The Crime Problem: It is not an Either/Or Solution

An Honors Thesis (HONRS 499)

by

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Purpose of Thesis

This discussion of the crime problem and the possible solutions focuses on two main theories: the deterrence hypothesis and the rehabilitation hypothesis. The deterrence hypothesis states that an increase in expected punishment causes a significant decrease in crime. It also suggests that individuals respond significantly to the deterring incentives created by the criminal justice system (Cooter and Ulen 524). Examples of these incentives include prison or fines. The rehabilitation hypothesis states crime is reduced by devoting resources to job-creation, income maintenance, family counseling, mental health, and other programs designed to alleviate social, economic, and biological causes of crime (Cooter and Ulen 413).

Both theories are discussed and weighed as to their costs and benefits. The costs and benefits of each theory are explored on both the effects of society and the offender. Each theory is also explored as to whether efficiency is the key to the crime problem or if there is something deeper that is also involved. Although each of the two main theories deal with different issues, they share a common goal: a solution to the crime problem. Since they share this goal, it could be said that both approaches are not mutually exclusive and the optimal public policy for reducing crime is a mix of the two. The two should be mixed until the marginal productivity of a dollar spent on deterrence equals the marginal productivity of a dollar spend on rehabilitation.
There are two basic hypotheses to solving the crime problem: the deterrence hypothesis and the rehabilitation hypothesis. The deterrence hypothesis states that an increase in expected punishment would cause a significant decrease in crime. The deterrence hypothesis also suggests individuals respond more to deterring incentives such as incarceration and fines. However, the rehabilitation hypothesis assumes crime is a result of a complex set of socioeconomic or biological factors that would be more affected by education or rehabilitation such as teaching the prisoners a marketable job skill or providing religious instruction (Cooter and Ulen 413). The rehabilitation hypothesis also focuses on reducing crime by devoting resources to job-creation, income maintenance, family counseling, mental health, and other programs designed to alleviate social, economic, and biological causes of crime (Cooter and Ulen 413).

The major question in solving the crime problem is whether the economic solution to crime ignores the possible solution of rehabilitation or other non-institutional alternatives. But what would happen if these theories were not mutually exclusive. What if a solution could be found that takes into account both job-related variables (such as the rate of unemployment, labor force participation, and education) and sanctioning variables (such as increasing the severity and/or probability of punishment).

The two alternative solutions can be divided into four basic ways to correct the crime problem: increase resources for crime prevention, incarcerate criminals during the most
crime intensive years, increase the legitimate opportunities for the less skilled, or increase the penalty for crime. When looking at an optimal crime control policy and these basic corrective measures, two sets of incentives that motivate potential or actual criminals must be analyzed. These incentives are divided into two categories: negative and positive. Negative incentives deter or prevent the potential or actual criminal from entering or actively pursuing illegitimate activities (Ehrlich 44). Negative incentives fall under the deterrence hypothesis. Positive incentives induce participation in legitimate employment and earnings opportunities, rehabilitation programs, and a reduction in the disparity in the distribution of income in society (Ehrlich 44). Positive incentives would fall under the rehabilitation hypothesis. These incentives are not mutually exclusive. A solution just needs to be found that efficiently combines the corrective measures.

However, neither solution would lead to a decrease in the supply of offenses if criminals were not at least a little rational. Criminals commit crimes because they believe they will gain more from criminal activity or they will run a smaller risk of punishment than usually is true. Criminals also tend to act contrary to their own long term interests which is referred to as temporal inconsistency (Wilson & Abrahamse 360). Temporal inconsistency causes criminal to overvalue the benefits of crime while undervaluing the costs (372). Criminals act this way because the benefits of crime often occur simultaneously
with or shortly after committing the crime, while the costs might not occur for many months if at all (373). Career criminals commit crime because they "discount punishment for uncertainty and futurity more highly than other people" (Cooter and Ulen 417).

Criminals look at the expected benefits of a criminal act in comparison to a certain income provided by legal activities. In order for a criminal to refrain from criminal activities, legal activities must provide the most benefit. The monetary gain of crime depends upon: legitimate earnings opportunities, criminal earnings opportunities, likelihood crime will succeed, and the penalty of the crime if caught (Freeman 31). Since the reduction of the amount of criminal activity depends on the benefit or punishment to the criminal, the expected benefit from criminal activities should decrease or the opportunity costs of crime (income from legal activities) should increase in order to solve the crime problem. The rational criminal will compare the benefit of the crime with the assessment of the punishment, and if the punishment is less than the benefit, the individual will commit the act (Phillips and Votey 20). Even if the end result is uncertain a rational person will still respond to the difference between the expected reward and the expected punishment (21).

Now that it has been discussed why criminals commit crime, the focus will shift to how criminals can be prevented from committing crime. First, the deterrence hypothesis will be analyzed. The deterrence hypothesis states that an increase
in expected punishment causes a significant decrease in crime. It also suggests that individuals respond significantly to deterring incentives created by the criminal justice system. Deterring incentives would include increasing the severity or probability of punishment either through incarceration or fines. By imprisoning criminals, four major social benefits can arise (Cooter and Ulen 419). The first social benefit would be retribution. Retribution imprisons criminals in proportion to the crime committed while serving society's desire to do justice. The length of the sentence is varied until it is in proportion to the shame and personal cost of imprisonment. The second social benefit would be deterrence which uses imprisonment to deter criminals from committing crimes in the future. Another social benefit would be rehabilitation. Rehabilitation allows criminals to participate in programs that reduce the chance they will return to crime once released. Examples of rehabilitation include teaching the prisoners a marketable job skill or providing religious instruction. The final benefit would be incapacitation which occurs by isolating criminals from society so they cannot commit crimes against anyone but each other (Cooter and Ulen 419).

Before discussing the costs of the deterrence hypothesis, the conditions that must hold for incarceration to be effective and reduce crime rates will be discussed. First, incapacitated criminals cannot be immediately replaced by new criminals because incapacitation is most effective when the supply of criminals is inelastic (Cooter and Ulen 420). This simply means that
once a criminal is imprisoned a new criminal cannot take his place or incarceration would not have an effect on the crime rate. Second, incarceration must reduce the total number of crimes repeat offenders commit over their entire criminal career. This condition implies that in order to reduce crime rates, recidivism cannot occur. Unfortunately, incarceration only effects the timing of crimes for some offenders. Incapacitation has no effect if a criminal commits crimes until the expected punishment exceeds the benefit (420).

There are also several costs related to the deterrence hypothesis. First, the costs of construction, maintenance, and operating costs of prisons needed to hold the criminals. Secondly, the opportunity cost of losing the productivity of the imprisoned criminal (See Appendix C). Next, unlike a fine, imprisonment does not generate a benefit to the state. Also, the cost of the decline of an offender's skills and the loss of their legitimate employment contacts after release (Posner 227). Because the purpose of imprisonment is to punish and/or incapacitate the criminal this forces prisoners to return to society with their labor market skills and opportunities decreased and their criminal skills and opportunities enhanced (Freeman 27). Another cost could be the long term effect of imprisonment which is the health care costs associated with the geriatric inmate (Cooter and Ulen 420). Imprisonment uproots criminals from their networks of social relationships (family, friends, workmates) and deprives them of the choice of companions. Prisons are also being revealed as places that
cause psychological deformation, loss of self-esteem and initiative, and depersonalization (Rotman 144).

Another deterring incentive would be fines. Fines are an available option that, unlike imprisonment, generate revenue for the state (Posner 227). According to Posner, the social cost of collecting fines from solvent defendants is less than the social cost of imprisonment (227). Fines in the United States are fixed per offense with a statutory maximum and independent of the criminal's income (Cooter and Ulen 421). According to Becker, fines should be used as the main form of punishment and the amount of the fine should be equal to the damage inflicted (Pyle 95). Fines have two major advantages. Fines inflict minimal social costs. Also, the revenue earned could be used to compensate victims for the damage inflicted. Unfortunately fines favor the rich and they are not always feasible for some crimes. In order to make fines more effective as an alternatives to imprisonment several improvements have been suggested: make fines payable in installments, make fines proportionate to and payable out of earnings, or impose heavy nonpecuniary sanction as an alternative (Posner 228).

Imprisonment and fines both involve an opportunity cost and a marginal cost. As with any crime, a rational individual will pursue the activity until the marginal cost of participating in the activity is equal to the marginal benefit derived from it (Pyle 95). According to Posner there is a down side to fines. Posner states, "since the foregone income from lawful employment is an opportunity cost of crime, a reduction in the offenders
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lawful earnings prospects reduces the cost of criminal activity to him and thereby increases the likelihood he will commit crimes (227).

The economic solution to crime involves an optimal level of punishment (whether it is incarceration or fines) for the purpose of deterrence. It is possible to eliminate, or nearly eliminate, crime by severely imposing a high probable punishment upon offenders (Cooter and Ulen 536). Unfortunately, this method involves two difficulties. First, extremely severe penalties may violate moral and constitutional rights of criminal (like capital punishment for shoplifting a loaf of bread). Second, the cost of apprehending, prosecuting, and punishing criminals is expensive. The solution to the crime problem involves balancing the cost against the advantages of reducing crime when making policy decisions. This balance has two aspects. First, policymakers should determine a target for the total amount of deterrence keeping in mind that the optimal amount is not to completely eradicate crime. Crime should not be completely eradicated because that is too costly and has a declining social benefit. Second, policymakers need to allocate their limited resources to achieve the deterrence target at the least cost to achieve their goal efficiently (Cooter and Ulen 536). These ideas match the approach of maximizing output for a given expenditure on inputs discussed earlier, so it can be concluded that the two alternative solutions to the crime problem are not mutually exclusive.
Prison can lower the 'overall life prospects' for some criminals while at the same time increasing the 'future well being' of others through the use of rehabilitation (Cooter and Ulen 420). This statement leads into the second theory, the rehabilitation hypothesis. Edgardo Rotman defines rehabilitation as "a right to an opportunity to return to (or remain in) society with an improved chance of being a useful citizen and staying out of prison" (3). Rehabilitation in prisons can involve: educational opportunities, vocational training, medical or psychological treatment, maintenance of family and community connections, safe and healthy prison environment, post-release support, and elimination of hindrances for re-entry into the community (Rotman 3). Rotman sees rehabilitation as the goal of a correctional institution to work to minimize the harms of incarceration (11). Using rehabilitation allows consideration to be given to subjectivity by enlarging the scope of the legal system to include the future life of the criminal in the community when sentencing and during correctional phases (2). There are several methods of rehabilitation (See Appendix A) which include: psychotherapies, guided group interactions, alternative schools and foster care for juveniles, family therapy, day treatment programs, pretrial release and diversion programs, work release and pre-release programs, restitution programs, and various community assistance programs (4).

Criticism of rehabilitation can be divided into three categories: (1) abuses committed in the name of rehabilitation such as overly intrusive therapies or excessively prolonged
incarceration based on rehabilitative considerations, (2) demand for punishment, (3) alleged ineffectiveness of rehabilitation programs (Rotman 101). According to Rotman, rehabilitative programs can be effective in preventing crime or reducing recidivism if they are carried out by competent, qualified individuals to suitable target populations (133).

Rehabilitation has several benefits. It prevents human deterioration, keeps punishment within its legal and constitutional limits, and it becomes a prisoner's right that reinforces all others (Rotman 144). It also provides a social learning environment which helps to counteract the depersonalizing effect of an institution, strengthens social connections with inmates, creates within the institution a society of mutual cooperation that resembles life on the outside (144). Rehabilitation includes the search for non-institutional alternatives. According to Rotman, these alternatives include: probation, suspended sentence, community service and restitution, diversion, electronic surveillance, and community corrections for juveniles (See Appendix B).

When finding a solution to the crime problem the common solution is seen as an all or nothing answer. The solution is normally seen as one choice or the other (for example, deterrence or education). In this illustration the term legitimate activity award is used to describe rehabilitative measures such as education, labor force participation, or counseling. To illustrate this approach suppose a 5% increase in legitimate activity rewards (education, labor force
participation) would cause a 2% decrease in the supply of offenses. This increase in legitimate activity rewards would cost $200,000. Now suppose on the other hand, a 3% increase in expected punishment (severity/probability) would lead to a 2% decrease in the supply of offenses. This increase in expected punishment would cost only $150,000. While both approaches lead to a 2% decrease in the supply of offenses, the legitimate activity reward alternative cost $50,000 more. However, the theory of diminishing marginal returns shifts the focus of the crime problem to an allocation of alternatives. So the most efficient solution would be to allocate public spending between legitimate activity awards (in this example education will be used) and deterrence such that the marginal productivity of a dollar spent on deterrence equals the marginal productivity of a dollar spent on education. The solution can be a total allocation of fixed funds that involves some expenditure in each project.

When finding an efficient approach to the crime problem, the solution must involve maximizing output for a given expenditure on inputs. In order to maximize output for a given expenditure on inputs, the government should always choose to operate at a point of tangency between an isocost and an isoquant (Landsburg 145). In the example above the isocost is the fixed amount of public spending available, and the isoquant is the reduction in offenses. Efficiency requires the criminal justice system to find the point on the isoquant at which the level of deterrence is achieved at the least cost (Cooter and Ulen
This point is represented by point A which is shown on the included graph (see Exhibit 1). So these two theories are not mutually exclusive because the solution lies in the tradeoff between the alternatives.

In seeking a solution to the crime problem the two hypotheses are not mutually exclusive because the key goal of correctional intervention (whether imprisonment or rehabilitation) is to minimize crime including recidivism (Gray 569). An optimal public policy for reducing crime would be to mix the alternatives until the marginal dollar best spent is reached. Unfortunately, public debate considers these two hypothesis to be mutually exclusive, although both can be correct because of the many variables that lead to crime (Cooter and Ulen 413). Economically speaking, the way to minimize crime would be to charge more to those who value criminal activity most (Pyle 28). This could be achieved under the deterrence hypothesis by two basic methods: increase the probability of punishment or increase the severity of punishment. Although these choices might reduce crime immediately, what happens when criminals are placed back into society after serving their sentences in prisons that are highly criminogenic. Without some form of rehabilitation these criminals will just return to society with decreased legitimate employment skills. So when responding to crime, justification cannot be given to a solution that may be efficient but fails to protect the rights of the criminals. Despite the harmful and reprehensible criminal activities offenders commit, the punishment should be humane.
enough to give criminals a chance to redeem themselves to society and become a useful component in the economy. In the absence of strong alternatives to imprisonment, increased reliance on incarceration would appear to be an effective approach to reducing crime. However, alternatives to imprisonment do exist. "Prevention or rehabilitation is preferable to long-term incarceration from both a cost-benefit and humanitarian perspective" (Levitt 348). According to Rotman, "rehabilitation does not oppose the measure of deterrence inherent in criminal punishment, but strives to maintain punishment within the limits of a pre-existing law, counteracting its unwarranted consequences" (183). Unfortunately the solution to the crime problem is not an either/or choice because neither alternative provides all the answers. By focusing on the strengths of each alternative an efficient solution can be found that takes into account society and the offender. An efficient and humane solution does exist to the crime problem. This solution lies not in one specific alternative, but in a combination of methods which leads to an optimal trade-off between costs and benefits, and society and the offender. The solution lies in allocating public spending between legitimate activity awards and deterrence so the marginal productivity on a dollar spent on deterrence equals the marginal productivity on a dollar spent on legitimate activity awards.
Exhibit 1: Minimizing the crime rate with a given monetary allocation of public spending

$SE = \text{Amount spent on Education}$

$SD = \text{Amount spent on Deterrence}$

Point A represents the level of deterrence that can be achieved at the lowest cost.
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Fines as an Alternative to Incarceration

Fines are an available option that, unlike imprisonment, generate revenue for the state (Posner 227). According to Posner, the social cost of collecting fines from solvent defendants is less than the social cost of imprisonment (227). Fines in the United States are fixed per offense with a statutory maximum and independent of the criminal's income (Cooter and Ulen 421). According to Becker, fines should be used as the main form of punishment and the amount of the fine should be equal to the damage inflicted (Pyle 95). Fines have two major advantages. Fines inflict minimal social costs. Also the revenue earned could be used to compensate victims for the damage inflicted. Unfortunately fines favor the rich and they are not always feasible for some crimes. In order to make fines more effective as an alternative to imprisonment several improvements have been suggested: make fines payable in installments, make fines proportionate to and payable out of earnings, or impose heavy nonpecuniary sanction as an alternative (Posner 228). Imprisonment and fines both involve an opportunity cost and a marginal cost. As with any crime, a rational individual will pursue the activity until the marginal cost of participating in the activity is equal to the marginal benefit derived from it (Pyle 95). According to Posner there is a downside to fines. Posner states, "since the foregone income from lawful employment is an opportunity cost of crime, a reduction in the offenders lawful earnings prospects reduces the cost
of criminal activity to him and thereby increases the likelihood he will commit crimes (227).
APPENDIX B

Rehabilitation Involving Juveniles

When discussing juveniles and rehabilitation it has been found that the most effective way to reform delinquent youth is to involve community support in their rehabilitation. Rehabilitation can be in the form of education and socialization. Organizations like CREST (Clinical Regional Support Teams) and the Michigan Behavioral-Employment Intervention Program have been proven to be effective. CREST uses a nonauthoritarian counseling approach instead of the usual threat of sanctions to obtain compliance from the offenders. The Michigan Behavioral-Employment Intervention Program implemented a successful job employment program. It achieved this success by ensuring motivation and a positive attitude from both offenders and employers (Rotman 168).

Because of the high concentration of crime being committed by youth it is necessary to focus on this issue. The majority of the youth involved in crime are school failures. If this is true, education could be the "antidote" to the problem of delinquency which would solve the crime problem before it could get started. School is increasing in importance and influence in the lives of adolescents because of the decline in organized religion, the close communities, and extended family networks of many working class people. Intervention through school can occur early and it is preventive unlike the enforcement of ineffective "cures" later on in life. Education teaches habits of restraint, punctuality, discipline, and obedience (Tutt 25).
There are four main features of a school that may inadvertently generate delinquency: rigid streaming by ability, high rates of corporal punishment, high staff turnover, and custodial or authoritarian school climate. A rigid streaming of ability occurs when good students are pitted against the so-called bad students. High rates of physical punishment within a school have repeatedly been reported as a causal factor in delinquency. Extensive use of physical punishment by teachers could be imitated by the students. A high rate of staff turnover makes it difficult for the students to identify with the staff. Also, the 'tone' of a school affects student delinquency, vandalism, and academic factors (Tutt 41).

Among juveniles, especially in community settings with serious crime or unemployment issues, crime leads to unemployment (Hagan 465). This occurs because early employment contacts are not formed because of the youths' participation in criminal activities. The juvenile's involvement in the criminal justice system engages them in court appearances and possible confinement instead of striving to achieve occupational goals that schools emphasize. The juveniles are removed from any possible job referral networks school might have provided and instead placed in prisons where the only networks are based on crime and further isolate them from legitimate employment opportunities (Hagan 465). According to Britt the connection between employment and juveniles can be explained by the motivational perspective. Under this theory, juveniles become frustrated because they cannot obtain or maintain employment.
yet they want to improve their standard of living, so they turn to criminal activity (Britt 100). This motivational perspective explains why juveniles respond substantially to the economic return of crime (Freeman 36). Some juveniles combine crime and work in order to supplement low wage or unsatisfactory work, as an option to riskier illegal work, or to expand markets for sellers of illegal goods or services (Freeman 35).

Diversion has influenced the development of measures for dealing with juvenile delinquents. Diversions can be categorized into four separate kinds: community absorption, screening, pre-trial diversion, and alternatives to institutions. Community absorption involves schools, families, or special designed clinics. Special designed clinics are used to deal informally and internally with the difficult children who have specific difficulties such as school phobia or mental illness. Screening occurs when the police refer an incident back to the family and simply drop the case instead of press criminal charges. Pre-trial diversion is dealing with juvenile offenders who have already been charged with a crime by settlement or mediation. This settlement or mediation takes place outside the normal criminal or juvenile justice system. Alternatives to institutions are the increase use of community measures such as restitution, probation, and community service instead of imprisonment (Tutt 45).

Diversion has several advantages. It provides an earlier opportunity to work with the defendants. The labeling theory is avoided. The labeling theory states that the process of
arrest, trial, and conviction change the self-image of a juvenile. The juvenile sees himself as a delinquent therefore he feels as if he should act like a delinquent. Diversion also avoids the differential association theory which suggests that criminal behavior occurs when individuals have increased contact with those individuals who have delinquent attitudes. Finally, diversion saves scarce resources (Tutt 47).

There are also several possible disadvantages to diversion. Diversion could be a less effective deterrent than a court appearance. Diversion might involve discriminatory practices. There is also a greater possibility that diversion will interfere with an offender's liberty. Diversion might lead to the application of pressure on children and parents to admit guilt in order to participate in the diversion program. There is also the possible extension rather than limitation of the network of social control. Finally, insufficient weights may not be given to the victim (Tutt 47).

Success of diversion does not necessarily reduce the recidivism rate. Diversion success should also be measured by the effect it has on the penal system. Diversion can effect the penal system by keeping individuals out of prison, saving money or spending it better, or by the degree of public acceptance of a sanction that is based more on constructive principles like learning, reparation, and reconciliation instead of repression (Tutt 186). To make diversion a success the central and local government should encourage and pay closer attention to the voluntary organizations working with offenders.
Voluntary agencies would probably be more successful in dealing with diversion because of their increased freedom and flexibility in determining how services are delivered. Voluntary agencies also have the benefit of being relatively unconfined by the slow bureaucracy of many statutory agencies (Tutt 209).
APPENDIX C

Further Discussion of the Opportunity Cost of Lost Productivity

It is hard to estimate the opportunity cost of lost productivity because many incarcerated criminals enter prison with poor work records, a welfare dependency, and the government is already paying for their health care.

Former Chief Justice Warren Burger proposed a solution to the problem of lost productivity. His proposal was to implement 'factories with fences'. The purpose of 'factories with fences' was to allow private industry to hire prisoners to produce marketable goods while in the confines of the prison. One example of this was at the Attica State Prison in New York. Prisoners were hired to manufacturer file cabinets in the prison metal shop. Also, a private, nonprofit organization in Minnesota, Stillwater Data Processing, hired prisoners of a maximum security prison as computer programmers. While these examples were profitable, there are a few legal obstacles. Federal law prohibits transportation of prison manufactured goods in interstate commerce. Also, certain 'state use' statutes prohibit the sale of products manufactured in prison. Although states are beginning to repeal this statute (Cooter and Ulen 421).
Works Cited


