

The Price of De-Stigmatization of criminal law: experimental approach

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- 1 Background
- 2 Experiment
- 3 Results

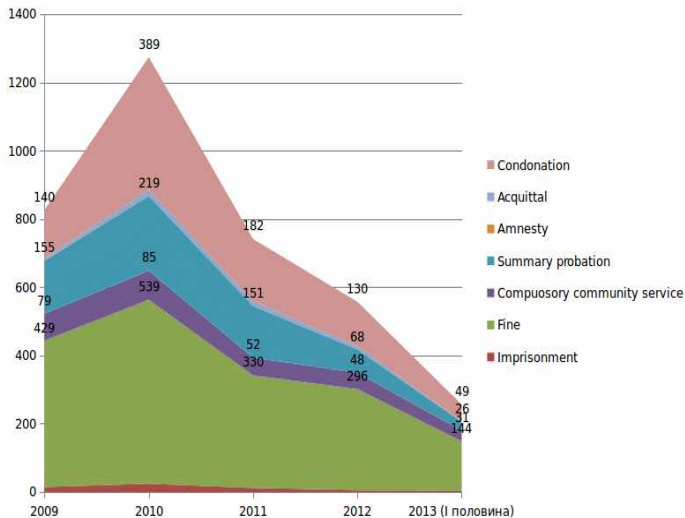
Can you buy the right to fraud?

- This paper explores the efficiency of a legal norm that allows to pay off a fine for clearing oneself of criminal record.
- Spread in several countries, incl. some US states, and Russia.
- 'A person committing a criminal offense for the first time is cleared of criminal charges and record if (s)he compensated in full the damage caused to a third party, and transfers the fine equal to five times the size of that damage to the federal budget' (Fed.Law 420, December 2011)
- Instances: Illegal banking activity, market manipulation, intended bankruptcy, intended delinquency on credit liabilities etc. - altogether about 20 Articles of the Criminal Code.
- Consequences: besides money, small to large, depending on reputation losses, as well as many restrictions, such as ban to teaching profession, deprivation of the right to be elected, visa problems etc.

Should you be allowed to do so?

- 1 Is this measure crime-provoking (rich people can afford some crimes) or crime-preventing (offers more choice to petty criminals and deters further crimes)?
- 2 How much people value de-stigmatization relatively to its legal cost?
- 3 What are the neuro mechanisms driving behaviour in this context (what do criminals feel once caught, and once purchasing indulgence)?
- 4 More fundamentally, Does dissipated feeling of guilt invalidate the mission of Law - — punish guilty people and prevent further crimes?

Evidence: statistics of accusations



Modified Investment Game (Berg et al., 1985)

- 5 sessions, 8 to 12 subjects per session, stranger matching for 20 periods, 10 by condition.
- Programmed in z-tree (Fischbacher, 2007), avg. pay 278 Russian Rub (5 Euro).
- Player 1 receives 100 ecus (= 0.2 RuR) and has to pass to player 2 any amount $x \geq 50$ (cannot pass less).
- Player 2 receives kx , $k \sim \text{uniform}(1, 4)$, which number is known to player 2, but not to player 1.
- Player 2 returns any $y \in [0, kx]$ to player 1, who observes the amount but not the share of y in kx .
- Warranted return is $y \geq \frac{kx}{2}$, but it's up to player 2 to decide.

Choices

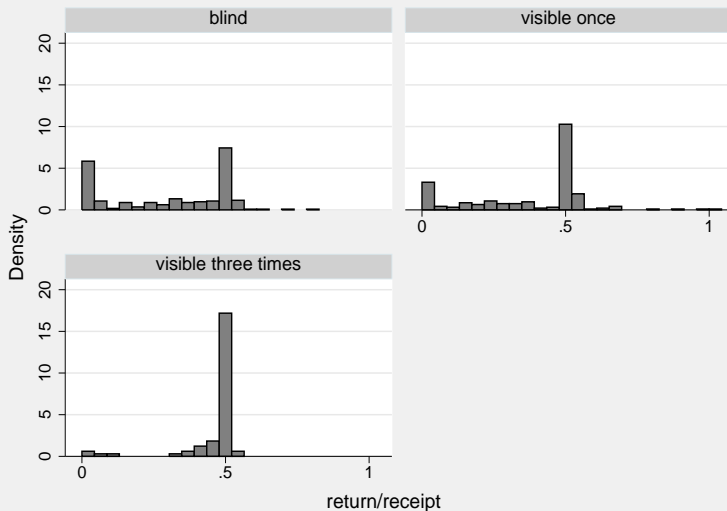
- Computer independently checks players 2 for the share (s)he has passed to partner player 1 with unknown exogenous probability ($p = 0.85$).
- If player 2 is discovered passing less than 0.5 of what (s)he get, (s)he is liable for fine $f = kx/2 - y$ to the experimenter (government), which is conveyed to both players in the present pair at the end of the period.
- Three conditions:
 - In control condition, that's it.
 - in experimental condition 1, the fact that player 2 has been caught cheating is passed to his partner player 1 in the *next* period of the game.
 - in experimental condition 2, the fact that player 2 has been caught cheating is passed to his partner players 1 in the *next three* periods of the game.

De-stigmatization: Becker-DeGroot-Marschak (1964) mechanism

In each condition, caught players 2 can independently get de-stigmatized (freed of fine and public ashaming, explicitly framed as "crime").

- player 2 names any $z \in [0, 6f]$.
- computer calls random number r from the uniform distribution with the same range.
- if $r > z$, player 2 remains convicted, pays f and is ashamed to his present (and in experimental conditions, future) partner(s).
- if $r \leq z$, player 2 pays r and nobody is informed about him cheating.
- stating $z = \text{true valuation}$ of de-stigmatization is weakly dominant strategy.

Shares of return (fair = 50%)



Graphs by 0 blind, 1 visible, 2 visiblex3

Shares of return (fair = 50%)

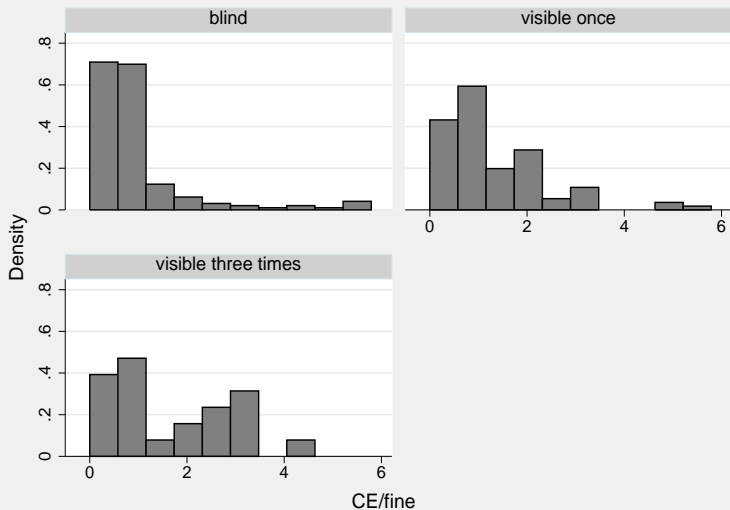
Significant differences across treatments (ANOVA $F = 20.07, p < 0.000$).

Shares of returns

	not visible	visible once	visible 3 times
N	520	430	150
mean size	0.303	0.379	0.464
fair return	0.684	0.779	0.866

Uniform significant increase of honesty with greater exposure.

Value of de-stigmatization



Graphs by 0 blind, 1 visible, 2 visiblex3

Value of de-stigmatization

Significant differences across treatments (ANOVA $F = 5.22, p < 0.006$).

With almost identical shares of caught people, share of punished people decreases, and WTP for de-stigmatization increases, with significant differences at 5% or more (WMW test).

Value of de-stigmatization

	not visible	visible once	visible 3 times
share of punished	0.263	0.193	0.140
mean size	0.924	1.255	1.612

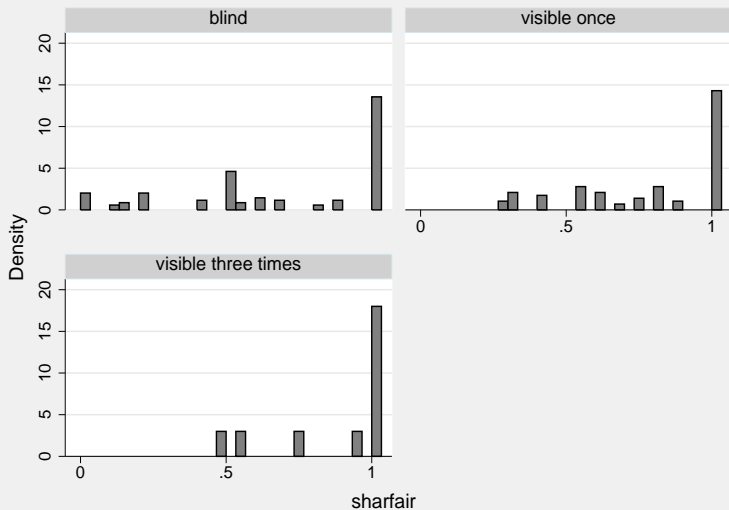
The mean value of de-stigmatization is about $0.7f \ll 6f$, suggesting heavy overpricing of its benefit.

Nature of cheating

Table : Estimation results : xtreg

Variable	Coefficient	(Std. Err.)
retshar	0.998	(0.451)
lretshar	-0.042	(0.397)
ltopunishtrue	-0.021	(0.153)
0b.treatm	0.000	(0.000)
1.treatm	0.369	(0.234)
2.treatm	0.268	(0.429)
Intercept	0.825	(0.241)

Share of fair individual strategies



Graphs by 0 blind, 1 visible, 2 visiblex3

Conclusion and extensions

- Much remains to be explored, incl. individual characteristics (survey data), and/or alternative valuation methods.
- Neuroeconomic extension: planning an fMRI experiment aimed at measuring neural correlates of feeling of being caught and determinants of WTP for de-stigmatization.
- Social effects of the right to get free of charge?

Be warned, and Thank you for your attention

