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Punishment – and beyond

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Punishment – and beyond

Abstract

This paper argues that the "Economics of Crime" concentrates too much on punishment as a policy to fight crime, which is unwise for several reasons. There are important instances in which punishment simply cannot reduce crime. Several feasible alternatives to punishment exist, such as offering positive incentives or handing out awards for law abiding behavior. These alternative approaches tend to create a positive sum environment. When people appreciate living in a society that is to a large extent law abiding, they are more motivated to observe the law.

JEL Code: K42, O31.

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, the lower the crime rate, *cet. par*. This is an important insight because under many conditions the only feasible and effective possibility of fighting criminal behavior is indeed to punish the offenders.[1] In all societies throughout the years, punishment has been widely, if not exclusively, used as a means of deterring people from committing criminal acts. An important issue has been the identification of causality; that is, higher punishment tends to reduce crime; however, when crime is high, there is a tendency to increase punishment (see Ehrlich and Brower 1987; Levitt 1996, 1997; and Donohue and Levitt 2001). The causality issue has been approached by using laboratory experiments (e.g., DeAngelo and Charness 2009). Recently, ingenious natural experiments have been used to deal with the causality problem; for example, Drago, Galbaiati, and Vertova (2009) found a robust deterrent effect of punishment on crime for individual data.

The Economics of Crime distinguishes two effects of punishment. The first is the deterrence effect of imposing costs on criminals who are apprehended, and the second is the incapacitation effect, which suggests that criminals thrown into prison, or suffering a death sentence, are no longer able to pursue their illegal activities. Prison sentences are, of course, not the only punishment possible. A less severe punishment is probation, which has been shown to have mixed effects on recidivism (Engel et al. 2009).

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[1] See, for example, Stigler 1970; Ehrlich 1973; Polinsky and Shavell 1979; Cameron 1988; Allen 1996; Ehrlich 1996; Levitt 1998; Freeman 1999; Corman and Mocan 2000; Eide 2000; Bourguignon 2001; Merlo 2004; Mocan and Rees 2005. Recently, behavioral or psychologically inspired approaches have been used, for example, Garoupa 2003.

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

1. The concept of punishment has been generalized to include the psychic costs to offenders by *shaming* them. Persons committing criminal acts are actively revealed to the general populace. As a result, their reputation is diminished, thus making it more costly for them to be accepted as (trading) partners by other people because of an innate distrust of criminals. A somewhat different type of shaming consists of directly confronting the perpetrators with their victims, thereby imposing psychic costs (Braithwaite 1989; see also Brennan and Pettit 2004). The murderer of a family's father, for example, is forced to experience the immense loss suffered by the widow and children of his victim.[2] A related approach is the stigmatization of offenders, which works through a reduction of wages offered by employers (Funk 2004).
2. Punishment to some extent is effective even if it is not enforced. Punishment serves as a signal to indicate what behavior is considered undesirable by lawmakers. Such *expressive punishment* may be the only possible action when it is impossible to monitor and impose punishment, except at an unreasonably high cost.[3] An example is the widespread custom of spitting in public places—a behavior that used to be common in Western countries until the middle of the 20th century and which is still common in many Asian countries. A similar activity is littering (see Torgler, Frey, and Wilson 2009).
3. A third extension of the Economics of Crime is the so-called *broken window theory*.[4] The idea is that unlawful behavior should not be tolerated.

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

[3] For the concept of "expressive law," see Hedman 1991; Cooter 1998; Bohnet and Cooter 2005.

[4] See Wilson and Kelling 1982; Skogan 1990; Kelling and Coles 1996; Gladwell 2000; Corman and Mocan 2005; Beckenkamp et al. 2009. The concept of "broken windows" was inspired by the field experiments undertaken by Zimbardo (1969).

One interpretation of this theory is that even perpetrators of minor misdemeanors must be immediately and severely punished in order to effectively deter people from deviating from the law. A similar approach is the *three-strikes-out* concept, which supports life imprisonment even for minor criminal acts if the offender repeats the act more than twice.[5] The problem is that such an approach tends to violate the principle of marginal deterrence. If this condition is not met, a potential criminal has 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 ignored in practice. In particular, authoritarian governments and dictatorships often seek to deter crime by imposing very harsh punishments 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 one (e.g., the death penalty) they may as well go for the larger crime with higher expected profits. 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 even minor violations of the tax code are heavily punished, it pays to conceal really large amounts. The verdict on the effectiveness of the broken window theory is open. Some observers are convinced that it is an effective deterrent, while others are more skeptical (e.g., Corman and Mocan 2005; National Research Council 2004).

[5] See Tyler and Boeckmann 1997; Clark, Austin, and Henry 1997.

II. PUNISHMENT DOES NOT ALWAYS WORK

While punishment is the cornerstone of the Economics of Crime, it should be acknowledged that it is sometimes inapplicable, inefficient, or even counterproductive.

A. 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 perpetrator. Suicidal terrorists who want to die are an extreme example.[6] Trying to deter them even with the threat of capital punishment is ineffective; they want to be heroes or martyrs for their cause. Similarly, gang members want to be punished by the police because this is a signal to the other gang members that they really belong—the more severe the punishment, the clearer the signal. Still, it can be argued that the incapacitation effect works, although this applies to the perpetrators themselves and has little or no effect on others who would like to excel similarly in such illegal activities.[7] The evidence suggests that in many terrorist organizations the supply of people willing to die for their cause is abundant (e.g., Krueger 2008). Eliminating the top echelon of a terrorist movement or drug cartel is ineffective if the demand for the respective "services" (i.e., the terrorist cause or the provision of drugs) remains unchanged. It simply means that the positions are empty thus enabling others to step in.

[6] Not all suicidal terrorists really choose voluntarily to die. Often they are manipulated by a terrorist organization. See Krueger 2008; Frey 2004.

[7] One often hears of gang leaders and members continuing their illegal activities while in jail, for example, the American and Sicilian Mafia or the drug barons in Columbia (Gambetta 1993).

B. Punishment Reduces Legal Opportunities

When an individual has been punished, it is often taken as a signal that the individual is not trustworthy. As a result, that individual usually finds it difficult or even impossible to find employment in legitimate sectors and is induced to turn once again to illegal activities.

C. The Maximum Punishment Is Too Low

There are conditions in which the expected punishment for committing a crime is lower than the expected benefits of doing so. If a rational comparison of expected benefits and costs indeed guides behavior, this produces an incentive to engage in criminal activities. In countries observing fundamental human rights, the maximum punishment is the death sentence or life imprisonment because torture is unacceptable. Civil rights groups have argued that putting people to death or keeping them in prison for life should be stopped. This position enlarges the scope for crime provided that people function according to the expected utility calculus.

D. Punishment Serves to Educate Criminals

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

E. Punishing the Innocent

In real life, it is practically impossible to punish all the guilty and never punish an innocent person. In many cases, innocent people are punished while the guilty 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 people. The incentive effects may be disastrous. If people realize that

they incur a substantial risk of being punished even if they follow the law, they have a strong incentive to at least also reap the benefits of acting illegally. A pertinent example is tax evasion. If honest people end up being punished for nothing, it pays to conceal as much as possible and take your chances.

F. Unwillingness to Impose the Optimal Punishment

The Economics of Crime generally assumes that the government and the legal system have an interest in imposing 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 establish suboptimal punishments in case their actions are detected. Interest groups as well as public opinion may also have a strong influence on what punishments are legal and actually imposed by judges. Moreover, in many countries, the president has the power to reduce or undo a punishment at will. This privilege is often used for political and private reasons, even in countries otherwise bound to the rule of law.

G. Crowding Out Intrinsic Motivation

Empirical research has convincingly established that it is impossible to account for the extent of tax paying by only considering the expected punishment.[8] The crucial question is not why people do not pay their taxes, but rather "Why is there so little cheating?" (See Alm 1996; for surveys, see Torgler 2007; Andreoni, Erard, and Feinstein 1998.) 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. Risk aversion is not able to account for the extent of taxes paid in the United States and Switzerland. The Arrow-Pratt measure of risk aversion would have to be no less than 30 in order to account for the actual compliance rates, but empirical

[8] Torgler 2001, 2007; Feld and Tyran 2002; Feld and Frey 2002, 2007; Frey and Torgler 2007.

measures of risk aversion lie between 1 and 2; that is, they are substantially lower (Graetz and Wilde 1985; Alm, McClelland, and Schulze 1992; R.L. Frey and Torgler 2002). An unfair, inconsiderate way of treating taxpayers—punishing honest taxpayers by error—tends to undermine this tax morale. The net effect of using punishment in an effort to establish legal behavior is counterproductive if the relative price effect of the punishment is smaller than the crowding-out effect. The conditions under which this happens have been identified.[9]

H. Unconscious Behavior

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

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

While focusing on punishment as a deterrent, the Economics of Crime does not totally neglect other incentives. However, in typical econometric analyses, only a few incentives other than punishment are considered,[10] in particular, the impact of the state of employment and education. It has been shown that a reduction in unemployment opens new opportunities for individuals to find employment in the legitimate as opposed to the shadow economy, and this

[9] For theoretical and empirical analyses of motivational crowding theory, see Frey 1992; Frey 1997; Bénabou and Tirole 2003; Frey and Jegen 2001.

[10] See the works cited in note 1.

reduces crime. Better-educated people can more easily earn a good income in legal activities and therefore are somewhat immune to many kinds of crime.[11]

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

A. Positive Non-monetary Incentives to Leave Crime

An important motivation to give up a life of crime is to have an opportunity to reenter the lawful part of society without undue costs. In most legal systems, people wanting to return to a legitimate activity often are faced with extremely high costs or are totally excluded. They serve the sentences for their crimes, but even after serving their sentences they are precluded from many legal activities. As a result, they are trapped in the illegitimate sector and are forced to continue their activity there. At the same time, the people wanting to stay in the illegitimate sector impose heavy barriers to exit because they fear that those leaving would be willing to provide the police with evidence.

A totally different approach considers the situation of people engaged in unlawful activities and seeks to *raise* the benefits of exiting by providing such persons with attractive opportunities in the lawful sector: they are not punished; instead, they are offered a new identity and satisfactory employment options so that they can start a new life. Such a policy flies in the face of what is normally considered fair because past crimes are not sanctioned. However, when going beyond the primitive urge to punish wrongdoers as a form of retribution, a policy of positive *marginal* incentives to set aside criminal activities may well turn out to be efficient under some conditions. In particular, this is the case if such a policy does not induce individuals to enter

[11] However, a better education also makes it easier to perpetrate white collar crime.

into criminal activity 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).

B. Rewards for Obeying 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 cooperated fully with them for an extended period, have not made any effort to exploit the law to their advantage, and have always paid their tax liabilities on time. Such a policy would obviously work only under some conditions because it could become too costly to reward the vast majority of people who observe the law. Moreover, monetary rewards for obeying social norms may weaken the norm and its enforcement and may gradually erode norm-guided behavior (Fehr and Falk 2002).

Nevertheless, such an approach should not be rejected out of hand. As the awards are nonmaterial in form, they are not costly, but they may provide substantial benefits in terms of reputation and recognition to the recipients.[12] 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 using punishment 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, in turn, the taxpayers mistrust the tax officers produces high costs. In contrast, taxing procedures built on a measure of

[12] The emerging literature on the Economics of Awards more fully discusses and empirically analyzes these aspects; see, for example, Frey 2006, 2007; Neckermann and Frey 2007.

mutual trust result in much lower costs and can be considered more efficient (Feld and Frey 2002).

IV. PROJECTING A LAWFUL SOCIETY

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

The Economics of Crime assumes that *human preferences* are constant and not affected by the environment. Whether other people violate or obey the law does not influence behavior. This assumption has proven to be very productive, in particular, because it allows us to derive empirically testable propositions.

Recent evidence suggests, however, that most people's behavior is influenced by the state of the environment. More importantly, the broken windows theory can be interpreted to show that individuals tend to be more inclined to behave illegally if the environment in which they act is disorderly.[13] In contrast, people are more willing to obey the law if they see that other people also do and the general environment is lawful. Such behavioral differences are not necessarily due to changes in preferences, but can 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 behavior induced by an orderly or disorderly environment. They find that if a norm-violating behavior becomes more common, the conformity to other norms is negatively 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 manner

[13] This statement has been controversially discussed in the literature; see, for example, Skogan 1990; Kelling and Coles 1996; Kelling and Sousa 2001; National Research Council 2004.

also with respect to other actions (e.g., they litter less). Consequently, these insights with respect to the spread of disorderly behavior have been called the "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 that 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 behavior, such as damaged buildings, graffiti, or litter, must be cleared away as quickly as possible. Such a policy only makes sense if the cost of removing the damage is not too expensive and if such action does not invite potential criminals to do even more damage.

The corrective policy is easy to undertake when the damage is immediately visible as is the case with damaged buildings or littering.[14] However, in many cases, the state of the environment is not directly visible. For example, petty crimes (such as stealing handbags) are rarely, if ever, directly observed. The same holds even more strongly when a person evades taxes. Other people cannot directly observe such behavior; an indirect indicator at best would be individuals having more disposable income than they likely would have if they paid their taxes. For that reason, *signals* become important: the government should make an effort to project the image that people live in a law abiding society. The political decision makers can use "framing" in order to shape people's perceptions 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, a public goods game is labeled a "Community Game," the participants are much more willing to act prosocially than when the identical game is labeled a "Wall Street Game" (Liberman,

[14] A similar idea has been proposed by Frey and Rohner (2007) as an antiterrorism policy.

Samuels, and Ross 2004).[15]. It must be emphasized that we are not suggesting that the government should provide biased data on the state of a society. Such a policy would not only be morally wrong, but would also risk being counterproductive. If the media detects such an attempt, which would likely be the case in an open society, people would probably 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 their taxes, people start to believe that cheating on your taxes is an important issue and that a large share of the population is involved. According to the broken windows theory, this induces honest taxpayers to try to cheat on their taxes. This may start a downward spiral of ever-increasing tax evasion. However, in actuality, only about 5 percent of taxpayers are cheaters (see Slemrod and Yitzhaki 2002; 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 the motivation to follow the others and to pay their taxes honestly.

The possibility of framing the state of the society by the government as a law abiding society depends a lot on the media. Following the early insights of Lippmann (1922/2004) that what people know about the world around them is mostly the result of secondhand knowledge provided by the media (in his time, it was 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 during the evening news on television.

Experimental evidence also 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

[15] For 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; Lindenberg and Frey 1993.

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 the news media have considerable influence over what and how they report,[16] public affairs news nevertheless is significantly affected by governmental agencies. Indeed, it has been argued, "in most matters of public policy, the news agenda itself is set by those in power" (Bennett, Lawrence, and Livingston 2007, 54; see also Nacos, Bloch-Elkon, and Shapiro 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 as law abiding rather than lawless is likely to systematically affect the behavior of individuals.

V. OVERCOMING THE PUNISHMENT FOCUS

This paper argues that the Economics of Crime concentrates too much 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 several feasible alternatives to punishment exist, such as providing positive incentives or handing out awards for law abiding behavior. These alternative approaches have the 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 observe the law.

[16] For instance, according to the principle of "bad news is good news."

The political economy of these proposals is left for future research. It must be taken into account that if the government undertakes such "positive" policies, in particular, by framing issues to project a law abiding society, the opposition has an incentive to inform the public about the extent of crime in that particular society. The task is to identify the conditions that determine the resulting political equilibrium. This equilibrium can be further influenced by the media, which is typically prone to emphasizing deviations from prevailing social norms—that is, inclined to report or even exaggerate criminal activity.

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. However, one should not ignore the fact that crime is significantly deterred by higher clearance and conviction rates, while the type (fine, probation, or imprisonment) and severity (length of prison sentence or amount of fine) of punishment are often small and insignificant (see Entorf and Spengler 2008). 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 limited knowledge of the relative advantages and disadvantages of the various policies. Hopefully, it will turn out that where one approach works too little (as pointed out for punishment), another approach will work much 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.

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