

# “DOES PRISON PAY?”

R E V I S I T E D

## Returning to the Crime Scene

**A N N E M O R R I S O N P I E H L  
A N D J O H N J . D I U L I O , J R .**

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Several years ago, in these pages, we tried to referee an acrimonious debate between criminologists who insisted that prisons “cost too much” and those who responded that they “protect too little.” Our contention was that both sides of the debate were stating their positions far too strongly given the lack of available empirical evidence. By presenting new survey data, we hoped to bring a little calm into the storm. But we succeeded only in changing the storm’s direction—toward us. Shorn of most of our peacekeeping illusions, we are back to revisit the question, “Does prison pay?”—again by way of new survey data.

Our original offering was a cost-benefit analysis of imprisonment based on a 1990 prisoner self-report survey we conducted in Wisconsin. The survey, based on a sample of 6 percent of the state’s prison population, found that in the year before their incarceration, half of the prisoners had committed 12 crimes or more, excluding drug crimes. Using the best available estimates of prison operating costs and the social costs of crime, we calculated that imprisoning 100 convicted felons who offended at the median rate cost \$2.5 million, but that leaving them on the streets cost \$4.6 million. We noted that for as much as a quarter of prisoners, other correctional options, such as probation, intensive drug treatment, or some other programs, might well be even more cost effective than imprisonment and we stressed the need for more research.

What we offer now is a new prisoner self-report survey, one that we conducted in New Jersey in 1993 of a random sample of 4 percent of recent male entrants to the state’s prison population. Analysis of this survey reconfirms our earlier finding: prison pays for most state prisoners. Most state prisoners are either violent or repeat offenders who pose a real and present danger to the physical safety or property of any communities into which they might be released. For them, assuredly, prison pays. But prison does not pay for all prisoners. It does not pay for all convicted felons. Most emphatically, it does not pay for all convicted drug felons. The public and its purse could benefit if 10–25 percent of prisoners were under some other form of correctional supervision or released from custody altogether.

## 1. INTRODUCTION TO MICROECONOMICS

### **Most Prisoners Are Dangerous, Repeat Criminals**

According to Lawrence A. Greenfeld of the U.S. Bureau of Justice Statistics, fully 94 percent of all state prisoners have either been convicted of a violent crime or been previously sentenced to probation or incarceration (see figure 1). Greenfeld's 94 percent statistic is unassailable. But even it understates the actual number and severity of crimes committed by state prisoners.

In the first place, adult prisoner profiles do not reflect the crimes committed by prisoners before they were of age to be legally tried, convicted, and sentenced as adults. Most state prisoners have long juvenile records, which are officially closed to adult authorities and are not considered by adult courts at sentencing time. According to our New Jersey survey, two out of three prisoners had served time in a juvenile institution. Other studies have shown that about 60 percent of youths aged 18 and under in long-term secure facilities have a history of violence. Many studies reveal that between a quarter and a third of juvenile criminals are high-rate offenders who commit a mix of violent and property crimes. Juveniles account for about a fifth of all weapons arrests and have set frightening new homicide records in the 1990s.

In a recent survey, 93 percent of judges in the juvenile system agreed that juvenile offenders should be fingerprinted, and 85 percent agreed that juvenile records should be open to adult authorities. As it now stands, however, juvenile crimes of assault, rape, robbery, burglary, and murder will mean nothing in adult courts and will not appear in statistical profiles of prisoners' criminality.

Second, more than 90 percent of all criminal cases do not go to trial because the offender pleads guilty to a lesser charge. Even violent crimes are routinely plea-bargained—an estimated 77 percent of rape cases, 85 percent of aggravated assault cases, and 87 percent of robbery cases. Unless one believes that all charges that are plea-bargained away are for crimes that the offender did not commit, then one must admit that actual crimes are swept under the criminal-records rug by plea bargaining. As yet no systematic empirical studies have estimated the deflationary effects of plea bargaining on the length and severity of prisoners' criminal records. But many prosecutors believe that the effects are large, and evidence is growing all around the country that they are right.

Third, as our two prisoner self-report surveys plainly reveal, most prisoners commit many times more nondrug felony crimes than they are ever arrested, convicted, and imprisoned for committing.

In the late 1970s the RAND Corporation conducted prisoner self-report surveys in Texas, Michigan, and California. Among other things, RAND's surveys showed that the median number of crimes, excluding all drug crimes, committed by prisoners the year before they were incarcerated was 15. In the late 1980s amidst the first round of controversies over benefit-cost analyses of imprisonment, some asserted that the RAND numbers could not even come close to being replicated in bigger-sample, more up-to-date surveys.

Both our prisoner self-report surveys were modeled on the RAND survey, though in both the sample was much larger. The 1993 New Jersey survey found that the median number of nondrug crimes committed by prisoners the year before their imprisonment was 12—exactly what it was for Wisconsin prisoners in 1990, and three lower than it was for prisoners in RAND surveys.

Although the exact replication is striking, future surveys will no doubt show that 12 is not a magic number. But serious analysts must now concede that there is less reason to be skeptical that the typical prisoner commits many undetected crimes, excluding drug crimes, the year before his incarceration.

In sum, the Greenfeld data alone are enough to rebut the notion that most state prisoners are petty, first-time, or mere drug offenders with few prior arrests, no previous convictions, no history of violence, and no potential for doing criminal harm if released tomorrow morning. And when we acknowledge that most prisoners commit crimes as juveniles, most prisoners plea bargain away crimes they have committed as adults, and most prisoners have committed a slew of undetected crimes the year before their incarceration, that notion is not only decidedly distorted but downright dangerous. It is a myth that anti-incarceration activists and their allies should be free to peddle, but that no responsible policymaker, prosecutor, judge, journalist, academic, or average citizen can afford to buy.

### **Calculating Social Costs**

Estimating the social costs and benefits of competing transportation or environmental policies is no analytical picnic. But estimating them for imprisonment and other sentencing options is a certain analytical migraine.

For starters, it is widely asserted that it costs \$25,000 to keep a prisoner behind bars for a year. But the latest Bureau of Justice Statistics figures for average annual spending per prisoner are \$15,586 for the states and \$14,456 for the federal Bureau of Prisons (which holds about 10 percent of all prisoners). These figures are calculated by dividing the total spent on salaries, wages, supplies, utilities, transportation, contractual services, and other current operating expenses by the average daily inmate population.

But hidden and indirect costs of running prisons might bring the \$25,000 figure closer to reality than the official spending averages would allow. For example, some tiny but nontrivial fraction of government workers outside of corrections (human services, central budgeting offices) spend time on matters pertaining to prisoners. And Harvard economist Richard Freeman and others suggest that incarceration decreases post-release employability and lifetime earnings potential. Thus an ideal estimate of the social costs of imprisonment would include any relevant spending by other government agencies, plus whatever public unemployment compensation, welfare, and health expenditures result from the negative short- and long-term labor market effects of imprisonment on ex-prisoners.

Also, there is wide inter- and intra-system variation not only in what it costs to operate prisons, but in how

prison dollars are allocated as between security functions (uniformed custodial staff), basic services (food, heat, medical supplies), treatment programs, recreational facilities, plant maintenance, and other expenditures. Whatever the best estimate of prison operating costs, such cost differences suggest that efficiency losses are occurring in some places and that efficiency gains are possible in others.

The cost-effectiveness of prisons, however, is by no means strictly determined by correctional administrators. Over the past 25 years the courts have had a major impact on both the total costs of operating prisons and the distribution of prison dollars between security and other needs. For example, in the wake of a sweeping court order, prison operating costs in Texas grew from \$91 million in 1980 to \$1.84 billion in 1994, a tenfold increase in real terms, while the state's prison population barely doubled. Texas is now one of at least 20 states that spends less than half of every prison dollar on security.

Finally, it is worth remembering that barely a penny of every federal, state, and local tax dollar goes to support state prisons and local jails. State and local governments spend 15 times what the federal government spends on corrections. But state and local spending on prisons and jails amounts to only \$80.20 per capita a year, or \$1.54 per capita a week.

**Estimating Social Benefits**

Whatever the best estimate of how much it costs society to keep a convicted criminal behind bars for a year, how do we decide whether it's worth the money? Imprisonment offers at least four types of social benefits. The first is retribution: imprisoning Peter punishes him and expresses society's desire to do justice. Second is deterrence: imprisoning Peter may de-

ter either him or Paul or both from committing crimes in the future. Third is rehabilitation: while behind bars, Peter may participate in drug treatment or other programs that reduce the chances that he will return to crime when free. Fourth is incapacitation: from his cell, Peter can't commit crimes against anyone save other prisoners, staff, or visitors.

At present, it is harder to measure the retribution, deterrence, or rehabilitation value of imprisonment to society than it is to measure its incapacitation value. The types of opinion surveys and data sets that would enable one to arrive at meaningful estimates of the first three social benefits of imprisonment simply do not yet exist.

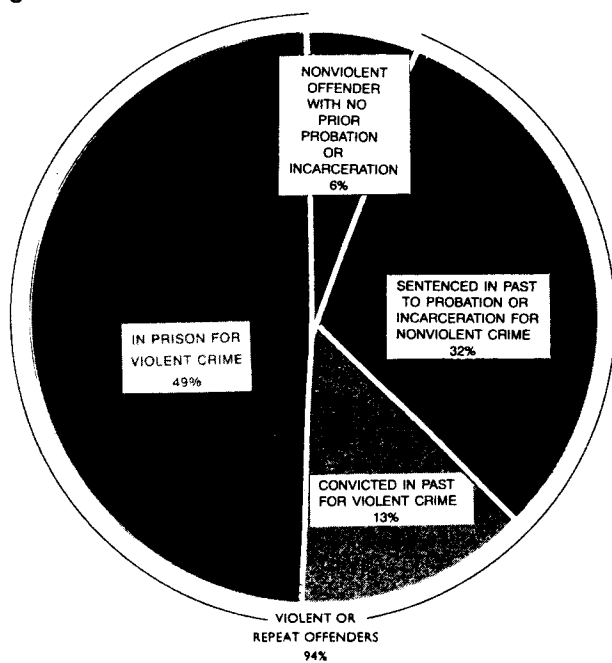
Thus, we focus exclusively on the social benefits of imprisonment measured in terms of its incapacitation value. As columnist Ben Wattenberg so vividly put it, everyone grasps that "A thug in prison can't shoot your sister." Thus, if a given crime costs its victims and society X dollars in economic and other losses (hospital bills, days out of work, physical pain, and emotional anguish), and if we know that, when free, a convicted criminal commits Y such crimes per year, then the yearly social benefits of imprisoning him are equal to X times Y. If we accept that it costs \$25,000 to imprison this convicted criminal for a year, then the benefit-cost ratio of imprisoning him is equal to the product of X times Y divided by \$25,000. If the ratio is greater than 1, then the social benefits exceed the costs and "prison pays" for this offender; but if the ratio is lower than 1, then the social costs exceed the benefits and it does not pay to keep him locked up.

But remember: we are monetizing the social benefits solely in terms of imprisonment's incapacitation value. Because there is every reason to suppose that the retribution, deterrence, and rehabilitation values of imprisonment are each greater than zero—that is, because it is virtually certain that in addition to incapacitating criminals who would commit crimes when free, prison also succeeds in punishing, deterring, and rehabilitating at least some prisoners under some conditions—our estimate of the net social benefits of imprisonment is bound to be an *underestimate*. And if, therefore, our estimate measured only in terms of prison's incapacitation value is positive, it means that the actual social benefits of imprisonment are even higher and that prison most definitely pays.

Several recent advances have been made in measuring the costs of crime to victims and society. For example, a recent Bureau of Justice Statistics study reports a total of 33.6 million criminal victimizations in 1992. The study estimated that in 1992 crime victims lost \$17.2 billion in direct costs—losses from theft or property damage, cash losses, medical expenses, and lost pay from work.

But the BJS estimate did not include direct costs (for example, medical costs) to victims incurred six months or more after the crime. Nor did it include decreased work productivity, the less tangible costs of pain and suffering, increased insurance premiums and moving costs due to victimization, and other indirect costs.

**Figure 1. Profile of Prison Inmates, 1991**



Source note: Lawrence A. Greenfeld, *Survey of State Prison Inmates, 1991* (Bureau of Justice Statistics). Statistics based on a sample representing 711,000 adults in state prisons.

# 1. INTRODUCTION TO MICROECONOMICS

A 1993 study by Ted R. Miller and others in *Health Affairs* took a more comprehensive view of the direct costs of crime and included some indirect costs as well. The study estimated the costs and monetary value of lost quality of life in 1987 due to death and injuries, both physical and psychological, resulting from violent crime. Using various measures, the study estimated that each murder costs \$2.4 million, each rape \$60,000, each arson \$50,000, each assault \$25,000, and each robbery \$19,000. The estimated total cost over the lifetime of the victims of all violent crimes committed during 1987-90 was \$178 billion per year, or many times the BJS estimate of direct economic costs.

Even these estimates, however, omit the detailed cost accounting of site-specific, crime-specific studies. For example, a recent survey of admissions to Wisconsin hospitals over a 41-month period found that 1,035 patients were admitted for gunshot wounds caused by assaults. These patients accumulated more than \$16 million in hospital bills, about \$6.8 million of it paid by taxes. Long-term costs rise far higher. For example, just one shotgun assault victim in the survey was likely to incur costs of more than \$5 million in lost income and medical expenses over the next 35 years.

Likewise, several studies have estimated the number of crimes averted by incapacitating criminals. For example, BJS statistician Patrick J. Langan has shown that in 1989 an estimated 66,000 fewer rapes, 323,000 fewer robberies, 380,000 fewer assaults, and 3.3 million fewer burglaries were attributable to the difference between the crime rates of 1973 and those of 1989. As Langan has observed, if only one-half or one-quarter of the reductions were due to rising incarceration rates, that would still leave prisons responsible for sizable reductions in crime. Also he has estimated that tripling the prison population from 1975 to 1989 reduced reported and unreported violent crime by 10-15 percent below what it would otherwise have been, thereby preventing a conservatively estimated 390,000 murders, rapes, robberies, and aggravated assaults in 1989 alone.

## Results of the New Jersey Study

What can the New Jersey prisoner self-report survey contribute to a cost-benefit analysis of imprisonment? Table 1, adapted from Mark A. Cohen's analysis of jury awards to crime victims, lists our estimates of the social costs of rape, robbery, assault, burglary, auto theft, and petty theft. For each offender in the New Jersey sample we multiplied these amounts by the annualized number of offenses reported of each type. Table 2 ranks the resulting social costs of crime for the sample. The median social cost of crime was about \$70,098. In other words, half of the prisoners in the sample inflicted more costs on society and half less than \$70,098. The social cost associated with the prisoner in the 25th percentile (that is, 75 percent of the sample inflicted higher social costs than he did) was about \$19,509, and at the 10th percentile it was \$1,650.

Table 3 converts the figures in table 2 to benefit-cost ratios by dividing the social benefits by \$25,000, the cost of imprisoning one prisoner for one year. Dividing the

median social cost per crime of \$70,098 by \$25,000 yields a benefit-cost ratio of 2.80: for every dollar it costs to keep a median-offending prisoner behind bars society saves at least \$2.80 in the social costs of crimes averted.

The prisoner at the 25th percentile was essentially a high-rate property offender, reporting that he committed auto thefts at a rate of three a year, burglaries at a rate of six a year, and petty thefts at a rate of 24 a year. Dividing the total social cost of these crimes by the cost of incarceration yields a benefit-cost ratio of

**Table 1. Estimates of Social Costs of Selected Crimes**

CRIME	SOCIAL COST
Rape	\$56,280
Robbery	12,060
Assault	11,518
Burglary	1,314
Auto theft	2,995
Fraud, forgery, petty theft	110

Source: Mark Cohen, "Pain, Suffering, and Jury Awards: A Study of the Cost of Crime to Victims," *Law and Society Review*, vol. 22, no. 3 (1988), as adjusted for inflation and transfer of wealth by the authors.

**Table 2. Social Costs of Property and Assault Crimes by New Jersey Inmates**

OFFENDER	SOCIAL COST
Average (mean)	\$1,600,499
Median	70,098
25th percentile	19,509
10th percentile	1,650

Source: Authors' calculations from the 1993 New Jersey Inmate Survey, N=419. Drug sales, homicides, and weapons offenses are excluded.

**Table 3. Benefit-Cost Ratios Implied by Table 2**

OFFENDER	RATIO
Average (mean)	64.02
Median	2.80
25th percentile	0.78
10th percentile	0.07

Source: Same as table 2.

**Table 4. Benefit-Cost Ratios for Property, Assault, and Drug Crimes**

OFFENDER	RATIO
Average (mean)	40.10
Median	0.36
25th percentile	0.00
10th percentile	0.00

Source: Same as table 2. N=669. Homicides and weapons offenses are excluded.

0.78. And at the 10th percentile, the ratio is a clearly cost-ineffective zero.

### Just Say No to No Parole

Clearly, the social benefits of incapacitating criminals, however great they may be, are nonetheless subject to the law of diminishing returns.

Make no mistake: within three years of their community-based sentences about half of all probationers either abscond or are returned to prison for a new crime, while roughly half of all parolees are convicted of a new crime. Of the 5 million people under correctional supervision in this country at any given time, 72 percent are not incarcerated. Even violent offenders serve barely 40 percent of their sentences in confinement. Each year community-based felons commit millions of crimes, many violent, that could have been prevented if they had been imprisoned for all or most of their terms.

But efforts, in Virginia and elsewhere, to abolish parole are too tough by half. For while about half of all parolees recidivate, the other half do not. Nationally, each year we spend more than 7.5 times more on prisons and jails (which house 28 percent of offenders) than we do on probation and parole (which account for the remaining 72 percent) combined. Thus we spend more than 20 times as much to hold each prisoner as we do to supervise each community-based offender. No doubt a large fraction of the parole population should be imprisoned. But a no-parole policy lowers rather than increases the chances that the system will sort offenders cost-effectively.

This is especially true where drug offenders are concerned. Between 1980 and 1992 the fraction of new state prisoners whose most serious conviction offense was a drug offense rose from 6.8 percent to 30.5 percent. Does that mean that one-third of the prison population consists of "mere drug offenders"? By no means. The vast majority of this group are recidivists with many a nondrug felony on their rap sheets, to say nothing of juvenile crimes, crimes they plea-bargained away, and crimes they got away with completely.

Then what fraction of prisoners might be accurately characterized as "drug-only offenders," meaning offenders whose only adult crimes have been drug crimes? At this point we have no way of knowing. But about 27 percent of the New Jersey sample reported that in the four months before incarceration their *only* offenses were drug sales. Nearly a quarter said they first got involved in crime to get money for drugs. And 3 percent were convicted of drug possession and reported no other crimes.

To be consistent methodologically, we must consider the incapacitation benefits of incarcerating such a substantial population. Doing so dramatically changes the results and the implications of our analysis. We believe that the best estimate of the incapacitation effect (number of drug sales prevented by incarcerating a drug dealer) is zero, and therefore value drug crimes (sales and possession) at zero social cost. Other analysts, including many whom no one can accuse of

being soft on drug crime or in favor of drug legalization, have reached similar conclusions. For example, in a recent issue of *Commentary*, James Q. Wilson observed that prison terms for crack dealers "do not have the same incapacitative effect as sentences for robbery. . . . [A] drug dealer sent away is replaced by a new one because an opportunity has opened up." Many law enforcement and corrections officials have reached the same conclusion.

As table 4 shows, including drug offenders in our analysis lowers the cost-effectiveness of incarceration across the board: even at the median, imprisonment appears to be very expensive. If even half of the inmates who report that their only crime was selling drugs are telling the truth, then 15 percent of New Jersey's spending on prisons is being devoted to "sending a message" about drug dealing. We are open to convincing evidence that the public is willing to pay substantial sums for retribution against drug dealers. And we are aware that certain types of prison-based drug treatment programs can work to reduce the chances that an offender will return to drugs or crime upon release. But let no one suppose that by incarcerating most drug offenders we succeed in averting lots of drug crimes. If there is an empirically sound argument for a no-parole policy that makes no distinctions between drug-only offenders and other prisoners, we have yet to hear it.

### Forging a New Consensus?

When we first ventured into the "Does prison pay?" debate, we were struck by the absence of empirical data to buttress the large claims being made on both sides. Now more than ever we are convinced that the path to a new intellectual consensus in this area, as in crime policy generally, can be paved not by disagreeing more amicably about the implications of what is already known (though that could be a pleasant change), but by agreeing more fully about the gaps in our knowledge and how best to fill them.

For example, many want drug-only offenders locked up regardless of the questionable incapacitation or general deterrence benefits of doing so. Likewise, others want to legalize drugs outright. But honest minds on both sides must admit that we do not yet have a definitive estimate of the fraction of the prison population that consists of drug-only offenders.

Little by little analysts are beginning to sketch a picture of the amount and severity of crimes committed by prisoners when free and to explain the conditions under which some community-based felons succeed in staying drug- and crime-free. But we need a much fuller picture, a much clearer explanation.

In short, a new intellectual consensus on crime policy can be built not by avoiding the hardest policy-relevant empirical questions, but by attempting to identify and answer them, preferably in common with those with whom we are now most inclined to disagree strongly. Through a new Brookings research project, we hope to help foster just such a consensus.