birth

Date of crime

Demographics

Crime type

Empirical Models

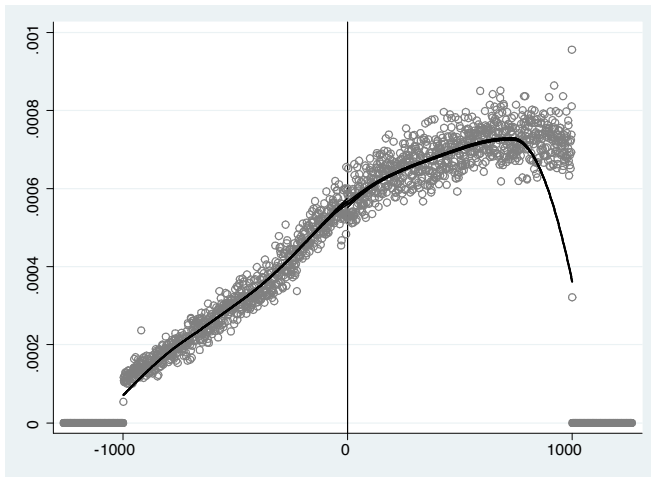
RD (Thistlethwaite and Campbell, 1960)

$$recid_i = \beta + \beta_1 Over_15_i + f(\text{age relative to 15}) \quad (1)$$

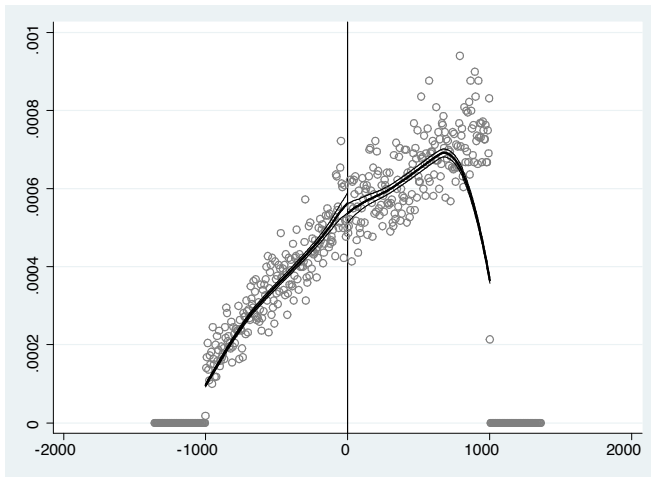
Preview of Main Analyses

- ▶ 1. Sorting
- ▶ 2. Transfer probabilities
- ▶ 3. Recidivism
- ▶ 4. Recidivism heterogeneity
 - ▶ Recidivism timing
 - ▶ Effects by recidivism type

All Offenses



Transfer Eligible Offenses



Density Tests

For all juvenile offenders :

McCrary Test Log Difference : $-.015$ (.010)

Frandsen Test P-Value : .789

Density Tests

For juveniles eligible for adult court transfer

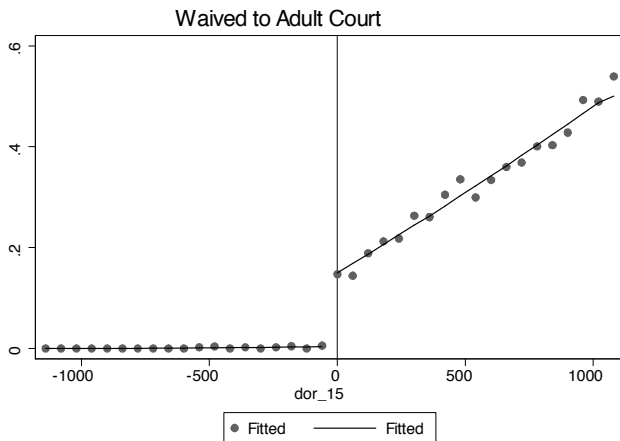
McCrary Test Log Difference : $-.049$ (.035)

Frandsen Test P-Value : .434

Density Tests

Fail to reject null of no-sorting at threshold
Proceed to investigate changes in transfer probabilities to adult court at age 15

Transfer Probabilities



 Transfer Probability: All Eligible Offenses

Treatment	.130*** (.021)	.121*** (.015)	.138*** (.012)
Polynomial	Quad	Quad	Quad
Bandwidth (Years)	1	2	3

Being over 15 increases probability of transfer by .12 to .14 percentage points

Recidivism

Examine the effect of before age 15 at referral on recidivism

Recidivism defined as being referred to OYA again prior to turning age 18
(naturally declines as people approach age 18)

Policy effect being estimated is a combination treatment
- Incapacitation effect, specific deterrence, and criminogenic effect

In the future we aim to capture the long term effects on adult criminality (linking juvenile and adult records)

Recidivism

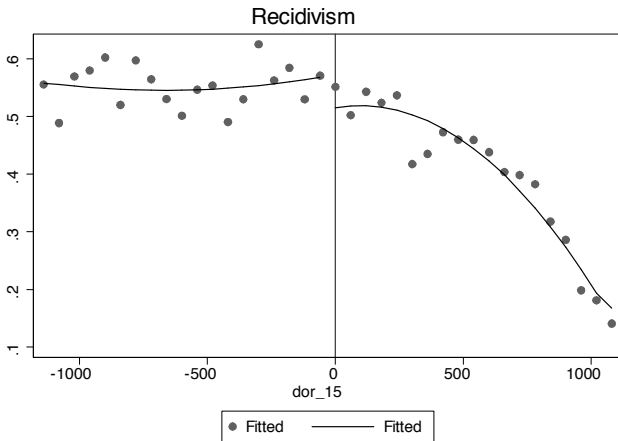


Table 3: Changes in Recidivism at Age 15

	All		
<i>Estimate</i>	0.004	-0.024	-0.053**
	(0.039)	(0.028)	(0.023)
Polynomial	Quad	Quad	Quad
Mean		.523	
Bandwidth (yrs)	1	2	3

Recidivism Summary

At smaller bandwidths estimated effect could be zero

At larger bandwidths estimated effect could be as large -5 percentage points

Examine heterogeneous effects by

- Recidivism timing
- Originating offense type
- Repeat offense type

Recidivism Timing

Changes in Recidivism Timing

	Year 1	Year 2	Year 3
Estimate	-0.016 (0.018)	0.001 (0.010)	-0.011 (0.008)
Mean	.198	.057	.045

Not clear evidence of incapacitation effect
 Examine 1st year on a more granular basis

Recidivism Timing

Changes in Recidivism Timing Over First Year

	0-30 Days	30-90 Days	90-180 Days	181-365 Days
Treatment	-.014 (.009)	.003 (.009)	.006 (.010)	-.009 (.010)
Mean	.054	.046	.043	.055

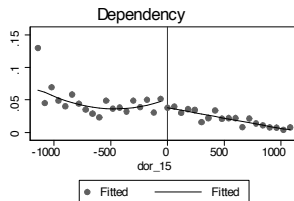
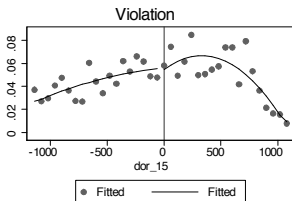
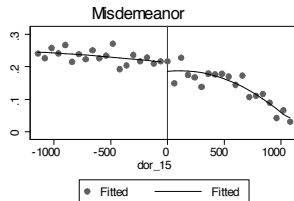
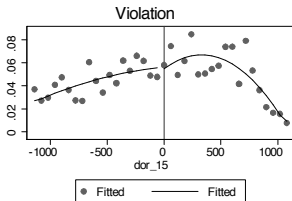
Recidivism Heterogeneity

Recidivism Changes by Repeat Offense Classification

	Felony	Misdemeanor	Violation	Dependency
Estimate	-.013 (.019)	-.028 (.018)	-.003 (.010)	-.009 (.010)
Mean	.247	.214	.056	.049

Recidivism Heterogeneity

Recidivism By Repeat Offense Type



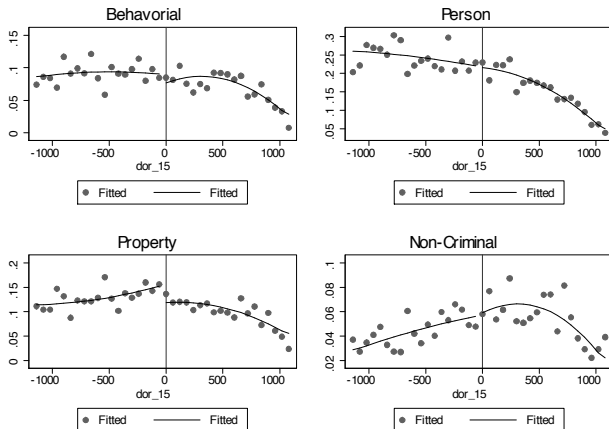
Recidivism Heterogeneity

Recidivism Changes by Repeat Offense Type

	Person	Property	Behavioral	Non-Criminal
Estimate	.0002 (.018)	-.036** (.015)	-.014 (.013)	.001 (.011)
Mean	.218	.155	.089	.056

Recidivism Heterogeneity

Recidivism By Repeat Offense Type



Recidivism Heterogeneity Summary

Any estimated reductions in recidivism appears to be driven by

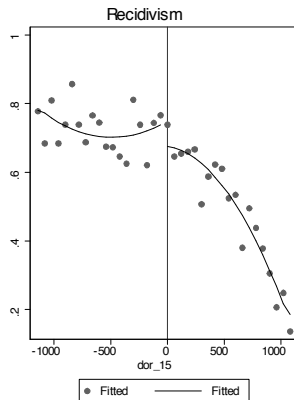
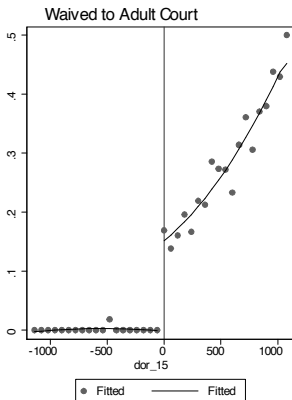
- Financially motivated crimes
- Property

Recidivism Heterogeneity

	By Original Offense Type			
	Overall	Assault	Robbery	Sexual
<i>Probability of Transfer</i>				
	.138***	.148***	.463***	.069***
	(.012)	(.031)	(.079)	(.014)
Effect on Recidivism				
	-0.053**	-.066	-.023	-.001
	(0.023)	(.055)	(.051)	(.001)

Recidivism Heterogeneity

Original Charge Assault



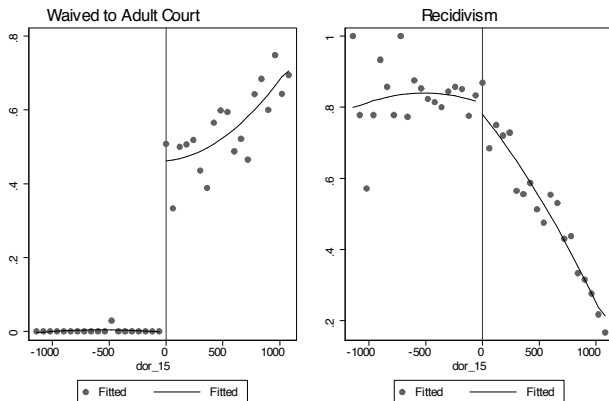
Recidivism Heterogeneity

Recidivism Changes by Crime Type
Assault Original Arrest

	Person	Property	Behavioral	Non-Criminal
Estimate	.012 (.051)	-.035 (.042)	-.018 (.043)	-.027 (.032)
Mean	.214	.145	.141	.065

Recidivism Heterogeneity

Original Charge Robbery



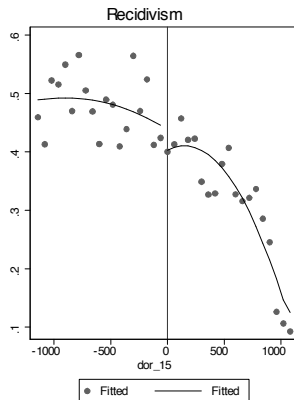
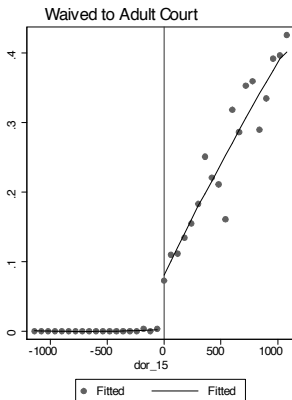
Recidivism Heterogeneity

Recidivism Changes by Repeat Offense Type
Robbery Original Arrest

	Person	Property	Behavioral	Non-Criminal
Estimate	-.0002 (.040)	-.039 (.059)	.021 (.042)	-.019 (.031)
Mean	.216	.267	.151	.068

Recidivism Heterogeneity

Original Charge Sexual



Recidivism Heterogeneity

Recidivism Changes by Repeat Offense Type Sexual Original Arrest

	Person	Property	Behavioral	Non-Criminal
Estimate	-.006 (.025)	-.023* (.014)	-.016 (.014)	.019 (.012)
Mean	.226	.064	.064	.030

Summary

At age 15

1. Significant increase in probability of transfer to adult court
2. No clear sorting occurring at age 15 threshold
3. Potential decrease in recurrent juvenile crime
4. Heterogeneity results suggest driven by a decline in property related crimes (if present)

Conclusions

Evidence that adult prosecution may reduce some youth crime

In the future

- Additional years/more states to increase power
- Subsequent years from adult criminal records
- Employment outcomes

Conclusions

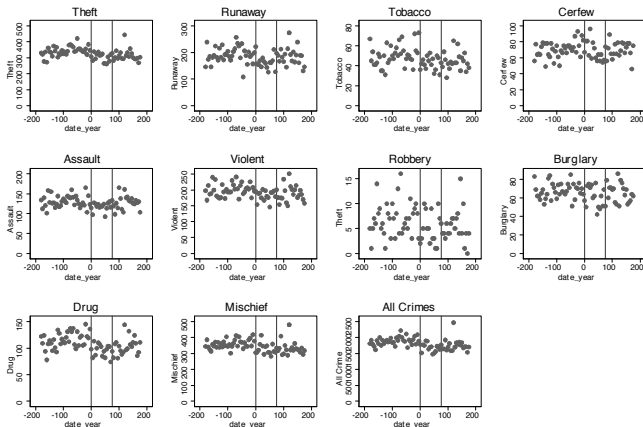
Benefits of lower crime should be weighed against costs

Aizer and Doyle (2013), adult prosecution is really bad for future employment

Other interventions (Heller et al. 2013; Heller, S. 2013) are more efficient

Future Work, Relative Age and Juvenile Crime

Age 13 and Under



Future Work, Relative Age and Juvenile Crime

Age 14

