

CRIMINAL PROCEDURE



Outline

- What is procedure, its objectives
- Conviction standard
- Alternative criminal procedures
- Allocation of resources and incentives of enforcement officials

Criminal procedure

....mechanisms, under which crimes are investigated, prosecuted, adjudicated, and punished.

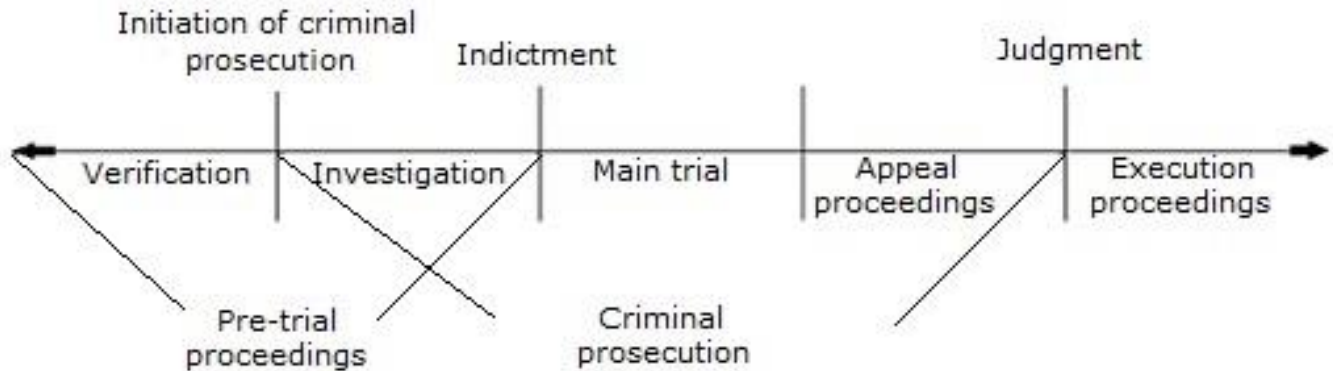
- formal criminal charge, trial (free, on bail, incarcerated), conviction or acquittal
- inquisitorial, adversarial
- due process (notice of the proceedings, hearing, defense, impartial tribunal, fair sentence)
- fulfill the objectives of the criminal law
- Why innocent until proven guilty? Why such a high standards of evidence?

Justice System - Trial

	Defendant Innocent	Defendant Guilty
Reject Presumption of Innocence (Guilty Verdict)	Type I Error	Correct
Fail to Reject Presumption of Innocence (Not Guilty Verdict)	Correct	Type II Error



Czech Criminal proceedings



Pre-trial proceedings – Preliminary hearing of indictment (charge) – Main trial – Appeal (remedial) proceedings – Execution proceedings

Source: Karabec, Zdeněk, Jiří Vlach, and Jana Hulmáková. *Criminal Justice System in the Czech Republic*. Institute of Criminology and Social Prevention, 2011.

Conviction standard

- probable cause
- reasonable suspicion
- reasonable doubt

Three strike laws

Truth-in-sentencing act

Conviction standard

- Andreoni, James (1991). Reasonable doubt and the optimal magnitude of fines: should the punishment fit the crime? *RAND Journal of Economics*, Vol. 22 (3), pp. 385-395.

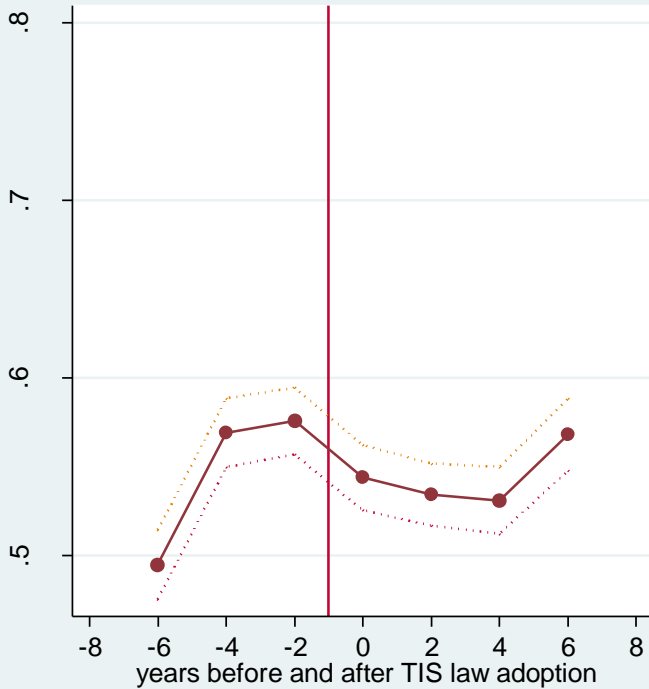
Models of the enforcement-compliance relationship have assumed that both the probability and magnitude of fines are independent choice variables of policy makers. These models indicate that it may be optimal to monitor with low frequency but to inflict uniformly maximal penalties for all infractions detected. This article shows that if the judicial system is built on the “reasonable doubt test,” then the penalty and the probability of conviction are not independent. In particular, as the penalty increases, the probability of conviction falls. As a result, uniformly maximal penalties may actually encourage crime rather than deter it. This article shows that optimal fines should rise with the severity of the infraction, that is, the penalty should “fit the crime.”

Severity of punishment and conviction standard - empirics

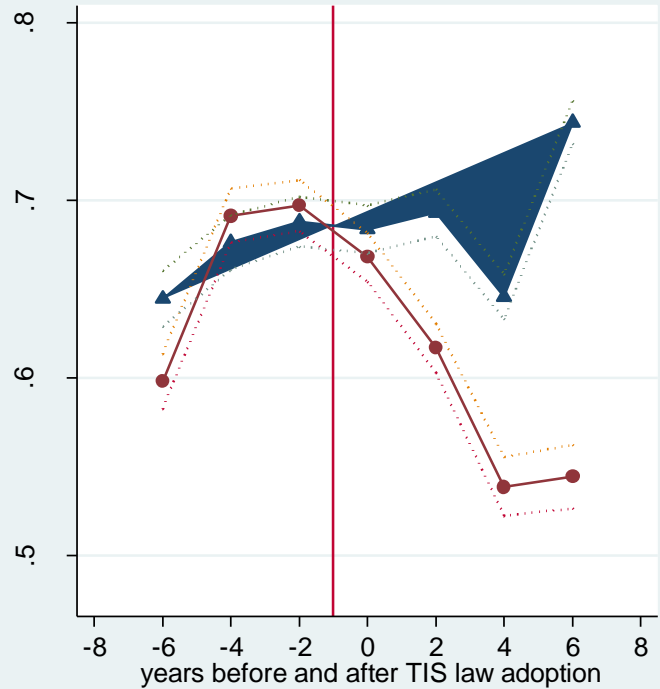
- Tsuchimoto, F. and Libor Dusek (2012): Responses to more severe punishment in the courtroom: Evidence from Truth-in-Sentencing Laws, *working paper*.
- Bjerk, D. (2005). Making the crime fit the penalty: the role of prosecutorial discretion under mandatory minimum sentencing. *Journal of Law and Economics*.
- Walsh, J. E. (2004). Tough for Whom? How Prosecutors and Judges Use Their Discretion to Promote Justice Under the California Three-Strikes Law. *Crime and Justice Policy*

probability of conviction conditional on arrest

violent crimes



non-violent crimes

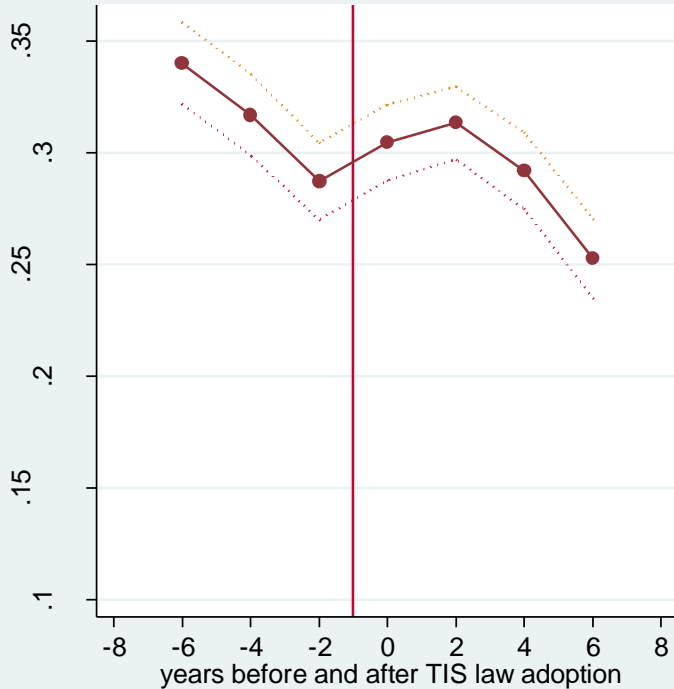


—▲— cases not eligible under TIS —●— cases eligible under TIS

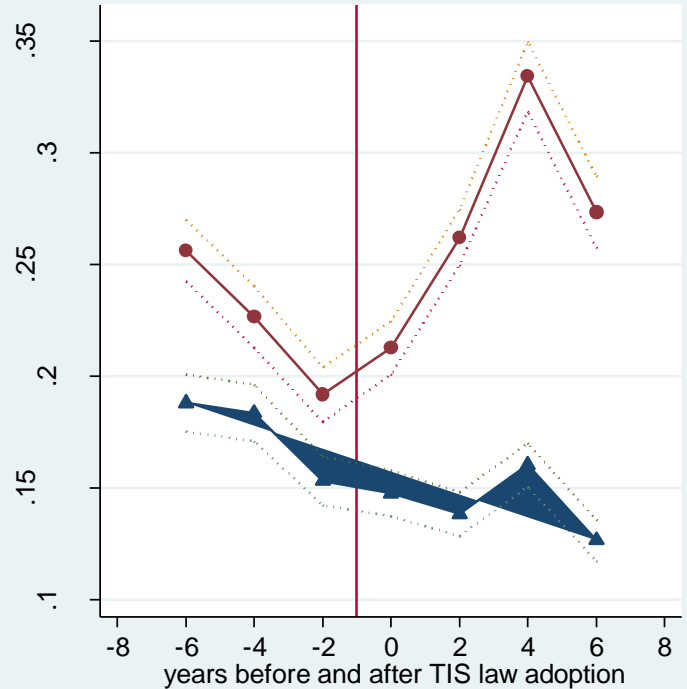
95% confidence intervals also shown

probability of dismissal

violent crimes



non-violent crimes

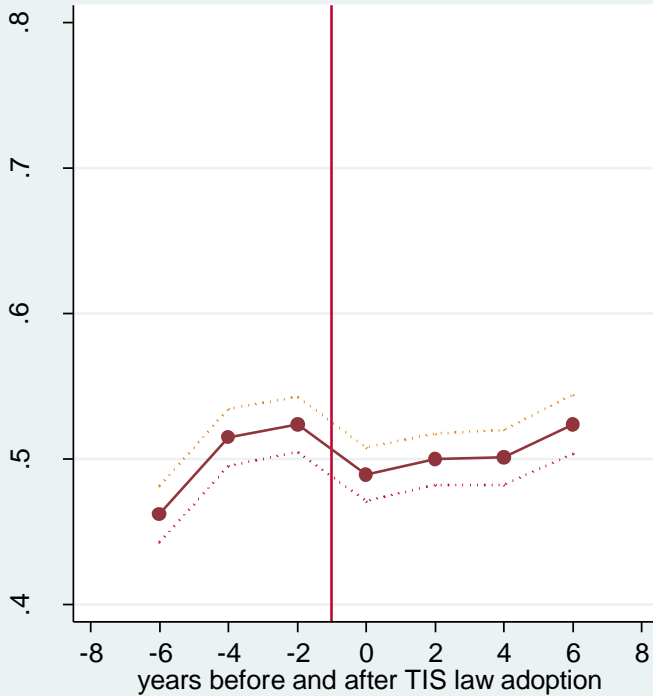


—▲— cases not eligible under TIS —●— cases eligible under TIS

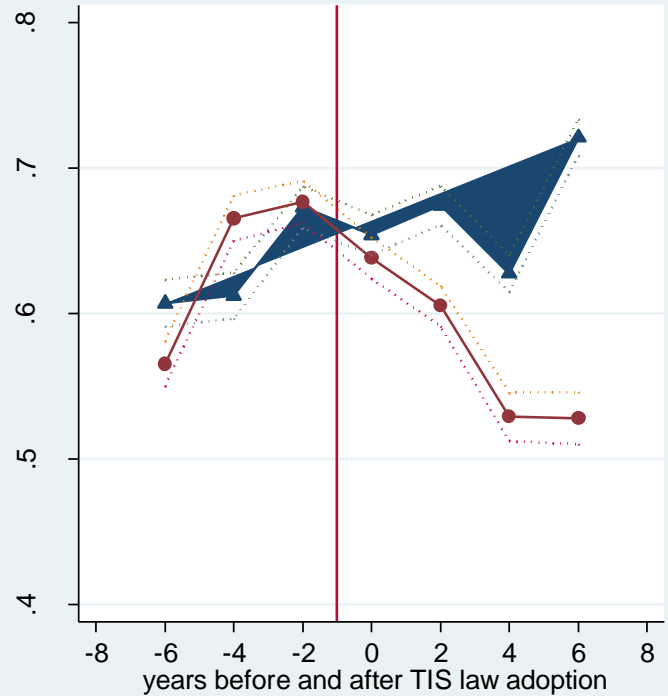
95% confidence intervals also shown

probability of accepting a plea bargain

violent crimes



non-violent crimes

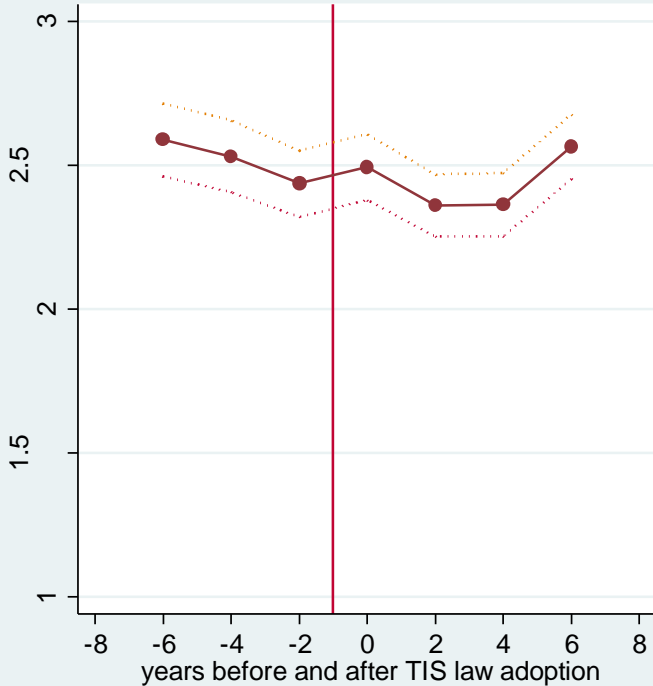


—▲— cases not eligible under TIS —●— cases eligible under TIS

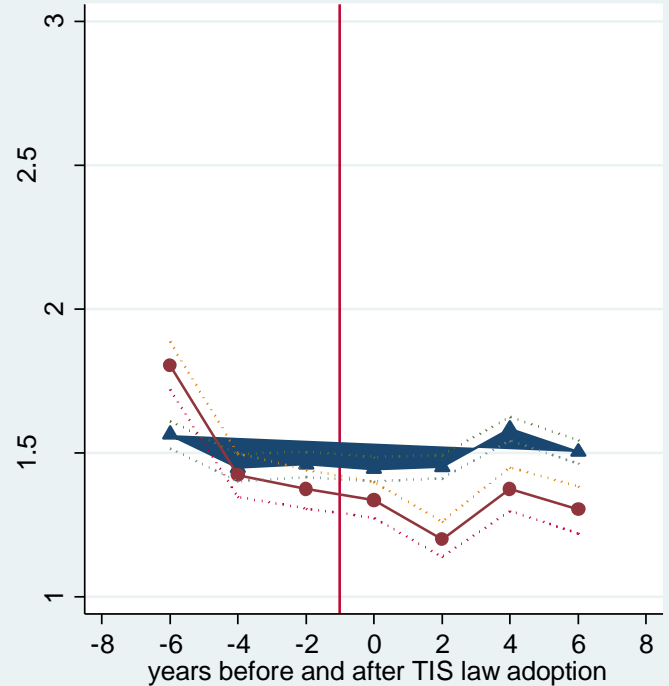
95% confidence intervals also shown

logarithm of sentence (in months) upon conviction

violent crimes



non-violent crimes



—▲— cases not eligible under TIS —●— cases eligible under TIS

95% confidence intervals also shown

Table 3: Probit Estimates, Probability of Conviction Conditional on Arrest

	1	2	3	4
TIS case	-0.094*** (0.010)	-0.088*** (0.010)	-0.093*** (0.010)	-0.061*** (0.009)
TISstate	0.042*** (0.011)		0.105*** (0.010)	
TISstate x violent		0.070*** (0.017)		0.108*** (0.015)
offense x year dummies	Yes	Yes	Yes	Yes
county x violent dummies	Yes	Yes	No	No
state x offense dummies	No	No	Yes	Yes
# observations	83,506	83,506	83,437	83,437
pseudo R ²	0.153	0.153	0.140	0.139

Table 4: Tobit Estimates, Imposed Sentence Conditional on Arrest (all cases)

	1	2	3	4
TIS case	-0.114*** (0.026)	-0.097*** (0.025)	-0.083*** (0.026)	-0.040 (0.025)
TISstate	0.106*** (0.028)		0.185*** (0.032)	
TISstate x violent		0.172*** (0.058)		0.233*** (0.061)
offense x year dummies	Yes	Yes	Yes	Yes
county x violent dummies	Yes	Yes	No	No
state x offense dummies	No	No	Yes	Yes
# observations	83,244	83,244	83,244	83,244
pseudo R ²	0.095	0.095	0.093	0.093

Table 8: Offense-Specific Effects

Dependent Variable	Sample	Offense Categories				
		murder	other violent	property	drug	other
Probability of conviction	all	0.066 (0.057)	-0.050** (0.020)	-0.136*** (0.014)	-0.070*** (0.013)	-0.145*** (0.020)
Expected imposed sentence	all	0.138 (0.177)	-0.027 (0.054)	-0.153*** (0.030)	-0.100*** (0.029)	-0.144*** (0.041)

Alternative criminal procedures

- Plea bargaining
 - deal between prosecutor and defendant
 - charge, count, fact, sentence; (has to be accepted by judge)
- Penal order
 - by prosecutor or judge, accept or go to trial
- Accelerated/simplified proceedings
 - skip or bypass steps, if conditions are satisfied

Alternative procedures in Europe

- ▶ Penal order:
 - ▶ Germany (forever)
 - ▶ Czech Republic (1994)
 - ▶ Netherlands (2008)
- ▶ Accelerated / simplified proceedings:
 - ▶ Spain (1998, 2002)
 - ▶ Czech Republic (2002)
 - ▶ Poland (2007)
- ▶ Plea bargaining:
 - ▶ Poland (2003)
 - ▶ France (2004)
 - ▶ Slovakia (2005)

Alternative criminal procedures

Fundamental issue: **resources are constrained**

- Enforcers cannot process all cases at the “ideal” quality =>
 - Limit the number of cases
 - police discretion (everywhere)
 - prosecutorial opportunism (USA)
 - Compromise quality
 - Fewer decisions on merit (Huang 2010, Yang 2016)
 - Legislators adopt alternative criminal procedures

Alternative criminal procedures

- Landes, William M. (1971): An economic analysis of the courts. *Journal of Law & Economics*.
- Dusek, L., & Montag, J. (2016). The Effects of a Simpler Criminal Procedure: Evidence from One Million Czech Cases. *working paper*

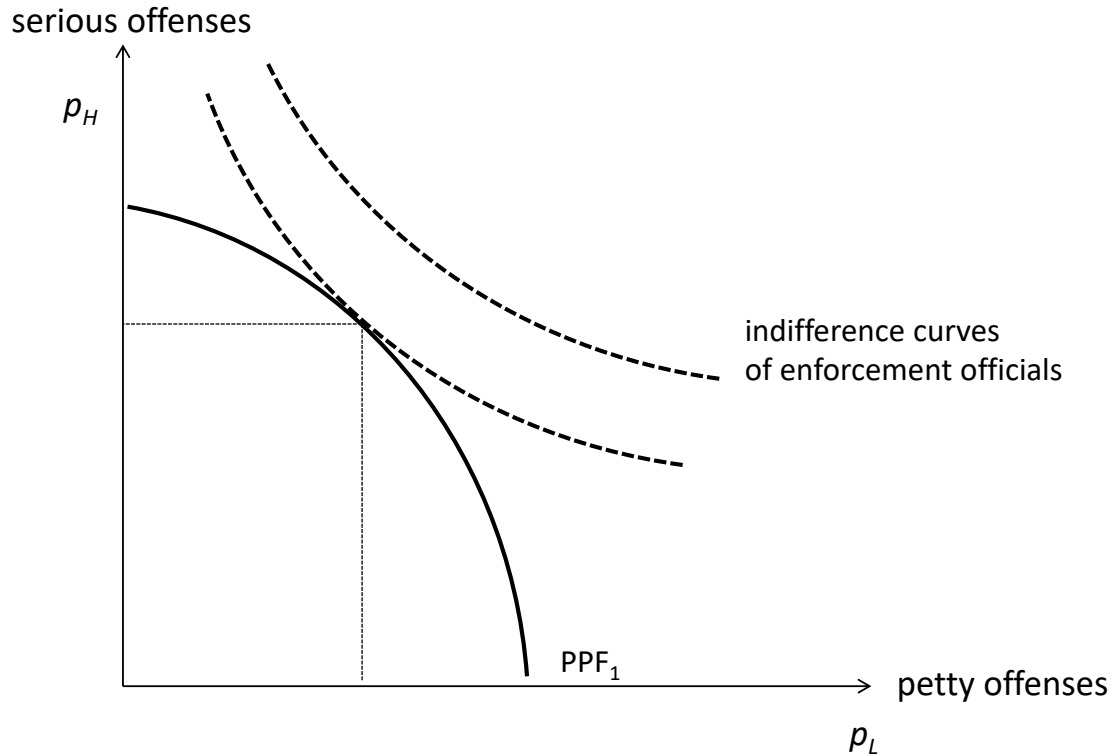
Alternative criminal procedures

- Dusek, L., & Montag, J. (2016). The Effects of a Simpler Criminal Procedure: Evidence from One Million Czech Cases. *working paper*

We estimate the effects of a simplified criminal procedure applicable to minor crimes on case durations and probabilities of charges and conviction. The identification strategy exploits a quasi-natural experiment in the implementation of the simplified procedure across districts. The procedure reduces the duration of the pre-trial phase and increases the probability that the prosecutor will charge the defendant in court. The effects on the duration of the court phase and the probability of conviction at trial are less significant. The resources released by the use of the simplified procedure could be allocated to serious cases. However, we do not find evidence of such beneficial spillovers.

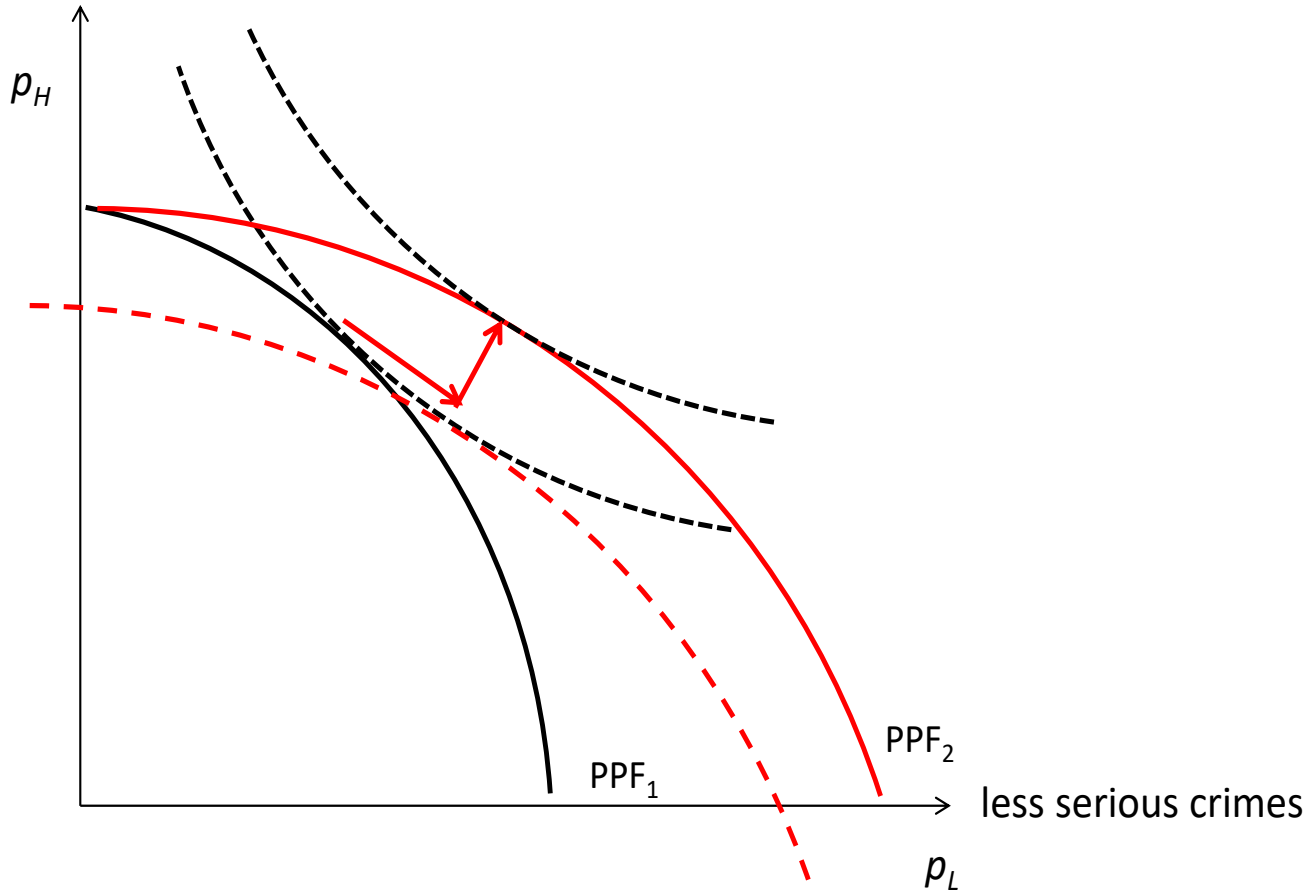
2002 – fast track procedure in CR

Allocation of enforcement resources

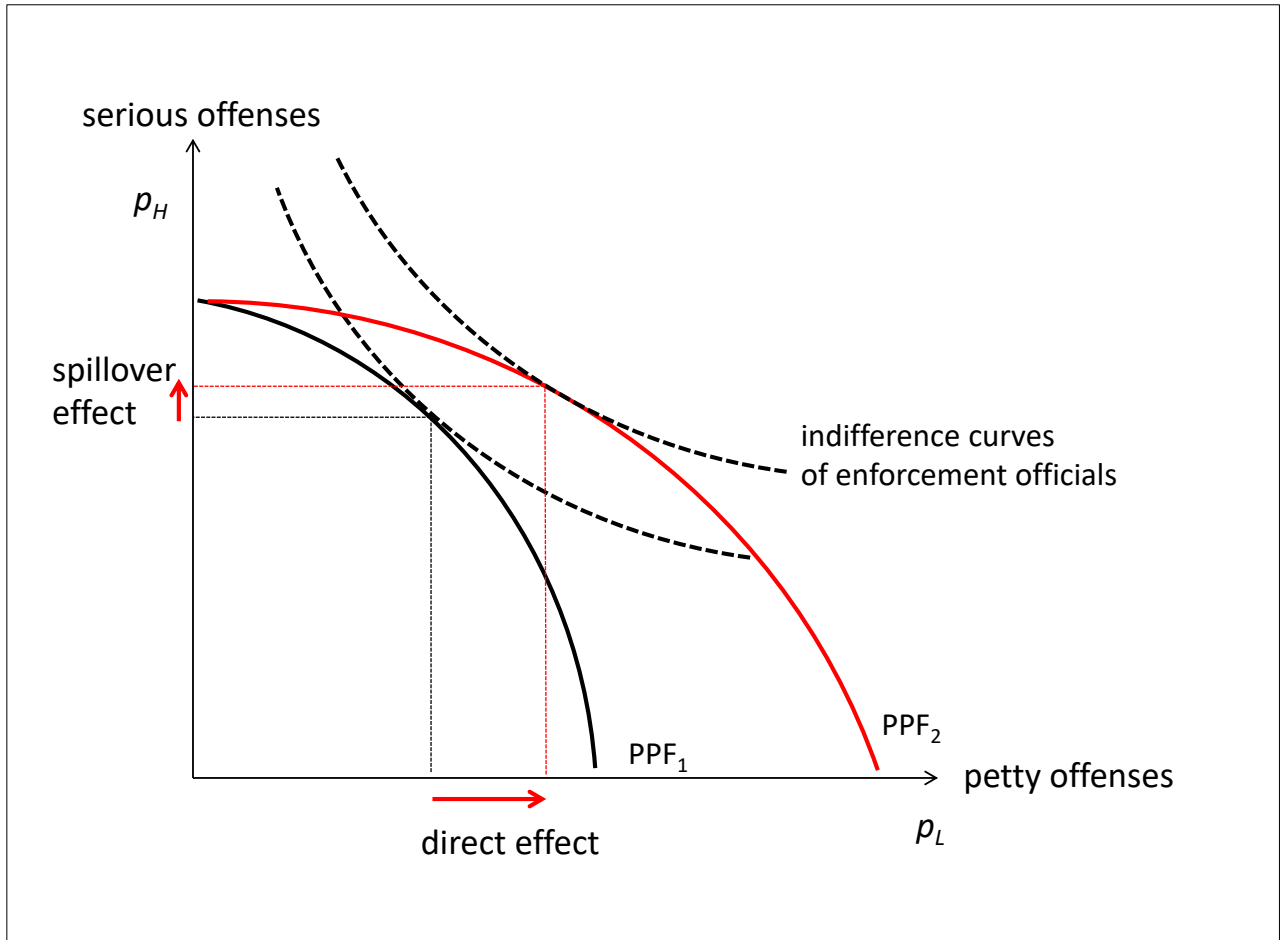


Substitution and scale effects

serious crimes



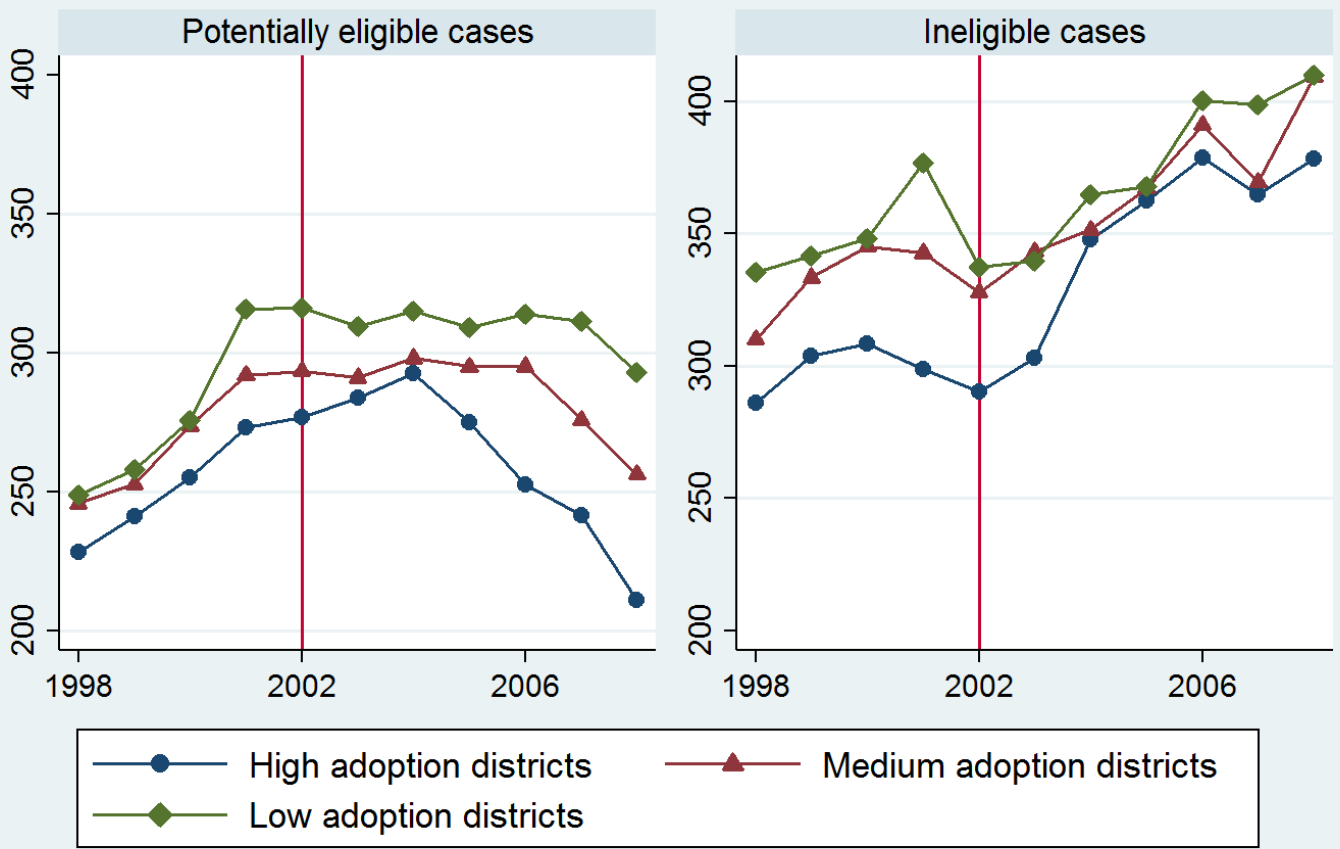
Final effects



Variation across 86 districts

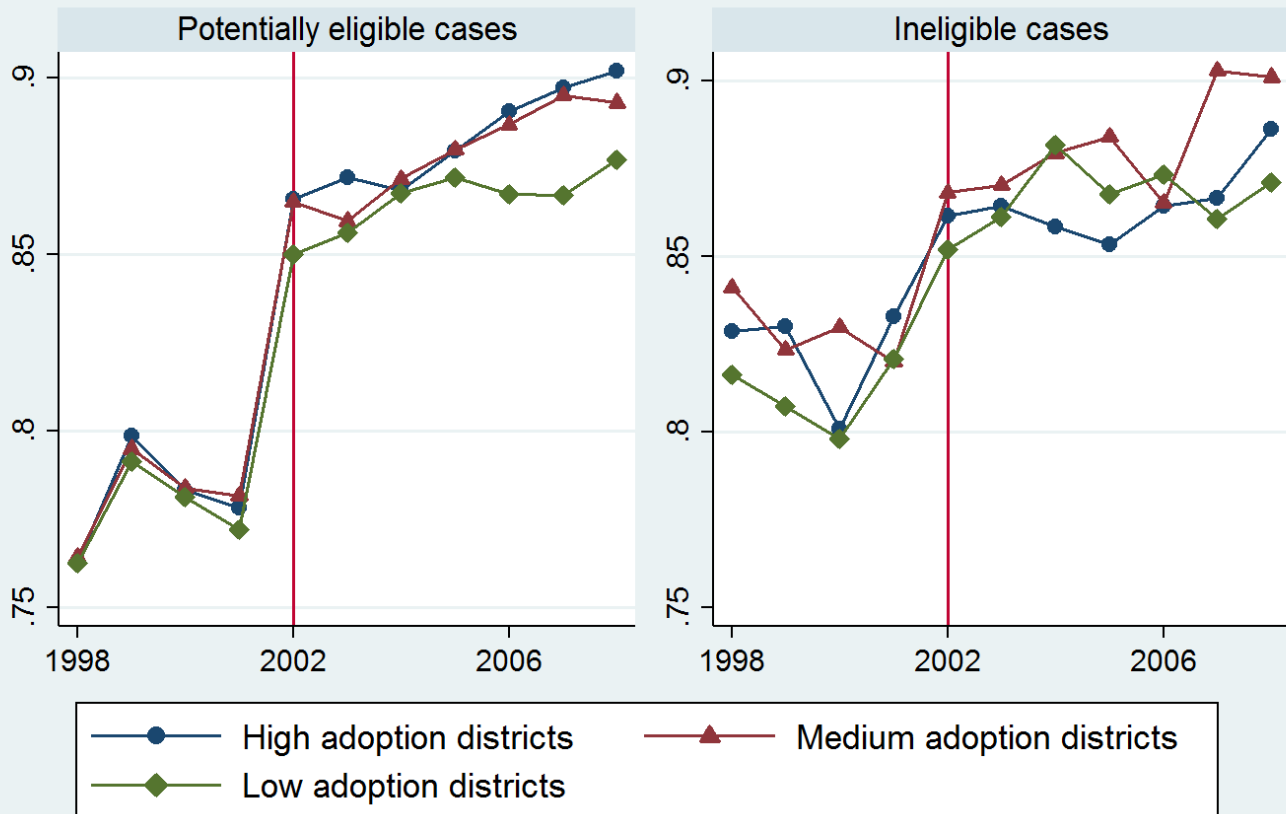
Offense category	Share of fast-track cases in 2002 (%)			Share of fast-track cases in 2008 (%)		
	Mean	P_5	P_{95}	Mean	P_5	P_{95}
Theft/burglary	0.27	0.08	0.49	0.37	0.16	0.61
Driving	0.57	0.28	0.84	0.76	0.58	0.92
Against public order	0.19	0.02	0.44	0.21	0.03	0.43
Against life or health	0.03	0.00	0.14	0.03	0.00	0.16
Sex offenses	0.06	0.00	0.33	0.09	0.00	0.50
All potentially eligible cases	0.20	0.08	0.35	0.39	0.26	0.55

Average duration from offense to charges



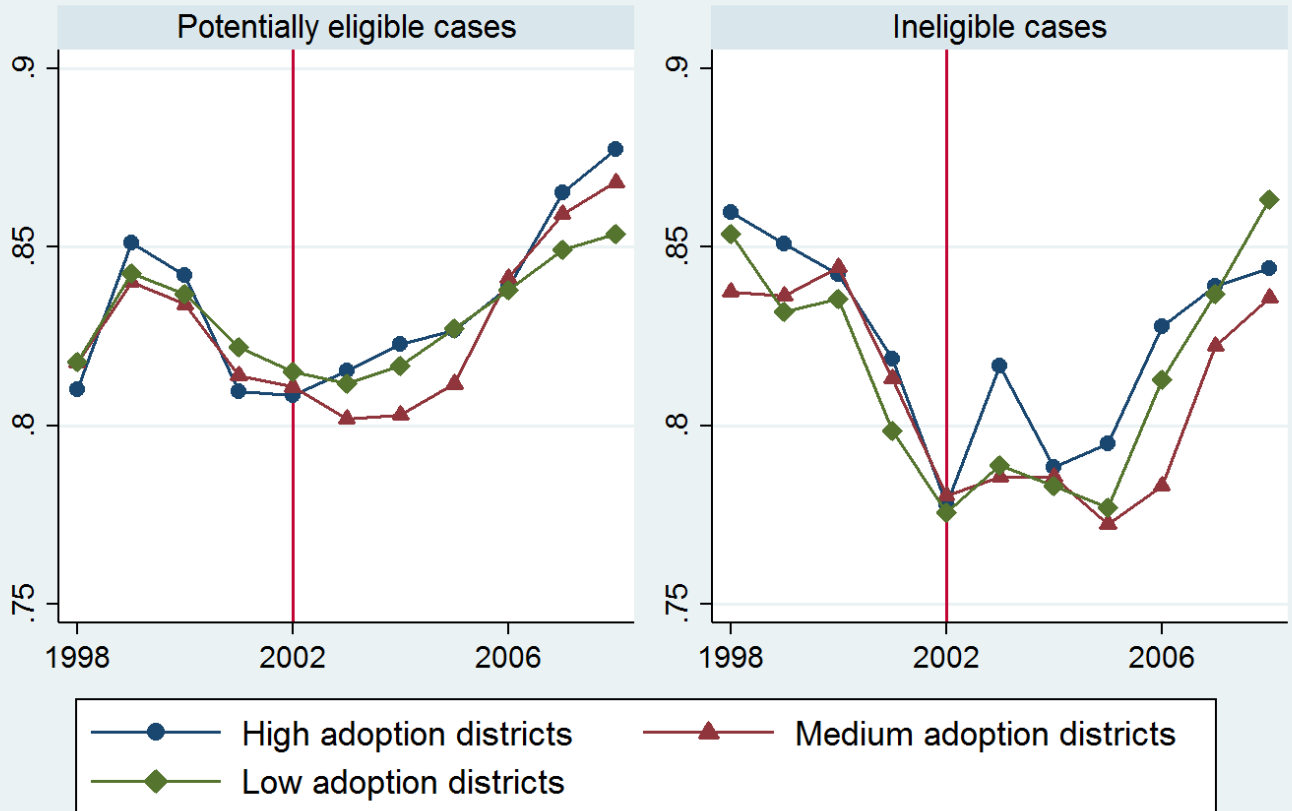
Districts classified by terciles of the fast-track share among eligible cases in 2008

Average probability of charges



Districts classified by terciles of the fast-track share among eligible cases in 2008

Average probability of conviction



Districts classified by terciles of the fast-track share among eligible cases in 2008

Effects on the police/prosecutor duration

	Theft/ burglary	Driving	Against public order	Against life/ health	Sex offenses
Potentially eligible cases					
Direct effect	-87*** (18)	-93*** (12)	-151*** (29)	-220*** (42)	-185.0*** (44)
Spillover effect	27 (30)	23 (20)	83* (48)	50* (27)	4 (102)
R-squared	0.155	0.110	0.134	0.131	0.141
Observations	253,522	142,575	82,508	51,056	7,706
Ineligible cases					
Spillover effect	203 (180)	-43 (274)	134 (137)	35 (39)	-95 (149)
R-squared	0.243	0.207	0.466	0.154	0.151
Observations	5,961	2,993	11,834	36,433	15,501
District FE	yes	yes	yes	yes	yes
Year FE	yes	yes	yes	yes	yes
District trends	yes	yes	yes	yes	yes

Effects on the probability of charges

	Theft/ burglary	Driving	Against public order	Against life/ health	Sex offenses
Potentially eligible cases					
Direct effect	0.094*** (0.023)	0.096*** (0.032)	0.112*** (0.031)	0.138 (0.106)	0.028 (0.068)
Spillover effect	0.031 (0.036)	-0.009 (0.043)	0.068 (0.059)	-0.04 (0.104)	0.064 (0.123)
R-squared	0.055	0.058	0.069	0.165	0.093
Observations	264,398	144,196	86,982	55,010	8,347
Ineligible cases					
Spillover effect	0.002 (0.085)	-0.402 (0.201)	0.02 (0.129)	0.065 (0.086)	0.057 (0.091)
R-squared	0.117	0.123	0.069	0.144	0.091
Observations	6,255	3,128	12,226	37,901	16,897
District FE	yes	yes	yes	yes	yes
Year FE	yes	yes	yes	yes	yes
District trends	yes	yes	yes	yes	yes

Effects on the probability of conviction

	Theft/ burglary	Driving	Against public order	Against life/ health	Sex offenses
Potentially eligible cases					
Direct effect	0.055** (0.024)	0.02 (0.014)	0.06* (0.031)	0.064 (0.082)	-0.114 (0.091)
Spillover effect	-0.05 (0.042)	0.001 (0.038)	-0.044 (0.059)	0.0131 (0.078)	-0.018 (0.141)
R-squared	0.054	0.051	0.068	0.124	0.089
Observations	219,331	127,470	67,822	47,314	8,499
Ineligible cases					
Spillover effect	0.039 (0.267)	-0.193 (0.224)	0.087 (0.112)	-0.018 (0.08)	-0.016 (0.112)
R-squared	0.204	0.120	0.151	0.121	0.126
Observations	4,472	2,835	10,697	27,044	13,284
District FE	yes	yes	yes	yes	yes
Year FE	yes	yes	yes	yes	yes
District trends	yes	yes	yes	yes	yes

Counterfactual analysis

	Probability of charges			Fast track accounts for
	Actual probability in 2001 (days)	Change in actual probability, 2001–2008	Change in counterfactual probability, 2001–2008	
Theft/burglary	0.82	0.11	0.07	0.05
Driving	0.93	0.03	-0.04	0.07
Against public order	0.77	0.08	0.05	0.03
Against life or health	0.66	-0.01	-0.00	-0.01
Sex offenses	0.76	0.12	0.09	0.02
All potentially eligible cases	0.79	0.11	0.06	0.05

Key points

- Trade-off between wrongful convictions and wrongful acquittals, innocent until proven guilty
- Optimal conviction standard: min the cost of judicial errors
- Enforcers have discretion = > they tend to undo harsher sentences
- Economic logic of alternative procedures – resource-releasing hypothesis
- Procedure has effects on substantive outcomes
- Incentives matter for justice
- Beware of overly strong monetary incentives

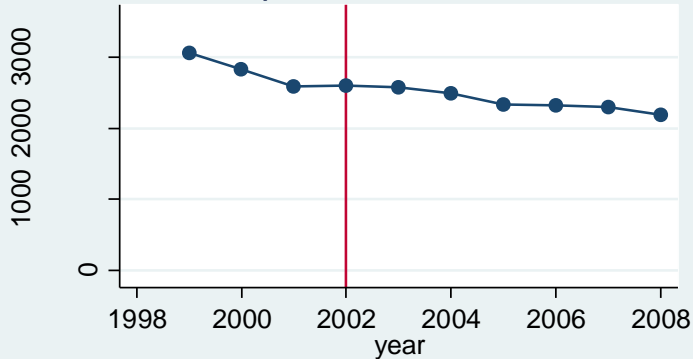
Procedure rules and incentives

- Dusek, L. (2015): Time to punishment: The effects of a shorter criminal procedure on crime rates, *International Review of Law and Economics*.

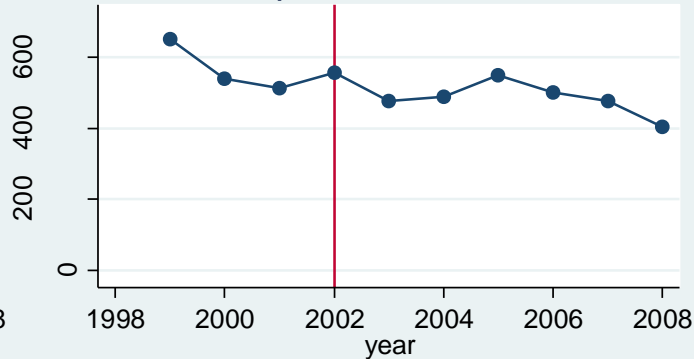
A shorter and simpler criminal procedure may affect crime rates by increasing the perceived severity of punishment and by inducing a reallocation of police enforcement resources. I investigate the impacts of a criminal procedure reform in the Czech Republic that allowed certain less serious offenses to be prosecuted via a simplified (fast-track) procedure. The share of cases actually prosecuted via the fast-track procedure varied substantially across police districts and offenses, which provides the basis for the identification strategy. The shorter procedure had very different effects on ordinary crimes reported by the victims compared with crimes that are identified mostly by police enforcement efforts. Specifically, it led to a substantial increase in the number of recorded criminal offenses associated with driving. This finding is best rationalized by a reallocation of police enforcement effort towards crimes that have low enforcement costs. I also find some, albeit rather weak, evidence of a deterrent effect on burglary and embezzlement.

Crime rates before and after the reform

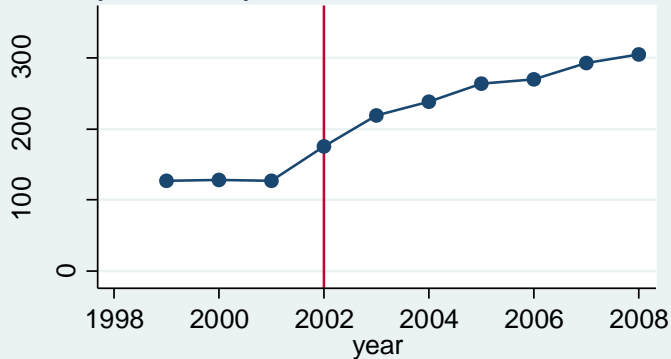
victim-reported, covered offenses



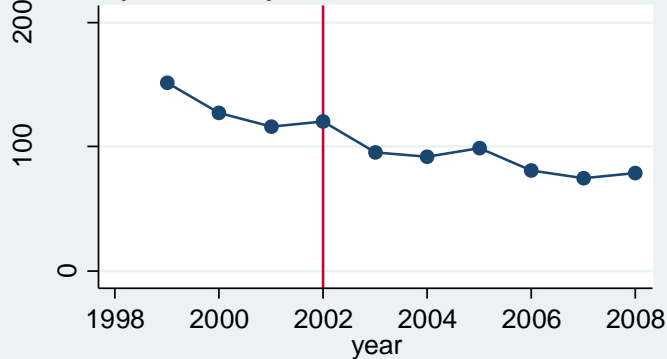
victim-reported, other offenses



police-reported, covered offenses



police-reported, other offenses



Results: IV, police-reported crimes

	violence ag. pub. officials	bank. card possession	obstruct. of offic. order	vandalism	driving under influence
IV 2nd stage					
log duration	-0.454 (0.429)	0.093 (0.018)	-0.243** (0.106)	-0.219 (0.185)	-0.956** (0.390)
IV 1st stage					
fast-track shr	-0.362** (0.152)	-0.733*** (0.148)	-1.607*** (0.260)	-0.958*** (0.140)	-0.638*** (0.078)

Results: IV, victim-reported crimes

	trespass	burglary	theft	other property	embezzl.	miscell.
IV 2nd stage						
log duration	-0.143 (0.176)	0.043 (0.075)	-0.065 (0.057)	-0.176 (0.122)	0.206 (0.309)	0.069 (0.141)
IV 1st stage						
fast-track shr	-0.782*** (0.130)	-0.829*** (0.171)	-1.33*** (0.251)	-0.86*** (0.177)	-0.537*** (0.156)	-1.045** (0.128)



EVROPSKÁ UNIE
Evropské strukturální a investiční fondy
Operační program Výzkum, vývoj a vzdělávání



Národohospodářská fakulta VŠE v Praze



This work is licensed under the Creative Commons Attribution-ShareAlike 4.0 International License. To view a copy of this license, visit <http://creativecommons.org/licenses/by-sa/4.0/> or send a letter to Creative Commons, PO Box 1866, Mountain View, CA 94042, USA.