

Why Do People Commit Crimes? Evidence from Inmates' Survey.

Daniel Chen¹ Lubomír Cingl² **Arnaud Philippe**³ Michal Šoltés⁴

¹TSE/IAST ²Prague University of Economics and Business ³University of Bristol

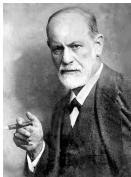
⁴Charles University, Faculty of Law

September 14, 2022



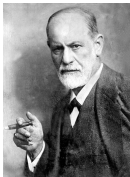
- ▶ Pseudo-biology: There is a criminal nature coming from phenotype/genetics...

Theories on the Origin of Crime



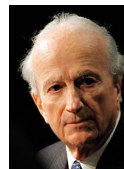
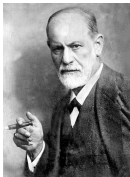
- ▶ Pseudo-biology: There is a criminal nature coming from phenotype/genetics...
- ▶ Psychology: Criminals have a mental illness.
- ▶ Marginality: Criminals are the margin of society.

Theories on the Origin of Crime



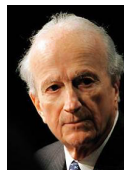
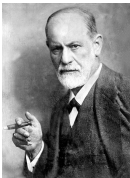
- ▶ Pseudo-biology: There is a criminal nature coming from phenotype/genes...
- ▶ Psychology: Criminals have a mental illness.
- ▶ Marginality: Criminals are the margin of society.
- ▶ Criminal Identity: Criminal behavior is a counter-culture opposing the dominant one.

Theories on the Origin of Crime



- ▶ Pseudo-biology: There is a criminal nature coming from phenotype/genes...
- ▶ Psychology: Criminals have a mental illness.
- ▶ Marginality: Criminals are the margin of society.
- ▶ Criminal Identity: Criminal behavior is a counter-culture opposing the dominant one.
- ▶ Homo oeconomicus: Criminals are people who have incentives to commit crimes.

Theories on the Origin of Crime



- ▶ Pseudo-biology: There is a criminal nature coming from phenotype/genes...
- ▶ Psychology: Criminals have a mental illness.
- ▶ Marginality: Criminals are the margin of society.
- ▶ Criminal Identity: Criminal behavior is a counter-culture opposing the dominant one.
- ▶ Homo oeconomicus: Criminals are people who have incentives to commit crimes.
- ▶ Procedural justice: Crime is related to the trust/legitimacy of the state.

Theories on the Origin of Crime - Policy Implications

Those theories have different policy implications.

- ▶ Pseudo-biology/Psychology: Medical treatments.
- ▶ Marginality: Public policy toward homeless and people with weak social ties, helping the poor.
- ▶ Counter culture: Target gangs, avoid creating prison counter-culture.
- ▶ Homo oeconomicus: Increase sentences, reinforce police, reduce poverty.
- ▶ Procedural justice: Improve relations between institutions (police) and at-risk populations.

Understanding if/where/when a theory is true is key for public policy!

Theories on the Origin of Crime - Validation

Those theories have been tested in various context...

- ▶ Pseudo-biology/Psychology (Jacomé, 2020)
- ▶ Marginality (Corno, 2017; Cohen, 2020)
- ▶ Counter culture (Cohn & Maréchal, 2015)
- ▶ Homo œconomicus (Machin et al. 2015; Chalfin & McCrary 2017; Britto et al. 2022)
- ▶ Procedural justice (Nagin & Telep, 2017)

... and all are (at least) partly validated.

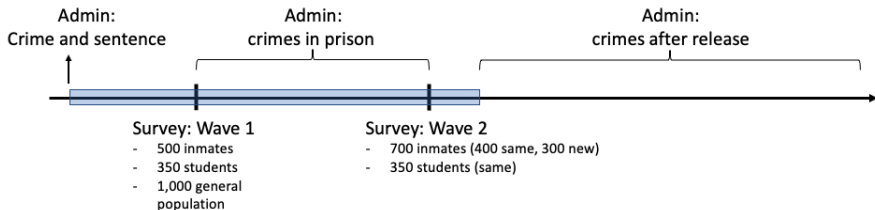
This Project (I)

Aims to measure inmates' preferences and perceptions to test:

- ▶ the explanatory power of the theories
- ▶ and their predictive power for misbehavior/crime

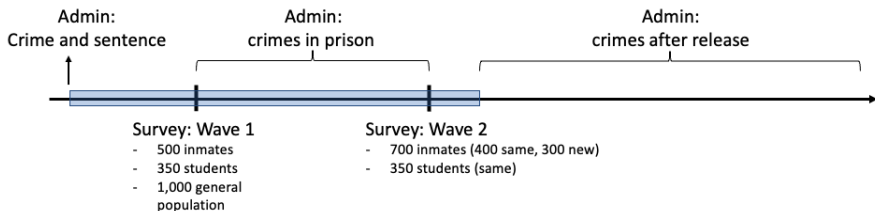
Do it in a unified framework.

This Project (II)



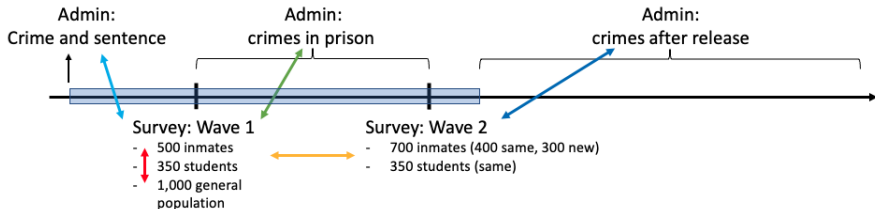
- ▶ Survey inmates twice one year apart.
- ▶ Ask the same questions to students and the general population.
- ▶ Merge inmates' survey data and administrative data.

This Project (III)



- ▶ *Homo oeconomicus*: Knowledge about parameters of criminal justice policies (e.g., expected sanction).
- ▶ *Counter culture*: Dictator/Trust games with male inmates and never incarcerated males.
- ▶ *Procedural justice*: Declared trust in institutions.
- ▶ *Behavioral*: Risk preferences, reciprocity, optimism

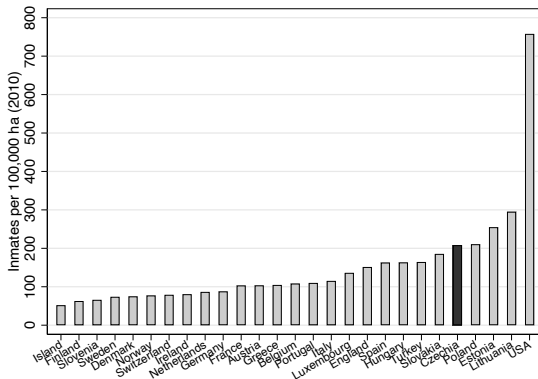
This Project (IV)



- ▶ How inmates' responses correlate with crime and sanctions?
- ▶ How inmates' responses differ from other groups?
- ▶ How inmates' responses evolve over prison time?
- ▶ How inmates' responses correlate with behavior in prison?
- ▶ How inmates' responses correlate with behavior after prison?

Context: Czech Republic (I)

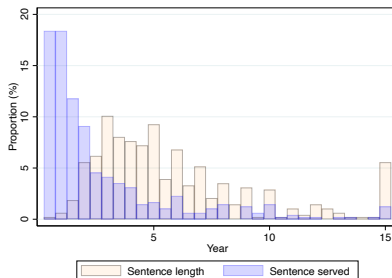
- ▶ 2021: 19,000 inmates (197 per 100,000) , prisons' budget around €500 millions
- ▶ 2017: 37% incarcerated for the first time



Inmates (I)

Surveys

- ▶ Administered by us, group sessions (+/- 20 indiv.)
- ▶ Wave 1: Aug-Nov 2021, 489 inmates from 15 prisons
- ▶ Wave 2: Aug-Nov 2022, the same from wave 1 + exp. 300 new
- ▶ Only males, relatively long sentences



Inmates (II)

Administrative data

- ▶ Judicial situation: Crime, sentence length, criminal record
- ▶ Psychologist's assessment: attitude towards formal and informal norms (acceptance of illegal behavior), relationship to work, frequency of conflicts with authorities, membership in a defective group
- ▶ Between wave 1 and 2: "disciplinary actions" in prison
- ▶ Long term: recidivism/reincarceration.

Other Respondents

Students

- ▶ Administered by us, group sessions (around 20 persons) and online.
- ▶ Wave 1: winter 2021-2022, 356 individuals.
- ▶ Wave 2: winter 2022-2023, the same students.

General population

- ▶ Administered by a private firm.
- ▶ Summer 2022, around 1,000 individuals (representative of our inmates' sample and the general population) (still ongoing).

Descriptive Statistics

	Inmates		General population		Students	
	Mean	Sd	Mean	Sd	Mean	Sd
Age	35.7	9.1	38.2	11.3	22.9	2.6
Family ever convicted			.23	.42	.16	.36
Education						
Elementary	.40	.49	.09	.28	0	0
High school	.54	.50	.74	.44	0	0
College or more	.04	.20	.18	.38	1	0
Family Status						
Single	.78	.41	.60	.49		
Married	.06	.24	.29	.45		
Divorced	.15	.36	.11	.31		
Crime type						
Drugs	.17	.37				
Property	.35	.48				
Violence	.38	.49				
Other	.1	.3				
N	489		786		356	

- ◀ ◻ ▶ ◀ ◻ ▶ ◀ ≡ ▶ ◀ ≡ ▶ ≡ ≡ ↺ 🔍 ↻

Homo œconomicus

Hypothesis:

- ▶ Inmates have better knowledge of the parameters of criminal justice policies than non-inmates.
- ▶ It is particularly true for crimes they have been convicted for.
- ▶ When wrong, inmates tend to underestimate risks.

Questions : ▶ Arrest ▶ Sanctions

- ▶ Short vignettes followed by questions about:
 - Probability of being arrested
 - Probability of being sent to jail conditional on being arrested
 - Average length of incarceration if sent to prison
- ▶ Answers compared to police and court statistics and incentivized by postage stamps.

Counter Culture

Hypothesis:

- ▶ Inmates trust other inmates more than they trust non-inmates (strong hypothesis)
- ▶ Inmates trust other inmates more than non-inmates trust inmates (weak hypothesis)

Trust games/dictator games:

- ▶ Each player played as the sender twice.
- ▶ Receiver is an inmate or a non-inmate (random order).
- ▶ Up to 7 postage stamps can be sent.
- ▶ Amount is tripled.

Procedural Justice

Hypothesis:

- ▶ Inmates do not trust the institutions.
- ▶ It is particularly the case when they think they haven't been treated fairly.

Questions (scale 1(no)-11(yes)):

- ▶ Generally, would you say that the *healthcare system/the judicial system* treats all people equally?
- ▶ Generally, would you say that you can trust the information from *health/judicial* authorities (*doctors, nurses*)/(*judges, prosecutors*)?
- ▶ Would you say that the law enforcement and the actors of the judicial system were fair in the handling of your specific case?

Behavioral Explanations (I)

Hypothesis:

- ▶ Inmates are less risk averse.
- ▶ Inmates are less patient.
- ▶ Inmates have higher negative reciprocity.
- ▶ Inmates are less optimistic.

Behavioral Explanations (II)

Questions (scale 1(no)-11(yes)):

- ▶ *Patience*: Would you say that, relative to other people, you are willing to sacrifice something now to get greater benefits in the future?
- ▶ *Negative reciprocity*: To what extent are you willing to punish someone who treated you unfairly, even if it will have repercussions for you?
- ▶ *Risk preferences*: To what extent are you willing or not willing to risk?
- ▶ *Optimism*:
 - General: likelihood to find an appartement, get a job, get a ride, make a non criminal friend for person with no criminal record/released from prison [▶ More](#)
 - Personal: likelihood find a flat, get a job in 1 year (after release if relevant) [▶ More](#)

Table of Contents

- 1 Context and Data
- 2 Survey
- 3 Inmates vs. Non-inmates**
- 4 Evolution
- 5 Next Steps

Objective

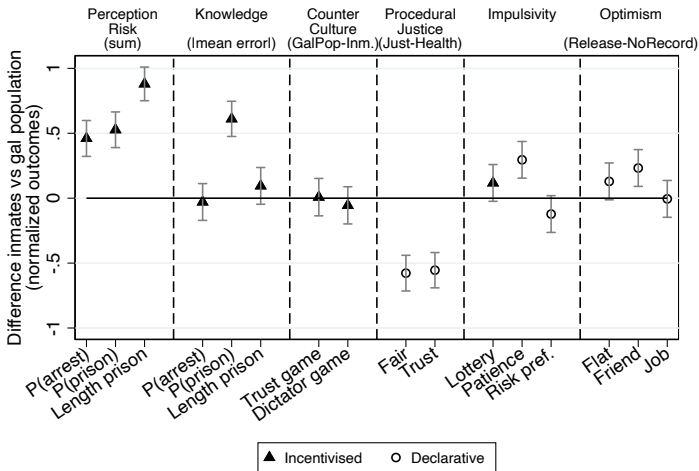
The first objective of the project is to measure how inmates differ from the rest of the population

- ▶ We measure the differences conditional on age and education
- ▶ We compare inmates and the general population and students

$$Outcome_i = \beta_0 + \beta_1 \cdot Inmates_i + \beta_2 \cdot Student_i + \alpha \cdot X_i + \epsilon_i$$

- ▶ Outcomes are normalised ($X = (X - E(X))/sd(X)$) to be comparable

Main Results



► Same results w/o students (and control for family+religiosity)

► More

Detailed Results (I)

Homo oeconomicus

▸ Probabilities

▸ Sentence length

- ▶ Inmates perceive risks as higher than others
- ▶ "Experts" are not particularly knowledgeable

Counter culture

▸ Games

- ▶ Inmates send more in both games.
- ▶ All groups send more to non-inmates
- ▶ Same results for inmates with a connection to defective groups

► Political participation

- behavioral ▶ Lottery ▶ Reciprocity
- ▶ Inmates declare to be less risk takers and more impatient
 - ▶ Inmates declare higher positive reciprocity and lower negative reciprocity.

► Reciprocity

- ▶ Inmates declare to be less risk takers and more impatient
- ▶ Inmates declare higher positive reciprocity and lower negative reciprocity.

► Personal

- ◀ ◻ ▶ ◀ 📄 ▶ ◀ 📊 ▶ ◀ 📈 ▶ ◀ 📉 ▶

Variation by Type of Crime

We can distinguish between violent crimes, property crimes, drugs, and others.

- ▶ No striking variations
- ▶ Knowledge, risk perception similar [▶ More](#)
- ▶ Drug-related offenders slightly more risk taking? [▶ More](#)

[▶ Games](#)[▶ Trust institutions](#)

◀ ◻ ▶ ◀ ◻ ▶ ◀ ≡ ▶ ◀ ≡ ▶ ≡ || ≡ ↺ 🔍 ↻

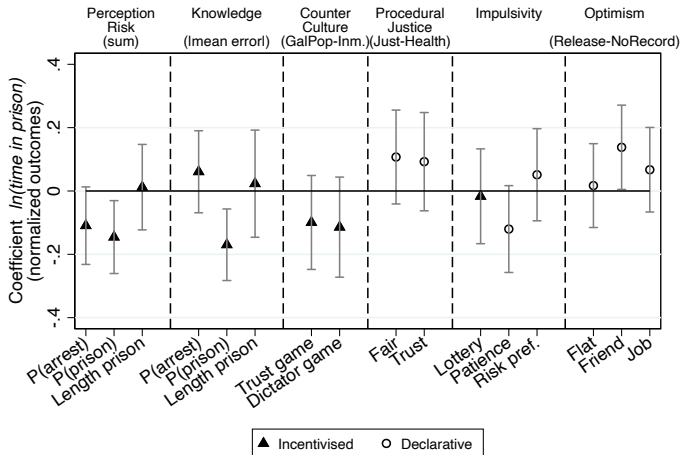
Objective

The second objective is to measure how preferences and perceptions evolve over prison time

- ▶ We want to compare answers from waves 1 and 2...
- ▶ ... but we can start by measuring the effect by time served.
- ▶ Measure conditional on sentence time and crime category following:

$$Outcome_i = \alpha_1 \cdot \ln(TimeServed_i) + \alpha_2 \cdot \ln(Sentence_i) + \beta \cdot X_i + \epsilon_i \quad (1)$$

Preliminary results



Next Steps

- ▶ Finish wave 2.
- ▶ Replication and extension in India should start soon.
 - Larger sample size in Firozabad (Uttar Pradesh)
 - Add question about social network.
 - Add question about expected trial outcome to document the effect of potential disappointment.

Homo œconomicus: sanctions

Imagine 100 people who were already convicted a few times before (3-5) and are now found guilty of *[a theft during which a not negligible damage was caused on a property belonging to someone else - that means it was the least serious form of theft]*.

- ① How many, out of these 100 people, are, on average, convicted and sentenced to jail?
- ② How long will their sentence be, on average? (in months in prison)

Other crimes:

- ▶ *[manufacturing and possessing narcotics in small amounts - the least serious form of narcotics manufacturing considered to be a criminal offence]*
- ▶ *[murder]*

Behavioral explanations: optimism (general)

- ▶ Imagine the following situations and indicate how likely do you think it is that they will happen to the two following types of men. These two men are very similar (age, looks, region), but man no. 1 was recently released from prison while man no.2 has no criminal record. The people who deal with them know about their past, but do not know anything else about the men.
 - ① Get an apartment for rent
 - ② Befriend a person with no criminal record
 - ③ Get a new job
 - ④ Someone will offer to give them a ride had they need it
- ▶ Imagine that, in addition to the two men above, people will also deal with a third man, who is currently incarcerated. How do you think people will generally treat these three men?

Behavioral explanations: optimism (individual)

How likely do you think it is that you will...

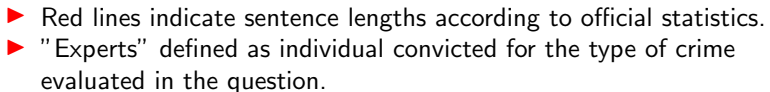
- ① ...have a stable job in the first year after your release from prison?
- ② ...have quality and stable accommodation in the first year after your release from prison?
- ③ ...vote in the first five years after your release from prison?
- ④ ...participate in an anti-government protest in the first five years after your release from prison?

▶ Back

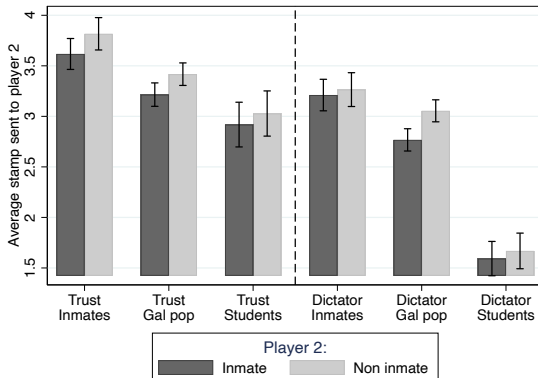




- ▶ Red lines indicate probabilities according to official statistics.
- ▶ "Experts" defined as individual convicted for the type of crime evaluated in the question.

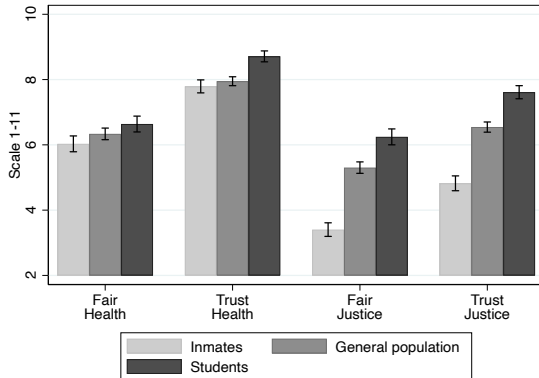


Criminal identity

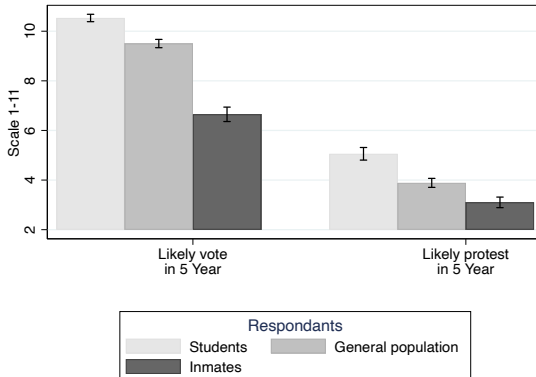


► Back

Procedural justice: results (I)

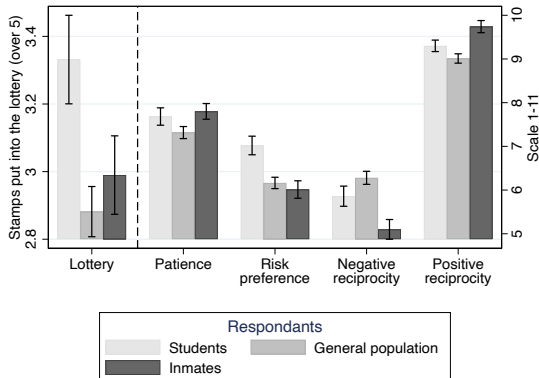


Behavioral explanations: results(II)

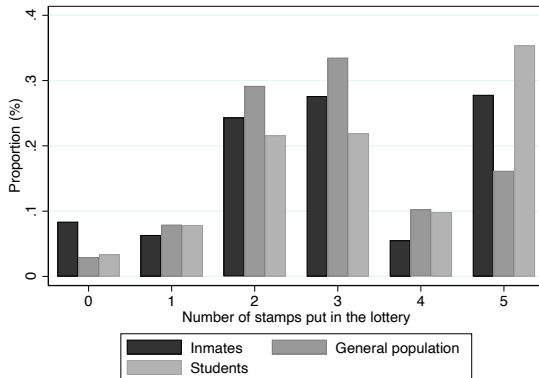


► Back

Behavioral explanations



Lottery

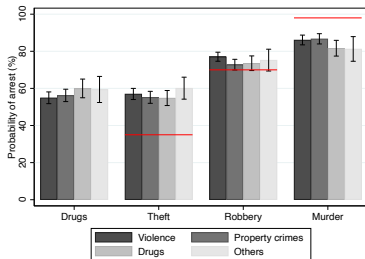


▶ Back

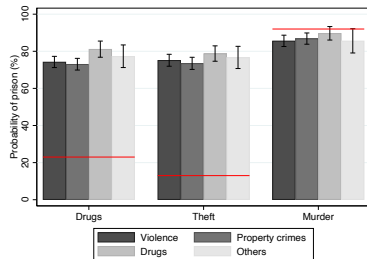




Difference by crime: risk perception



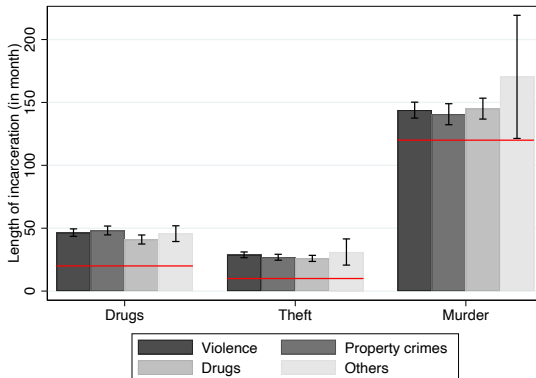
Arrest



Jail if arrested

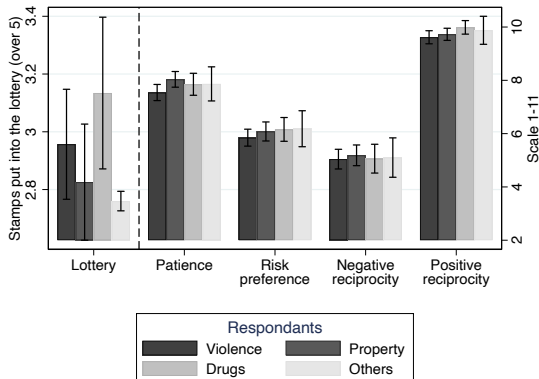
► Back

Difference by crime: risk perception

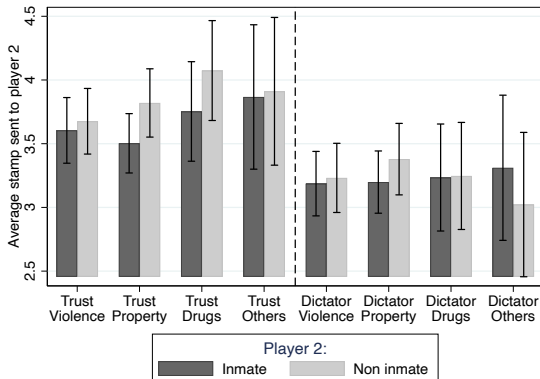


► Back

Difference by crime: behavioural



Difference by crime: games



► Back

