

Workshop

Beyond the Economics of Crime

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Preliminary!

PUNISHMENT – AND BEYOND

by

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Abstract. This paper argues that the Economics of Crime is too much concentrated on punishment as a policy to fight crime. To mainly or even exclusively rely on punishment is unwise for several reasons. There are important instances in which punishment is unable to reduce crime. Several feasible alternatives to punishment exist such as providing positive incentives or handing out awards for law-abiding behaviour. These alternative approaches tend to create a positive-sum environment. When people are framed to appreciate that they live in a society to a large extent law-abiding, they are motivated to also observe the law.

Keywords. Crime, Punishment, Incentives, Motivation, Framing, Broken Window Theory.

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I. Punishment's Prominent Role

When Gary Becker in his 1968 article founded the modern Economics of Crime, he called it “Crime and Punishment” (Becker 1968). The basic idea is that rational individuals systematically respond to changes in relative prices: the higher the expected punishment is, the lower is crime, *cet. par.* This is an important insight; under many conditions the only feasible and effective possibility to fight criminal behaviour is indeed to impose punishment of offenders. In all societies and times punishment has indeed been widely, if not exclusively used as a means to deter people from committing criminal acts. A large literature in economics empirically shows the effectiveness of punishment¹.

The Economics of Crime distinguishes two effects of punishment. The first is the deterrence effect imposing costs on criminal persons apprehended, and the second is the incapacitation effect suggesting that criminals thrown in prison, or obviously suffering a death sentence, are no longer able to pursue their illegal activities. The economic approach to crime stresses marginal deterrence: the worse the crime, the higher should be the punishment. If this condition is not met, potential criminals get an incentive to commit a worse crime because the expected marginal benefits to the offender are likely to be positive while the marginal punishment remains constant. This insight is obvious to economists but has often been disregarded in practice. Especially authoritarian governments and dictatorship often seek to deter crime by imposing very stiff punishment for even minor crimes. The predictable result is that the incidence of crime is low but once a crime is committed it tends to be significant. The perpetrators correctly reckon that if a minor crime gets the same punishment as a major demeanour (e.g. a death punishment) they may as well go for a larger crime with higher expected profits.

The Economics of Crime has been extended in various ways. It suffices to mention three particularly interesting aspects:

- The concept of punishment has been generalized to include psychic costs to offenders by “*shaming*” them. Persons committing criminal acts are actively revealed to the general public. As a result their reputation diminishes making it more costly for them to be accepted as (trading) partners by other persons because they distrust them. A somewhat different type of shaming consists in

¹ For recent surveys see e.g. Cameron 1988, Levitt 1998, Corman and Mocan 2000, Mocan and Rees 2005.

directly confronting the perpetrators with their victims and to therewith impose psychic costs (Braithwaite 1989, see also Brennan and Pettit 2004). A murderer of a family father, for example, is made to experience the immense loss to the widow and the children of his victim².

- Punishment to some extent is effective even if it is not enforced. Punishment serves as a signal to indicate what behaviour is considered to be undesirable by the law makers. Such “*expressive*” *punishment* (see Cooter 1998, Bohnet and Cooter 2005 for the concept of “expressive law”) may be the only possible action when it is impossible to monitor and to impose punishment, except at unreasonably high cost. An example is the widespread custom of spitting in public places which used to be common in Western countries up to the middle of the 20th century, and still is in many Asian countries. A similar activity is littering (see Torgler, Frey and Wilson 2007).
- A third extension of the economics of crime is the so-called “*broken window theory*”³. The idea is that no unlawful behaviour should be tolerated. One interpretation of this theory is that even minor misdemeanours must be immediately and stiffly be punished to effectively deter people to deviate from the law. A similar approach is the “*Three strikes out*” (see Tyler and Boeckmann 1997 and Clark, Austin and Henry 1997) concept proposing life imprisonment even for minor criminal acts if they are repeated more than twice. The problem is, of course, that such an approach tends to violate the principle of marginal deterrence. Once the threshold of three criminal acts is surpassed, and given that there is a maximum penalty (either life imprisonment or death), increasingly serious crimes come at no additional cost. Take tax evasion as an example: if already minor violations of the tax code are heavily punished it pays to conceal really high amounts. The verdict on the effectiveness of the “broken window theory” is open. Some observers are convinced that it is as an effective deterrence while others are more sceptical (e.g. Corman and Mocan 2005, National Research Council 2004).

² It may be argued that such shaming only works for one-time offenders but not for professional criminals.

³ Wilson and Kelling 1982, Skogan 1990, Kelling and Coles 1996, Gladwell 2000. Corman and Mocan 2005.

II. But Punishment Does Not Always Work

While punishment is the cornerstone of the standard economics of crime it should be acknowledged that it is sometimes inapplicable, inefficient, or even counter-productive. There are several major instances.

1. *Punishment is desired by the perpetrators*

There are conditions in which a punishment imposed for an illegal act constitutes a benefit, rather than a cost, to the perpetrators. Suicide terrorists who want to die are an extreme example⁴. To try to deter them even by a capital punishment is ineffective; they want to be heroes or martyrs for their cause. Similarly, gang members want to be punished by the police as this is a signal to the other gang members indicating that they really belong to them. The more severe the punishment, the clearer is this signal. It may be argued that the incapacitation effect still works. This applies to the perpetrators themselves⁵ but has little or no effect on other persons who would like to similarly excel in such illegal activity. Evidence suggests that in many terrorist organizations the supply of persons willing to die for their cause is abundant (e.g. Krueger 2008). Even killing the top echelon of a terrorist movement or drug cartel is also ineffective if the demand for the respective “services” (i.e. the terrorist cause or the provision of drugs) is unchanged. It simply means that the position is emptied, enabling someone else to step in.

2. *Punishment reduces legal opportunities*

Having been punished is often taken as a signal that the corresponding individual is not trustworthy. He or she then finds it difficult or even impossible to find employment in the legal sector and is induced to turn to illegal activities.

3. *Too low maximum punishment*

There are conditions in which the expected punishment of committing a crime is lower than the expected benefits of doing so. If the rational comparison of expected benefits and costs indeed guides behaviour, this produces an incentive to engage in

⁴ Not all suicide terrorists really choose voluntarily to die. Often they are manipulated by a terrorist organization. See Krueger 2008, Frey 2004.

⁵ Though one often hears of gang leaders and members pursuing their activities also in jail, examples being the American and Sicilian Mafia, or the drug barons in Columbia (Gambetta 1993).

criminal activities. In countries observing the fundamental human rights the maximum punishment is the death sentence or life imprisonment while torturing is unacceptable. Civil rights groups have argued that putting people to death or keeping them in prison for lifetime should be discarded. This position enlarges the scope for crime, provided people function according to the expected utility calculus.

4. Punishment educates for crime

Young criminals often learn the tricks and techniques of their trade from more seasoned inmates of prisons. Once released, they can engage more productively in committing further crime. This problem is well known but nevertheless endemic.

5. Punishing innocent persons

In real life, it is impossible to punish all those guilty, and to never punish innocent persons. In many cases, innocent persons are punished while guilty persons are not (errors of type I and II). There is a trade-off: the more one tries to catch all violators of the law, the more likely it is that one also punishes innocent persons. The incentive effects may be disastrous. If people realize that they incur a substantial risk of being punished even if they keep to the law, they have a strong incentive to at least also get the benefits of acting illegal. A pertinent example is tax evasion. If honest people are punished anyway, they may as well conceal as much as possible.

6. Unwillingness to impose the optimal punishment

The Economics of Crime generally assumes that the government and the legal system have an interest to impose optimal negative sanctions. This is not necessarily the case. If, for instance, the politicians in power undertake unlawful acts, or have done so in the past, they may find it beneficial to set suboptimal punishments in case this is detected. Interest groups as well as public opinion may also have a strong influence on what punishments are legal and are actually imposed by the judges. Moreover, in many countries the president has the power to reduce or undo the punishment at his or her will. This privilege is often used for political and private reasons, even in states otherwise bound to the rule of law.

7. Crowding out intrinsic motivation

Empirical research has convincingly established that it is impossible to account for the extent of tax paying by only considering expected punishment⁶. To some extent, paying one's taxes is a "quasi-voluntary" act (See Levi 1988) attributable to an intrinsic motivation to contribute to the burden of taxation. An unfair, unconsidered way of treating taxpayers, and punishing honest taxpayers by error, tends to undermine this tax morale. The net effect of using punishment in an effort to establish legal behaviour is counter-productive if the relative price effect of the punishment is smaller than the crowding-out effect. The conditions under which this happens have been identified⁷.

8. *Unconscious behaviour*

There are instances in which people violate the law but are not aware of it. As Bazerman et al. (2002) argue for the case of accountants violating the law punishing such persons has no effect because they are not aware of any wrongdoing and are therefore unable to correct their behaviour.

These considerations show that punishment while important in many situations fails under other conditions. It is therefore important to seriously consider alternatives to punishment in order to maintain a society built on the rule of law.

III. Considering Alternatives to Punishment

Standard Economics of Crime while focusing on punishment as a deterrent does not totally neglect other incentives. But in typical econometric analyses⁸ only few incentives beyond punishment are considered, in particular the impact of the state of employment and education. It is shown that a reduction of unemployment opens new opportunities for individuals to find employment in the legal as against the shadow economy, and hence reduces crime. Better-educated persons can more easily gain a good income in legal activities and are therefore more immune against many kinds of crime⁹.

⁶ Torgler 2001, 2007, Feld and Tyran 2002, Feld and Frey 2007, Frey and Torgler 2007.

⁷ For theoretical and empirical analyses of motivational crowding theory see Frey 1992, Frey 1997, Bénabou and Tirole 2003, Frey and Jegen 2001).

⁸ See the works cited in footnote 1.

⁹ But a better education also makes it easier to enter white collar crime.

These incentives considered by the standard Economics of Crime refer to monetary incentives in the legal against the illegal sector. But there are other incentives to be considered going beyond monetary opportunities for people deciding to be active in either the legal or illegal society. It suffices to mention two such incentives little considered in the literature.

1. Positive non-monetary incentives to leave crime

An important motivation to leave crime is to have an opportunity to re-enter the legal part of society without undue costs. In most legal systems, people wanting to return to a legal activity are faced with extremely high cost, or it is totally excluded. They face punishment for their crimes and even thereafter are precluded from many legal activities. As a result, they are cornered in the illegal sector and are forced to continue their activity there. At the same time, the persons wanting to stay in the illegal sector impose heavy barriers to exit because they fear that the persons leaving will provide the police with evidence.

A totally different approach considers the situation of people in illegal activities and seeks to *raise* the benefits of exiting by providing such persons with attractive opportunities in the legal sector: they are not punished but rather are offered a new identity and satisfactory employment options so that they can engage in a new life. Such a policy flies in the face of what is normally considered to be fair as past crime is not sanctioned. However, when going beyond the primitive urge to punish wrong doers as a form of retribution, a policy of positive *marginal* incentives to leave crime may well turn out to be efficient under some conditions. This is, in particular, the case if such a policy does not induce individuals to enter the illegal sector in order to later profit from the positive incentives to exit. There is evidence that such a situation exists for some gangs such as the Mafia, and, more importantly for terrorist organizations (see, extensively, Frey 2004).

2. Rewards for keeping to the law

Instead of punishing people for behaving illegally persons acting legally can be rewarded in various ways. Individuals and firms can be commended for behaving as “good citizens” by handing out orders, medals, prizes and other awards. In the case of taxation, for example, the tax authorities can determine which persons and firms have for an extended period well collaborated with them, have not made any effort to

exploit the law to their advantage, and have always paid their tax liabilities in time. Such a policy can obviously only work under some conditions not least because it may become too costly to reward the vast majority of people observing the law. Moreover, rewarding people by money for obeying social norms may weaken the norm and its enforcement, and may gradually erode norm-guided behaviour (Fehr and Falk 2002).

Nevertheless, such an approach should not be rejected out of hand. As the awards are in non-material form, they are not costly but they may provide substantial benefits in terms of reputation and recognition to the recipients¹⁰. A major advantage of such a policy is that it promotes a positive sum game between the state and the citizens whereas reducing crime by punishing establishes a negative sum, or antagonistic, game resulting in heavy costs for both sides, and society as a whole. In particular, it has often been observed that an antagonistic tax system in which the tax authorities mistrust the taxpayers, and the taxpayers mistrust the tax officers produces high costs. In contrast, taxing procedures built on a measure of mutual trust are confronted with much lower cost and can be considered to be more efficient (Feld and Frey 2002).

IV. Projecting a Lawful Society

The following considerations are speculative and are suggested as possible topics for future research.

The standard Economics of Crime assumes that *human preferences* are constant and not affected by the environment. Whether other people violate or keep to the law does as such not influence behaviour. This assumption has proved to be very fruitful, in particular because it allows us to derive empirically testable propositions.

Recent evidence suggests, however, that people's behaviour is indeed influenced by the state of the environment. Most importantly, the "broken windows theory" may be interpreted to state that individuals tend to be more inclined to behave illegally if the environment in which they act is disorderly¹¹. In contrast, people are more ready to observe rules if they note that other people also do so, and the general environment is

¹⁰ The emerging literature on the Economics of Awards more fully discusses and empirically analyzes these aspects, see e.g. Frey 2006, 2007, Neckermann and Frey 2007.

¹¹ This statement has been controversially discussed in the literature, see e.g. Skogan 1990, Kelling and Coles 1996, Kelling and Sousa 2001, National Research Council 2004.

lawful. Such behavioural differences need not necessarily be due to changes in preferences but can also be attributed to a changed perception of how risky it is to violate the law. Careful and imaginative field experiments by Keizer, Lindenberg and Steg (2008) suggest that preference changes may be a more appropriate explanation of the change in behaviour induced by an orderly or disorderly environment. They find that the more common a norm-violating behaviour becomes, the more negatively is the conformity to other norms affected. This effect is not limited to social norms but has also been found for police ordinances. It works *across* different activities: if the setting is orderly (e.g. the walls are not covered by graffiti), people are induced to behave in a law abiding way also with respect to other actions (e.g. they will litter less). Consequently, these insights with respect to the spread of disorderly behaviour has been called “cross-norm inhibition effect” (Keizer, Lindenberg and Steg 2008: 1682). More generally, it has been well established that individuals do not wish to deviate from the social norms they consider to be prevailing (see e.g. Messik 1999, Cialdini and Goldstein 2004).

An immediate policy consequence is that a great effort is made to keep the environment orderly. According to the “broken windows theory” the damage visible by illegal behaviour such as damaging buildings, painting graffiti or by littering must be cleared away as quickly as possible. Such a policy only makes sense if the cost of removing the damage is not too high and if indeed such action does not invite potential criminals to undertake even more damages.

The corrective policy is easy to undertake when the damage is immediately visible as is the case for damaged buildings¹² or littering. But in many cases the state of the environment is not directly visible. Examples are, for instance, petty crime (such as stealing handbags) which are rarely, if ever, directly observed. The same holds even more strongly when a person evades taxes. Other persons cannot directly observe such behaviour; an indirect indicator is at best the higher disposable income than it would otherwise be of a tax cheater. For that reason *signals* become important: the government should make an effort to project the image that people live in a law regarding society. The political decision-makers can use “framing” in order to shape people’s perception about the kind of society they live in. It has been shown that individuals respond strongly to the way an issue is presented to them. If, for instance,

¹² A similar idea has been proposed by Frey and Rohner (2007) as an anti-terrorism policy.

a public goods game is labelled a “Community Game” the participants are much more willing to act pro-socially than when the identical game is labelled a “Wall Street Game” (Lieberman et al 2004)¹³. It must be emphasized that it is not suggested here that the government should provide biased data on the state of society. Such a policy would not only be morally wrong but would also risk being counterproductive. If the media detect such an attempt, and that is likely to be the case in an open society, people are likely to believe that the situation is indeed worse than it is in reality.

Consider the case of taxation. If the government constantly keeps informing the public that there are individuals cheating on taxes, people come to believe that tax cheating is an important issue and that a large share of the population is involved. According to the broken windows theory, this induces so far honest taxpayers to also try to cheat on their taxes. This may start a downward spiral of ever increasing tax cheating. In actual fact, however, (initially) only about 5 percent of taxpayers belong to the cheaters (see Slemrod and Yitzhaki 2002 and Cowell 1990). If, on the other hand, the government projects the image that most people are honest taxpayers, individuals become aware that they live in a law-abiding society. This environment provides them with a motivation to follow the others and to also pay their taxes honestly.

The possibility of framing the state of the society by government projecting the image of a law-abiding society much depends on the reactions by the media. Following the early insight by Lippmann (1997 [1922]) that what people know around the world around them is mostly the result of second-hand knowledge provided by the media (in his time the newspapers and radio). Thus people “often respond not to events or social trends but to *reported events*”(Page and Shapiro 1992: 340). More recently, the views of the public are strongly influenced by what appears in the evening news on television. Experimental evidence suggests that “people who were shown network broadcasts edited to draw attention to a particular problem assigned greater importance to that problem – greater importance than they themselves did before the experiment began, and greater importance than did people assigned to control conditions that emphasize different problems” (Iyengar and Kinder 1987:112). While

¹³ For many more experiments showing the effect of framing (and of other choice anomalies) on decisions see Hogarth and Reder 1987, Quattrone and Tversky 1988, Dawes and Hastie 1988, Thaler 1994 and Lindenberg 1993.

the news media have considerable influence over what and how¹⁴ they report, public affairs news is nevertheless significantly affected by government agencies. Indeed, it has been argued that "... in most matters of public policy, the news agenda itself is set by those in power" (Bennett et al 2007:54, see also Nacos et al 2008:3). While the government cannot simply project an image of a society obviously at odds with what people experience, framing the state of a society in a law-abiding rather than lawless way is likely to systematically affect the behaviour of individuals.

V. Overcoming the Punishment Focus

This paper argues that the Economics of Crime is too much concentrated on punishment as a policy to fight crime. To mainly or even exclusively rely on punishment (as a large part of the economic literature implicitly, and often explicitly does) is unwise for several reasons. An important, but generally neglected, reason is that punishment involves a negative sum game: both the perpetrators and the honest people loose. Moreover, there are important instances in which punishment is unable to reduce crime. Relying too much on punishment is also unwise because there exist several feasible alternatives to punishment such as providing positive incentives or handing out awards for law-abiding behaviour. These alternative approaches have the major advantage of creating a positive-sum environment. Yet another policy to fight crime is based on the government framing the image of the society. When people are made aware that they live in a society which to a large extent is law-abiding, they are motivated to also observe the law.

The basic argument of this paper is that it makes sense to use the whole spectrum of possibilities to fight crime, and not to focus only on punishment. I certainly do not argue that punishment should never be applied. What is needed is a better, empirically supported, knowledge of the conditions under which the various policies are more or less effective. So far, the Economics of Crime has only a most limited knowledge of the relative advantages and disadvantages of the various policies. Hopefully, it turns out that where one approach works only insufficiently (such as was pointed out for punishment), another approach works better. In any case, it is time for the Economics of Crime to move beyond the strong, and often unique, focus on punishment to a broader view of how to contain illegal activities.

¹⁴ For instance according to the principle "Bad news is good news".

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