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Author(s): John J. DiIulio, Jr.

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Help Wanted: Economists, Crime and Public Policy

John J. DiIulio, Jr.

As crime has risen to the top of the nation's domestic policy agenda, so has the need for a body of policy-relevant knowledge about crime, for theoretical ideas and empirical findings that can be translated into popular discourse and carved into public laws. To be frank, the professional criminologists, sociologists, political scientists, law professors, public management specialists and self-styled practitioner-scholars who have dominated the field are incapable of meeting this challenge. They generally lack the quantitative and formal modelling skills necessary to shed new light on old controversies or provide analytically compelling answers to methodologically complicated questions. In my view, therefore, criminal justice is a field that needs to be conquered by economists.

Of course, economists have not neglected criminal justice altogether. In a seminal article published 28 years ago, Gary S. Becker (1968) crafted what was essentially an early principal-agent model of crime and punishment: criminals are rational, self-interested agents whose behavior is best understood as an optimal response to the incentives set by the government (or principal) via expenditures on law enforcement and corrections. In the years since, others have refined Becker's "economic approach" to the subject. Notably, Block and Lind (1975a,b) have furnished theoretical reasons and empirical evidence to modify Becker's implication that an optimal sentencing system involves severe penalties. More recently, Akerlof and Yellen (1994) developed a model in which criminals know that the probability of being detected depends both on law enforcement monitoring and on the behavior of the community. This model includes Becker's interaction between law

■ *John J. DiIulio, Jr., is Professor of Politics and Public Affairs, Princeton University, Princeton, New Jersey, and Director, Center for Public Management, Brookings Institution, Washington, D.C.*

enforcement and criminals, but also includes interactions between community and criminals and between law enforcement and communities.

Beyond these refinements of the Becker model, a small band of economists have analyzed a wide range of criminal justice issues. Some examples that spring to my mind include Reuter (1990) on the workings of illicit drug markets; Cook on the effects of postrelease employment on parolee recidivism (1975), using clearance rates as a measure of justice system effectiveness (1979), the demand and supply of criminal opportunities (1986), and the effects of alcohol on criminal violence (1982; 1993); and Freeman's (1992) work on the effects of incarceration on post-release employability and lifetime earnings potential. A good deal of policy-relevant scholarship about crime and punishment is now being produced by a host of young economists: Piehl's (1994) work on criminality and education; Needels's (1994) study of recidivism and employment patterns; and Levitt's (1994; 1995) papers on police manpower, prison population size and crime, to cite just three examples.

But it remains true that most of those who research, write or legislate on crime in America today are hardly the slaves of some defunct (or recently doctorated) economist. Instead, many leading experts and policymakers doubt that economic perspectives on crime have much to offer, see zero value in attempts to model the conditions under which given public policies can cut crime, and disdain efforts to measure (or, heaven forbid, quantify) the social costs and benefits of competing crime policy options.

To overcome these suspicions, economists can begin by continuing to fine-tune their bedrock Beckerian assumptions in relation to such much-travelled topics as criminal deterrence. But in addition, more economists will need to train their intellectual comparative advantages on behavioral and public policy questions that have never attracted deep interest within the discipline. And economists will need to push out the frontiers of thinking about crime in relation to social capital.

I have my own views on the criminal justice system: in elite circles, I am considered right of center; in my old neighborhood, I am considered a flaming liberal. But my biases will not, I hope, prevent me from serving as a reliable guide on the road to an economics of crime policy.

A Ticking Crime Bomb?

The first thing to understand about crime is that the data reported in the popular press and utilized in many studies are often incomplete and misleading. Still, it is possible to disaggregate the data in ways that lend themselves to meaningful interpretations. The evidence does seem to indicate that America is on the verge of another major youth crime wave.

Data Dilemmas

There are two main sources of information about crime in America. The oldest and still the one cited most widely is the Federal Bureau of Investigation's annual

Uniform Crime Reports (UCR). Begun in 1929, the UCR tallies crimes reported to state and local law enforcement agencies. The UCR counts seven reported “index crimes,” which in turn are often divided into “violent” crimes and “property” crimes. The violent crimes in the UCR include murders and nonnegligent manslaughters, forcible rapes, robberies and aggravated assaults, while the property crimes are burglaries, larceny thefts and motor vehicle thefts. The overall crime rate rose steadily from 1960 to 1980, by all three measures. Since 1980, the property crime rate has stabilized somewhat, while the rate of violent crime continued to increase during the 1980s but may have leveled off in the early 1990s.

There are at least three limits to the FBI’s crime data. First, remember that the UCR is based only on crimes reported to the police. Most studies show that about two-thirds of all crimes, and even 55 to 60 percent of violent crimes, are not reported to the police. Second, local police departments determine how to compile their statistics, which has given rise to informed suspicions of systematic undercounting in given periods by some big-city departments intent in reporting a reduction in crime. Third, the FBI uses a method of “hierarchical” counting in which only the “most serious” act in any one incident is recorded. If a woman is raped and her car is stolen, for example, the FBI records the rape but not the theft.

Although efforts to enrich the FBI’s crime data are underway, it is not clear how successful they will be. For example, a number of states and localities are now experimenting with the FBI’s National Incident-Based Crime Reporting System, or NIBRS. Under NIBRS, data are collected on 46 specific crimes. For each incident, there are a half-dozen categories of reporting, including details about the crime, the victim and the offender. NIBRS includes a multiple-offense option, to avoid the problem mentioned a moment ago. But the software problems with NIBRS have yet to be cracked, and the day when this complex database will be operational in 16,000 separate law enforcement agencies remains a long way off.

The other main source of crime data is the National Crime Victimization Survey (NCVS) of the Bureau of Justice Statistics (BJS). About 50,000 households and over 100,000 individuals have participated in the NCVS each year since 1973, making it the second largest household survey conducted by the federal government. The NCVS counts violent crimes (rape, sexual assault, robbery, aggravated assault, simple assault) and property crimes (burglaries, motor vehicle thefts and thefts of other property). The survey reports that the overall level of crime has decreased since its peak in 1981 (BJS, 1994a; 1995a), but rates for most types of crime have tended to fluctuate from year to year. For example, the 1981 victimization rate for violent crimes—35.3 per 1,000 persons—was significantly higher than any year prior to 1977. After 1982, the violent crime rate declined until it reached its low between 1986 and 1989. By 1992, however, the rate had crept back to 32.1 crimes per thousand.

Generally speaking, the NCVS is a more reliable measure of crime than the UCR. And in recent years, the NCVS and the UCR trend lines have become more parallel (which tells us, in effect, that the UCR has been getting better). But the NCVS has been far from perfect. For example, as Bachman and Taylor (1994) have

summarized, the NCVS has undercounted the actual incidence of and increase in several types of violent crime. After consultations over the last decade with a consortium of experts in criminology, survey design and statistics, the BJS has recently redesigned its survey to address this problem. It has also greatly improved the NCVS in other ways, including computer-assisted telephone interviewing and “short cues”—examples of specific people, places, objects or actions that may have been associated with a victimization—used to jog respondents’ memories of events.

The first survey to make use of this redesign was the report on criminal victimization in 1993, released in May 1995 (BJS, 1995a). It is only a slight exaggeration to say that is the first reliable national data set on crime in America in a single calendar year. In that year, U.S. residents age 12 or older experienced a total of 43.6 million crimes, including nearly 11 million violent crimes (25 percent) and over 32 million property crimes (75 percent). In 1993, there were 52 violent victimizations per 1,000 persons and 322 property crimes per 1,000 households. By comparison, the total number of reported crimes in 1993 recorded by the FBI was 14.1 million, including 1.9 million violent crimes (13 percent) and 12.2 million property crimes (87 percent).

These data confirm that America suffers a great deal of serious crime, both in absolute terms and relative to best estimates of crime rates in the 1950s, ’60s and ’70s.

Concentration By Race, Place and Age

America’s crime problem, especially its violent crime problem, is highly concentrated among young minority urban males in certain inner-city neighborhoods. This is hardly surprising. As early as 1969, the report of the National Commission on the Causes and Prevention of Violence (1969, p. 82) explained that crime is “chiefly a problem of the cities of the nation, and there violent crimes are committed mainly by the young, poor, male inhabitants of the ghetto slum. . . increasingly powerful social forces are generating rising levels of violent crime which, unless checked, threaten to turn our cities into defensive, fearful societies.”

What is new, however, is the extreme concentration of homicidal and near-homicidal violence, both individual and gang related, among young minority urban males.

For example, in a study of murders committed in 1988 in the nation’s 75 most populous counties, John Dawson and Barbara Boland (1993) reported that blacks were 52 percent of all murder victims and 62 percent of all murder defendants, but they were only 20 percent of the general population in these metropolitan jurisdictions. By comparison, whites were 44 percent of all murder victims and 36 percent of all defendants, but they were over 77 percent of the general population in these urban areas. About 94 percent of all black murder victims and 76 percent of all white victims were killed by someone of the same race.

For the most part, what we are talking about here is young minority urban males victimizing other young minority urban males. Between 1985 and 1992, the rate at which males ages 14 through 17 committed murder increased by about

50 percent for whites and over 300 percent for blacks (Blumstein, 1995). Between 1973 and 1992, the rate of violent victimizations of black males ages 12 to 24 increased about 25 percent; for example, black males ages 16 to 19 sustained one violent crime for 11 persons in 1973 versus one for every six in 1992 (Bastian and Taylor, 1994). In 1992, black males between the ages of 16 and 24 were 1 percent of the population age 12 or over and experienced 5 percent of all violent victimizations. By comparison, white males in this age group were 6 percent of the population and were victims in 17 percent of violent crimes. Moreover, the violent crimes experienced by young black males tended to be far more serious than those experienced by young white males; for example, aggravated assaults rather than simple assaults, and violence involving gunfire rather than weaponless attacks.

What can such numbers mean in a particular place? Two local newspaper reporters, Bob Russell and Don Warner (1995), have compiled the numbers for Philadelphia, where 433 people were murdered in 1994, 340 of them black. Blacks were 39 percent of the city's population but 78.5 percent of its murder victims. More than half of the victims were males between the ages of 16 and 31. All but five of the 89 victims under 20 were nonwhite. Citywide, the number of murders per 100,000 residents was 23 (the national average since 1990 has hovered around 9.5). But in the predominantly white, working-class, greater northeast region of the city, the murder rate was about 2; in predominantly poor, black north Philadelphia, the rate was 66; and in the heart of north Philadelphia, in an area known to residents and police as "the Badlands," the rate was over 100 per 100,000 residents.

In many urban areas, gangs figure prominently in the youth crime problem. For example, as Luedtke (1995) has reported, Los Angeles County now has some 400 street gangs organized mainly along racial or ethnic lines: 200 Latino, 150 black, the rest white or Asian. Together these gangs claim over 50,000 members. In 1994 their known members committed 370 murders and over 3,300 felony assaults.

Demographic trends make it virtually certain that these gangs will have hordes of new recruits between now and the year 2005. Today America is home to about 7.5 million males between the ages of 14 to 17. That number will increase by roughly 500,000 between now and the year 2000 (Wilson, 1995). Between now and the year 2005, the number of 14- to 17-year-old males will increase by 23 percent, with increases of 28 percent and 50 percent for blacks and Latinos, respectively (Fox, 1995).

"Stone-Cold Predators"

The plural of anecdote is not data, but over the last 15 years I have spent a good deal of time doing in-depth interviews with police, prosecutors and, most especially, corrections (prison, jail, probation and parole) officials all across the country. People in law enforcement and corrections are not an easily excitable lot. But most of the hundreds of those with whom I have spoken over the last few years are convinced that America is a ticking crime bomb.

For example, following my May 1995 keynote address to the National District Attorneys Association in Washington, D.C., big-city prosecutors inundated me with

detailed “war stories” about the ever-growing numbers of hardened, remorseless juveniles who were showing up in the system. “They kill or maim on impulse, without any intelligible motive,” said one prosecutor. He and other prosecutors asserted that we are most definitely in the early stages of a youth crime wave, and that today’s young criminals are a new, more violent breed of predatory street offender than any we have ever seen or studied before. I have heard much the same thing from long-term prisoners. For instance, on a recent visit to East Jersey State Prison (formerly known as Rahway, a maximum-security facility), I spoke to a group of life-term inmates, many of them black males from inner-city Newark and Camden. In a typical remark, one prisoner worried, “I was a badass street gladiator, but these kids are stone-cold predators.”

Evidence from a generation of birth cohort studies reinforces such fears. Wolfgang (1972) launched this literature with a study of all 10,000 males born in 1945 who lived in Philadelphia between their tenth and eighteenth birthdays. Over one-third had at least one recorded arrest by the time they were 18. Most of the arrests occurred when the boys were 15, 16 or 17. Half of the boys who were arrested were arrested more than once; once a boy had been arrested three times, the chances that he would be arrested again were over 70 percent. But perhaps the most significant finding of the study was that 6 percent of the boys committed five or more crimes before they were eighteen, accounting for over half of all the crimes, and about two-thirds of all the violent crimes, committed by the entire cohort. This “6 percent do 50 percent” statistic has been replicated in a series of subsequent longitudinal studies on Philadelphia and other cities, and work is underway to see whether a similar pattern holds in countries as different from the United States as China.

This same literature indicates that each generation of crime-prone boys is several times more dangerous than the one before it. For example, crime-prone boys born in 1958 who resided in Philadelphia between their tenth and eighteenth birthdays did about three times as much crime as their older cousins in the class of ’45. Taken as a whole, the data suggests that the difference between the juvenile criminals of the 1950s and those of the 1970s and early ’80s was about the difference between the Sharks and Jets of “West Side Story” and the Bloods and Crips of Los Angeles County fame. It is not inconceivable that the demographic surge of the next 10 years will bring with it young male criminals who make the “O.G.’s” (original gangsters) of the Bloods and Crips look tame by comparison.

Get-Tough Policies?

The public, confronted with historically high rates of crime and perceiving a wave of brutal young criminals, is demanding stronger measures to deal with crime. By most appearances, those demands are being met. Over one million convicted criminals are now behind prison bars in America. Since the 1970s, many states have been backing away from prisoner rehabilitation programs and doing away with indeterminate sentencing. Many states have now adopted or are considering laws that would incarcerate for life any thrice-convicted violent felon. In 1994, California

voters overwhelmingly approved the nation's most expansive "three strikes" law: almost any three felony convictions, violent or not, automatically brings life behind bars. Georgia, which has (in effect) a "two strikes" law for violent criminals, has brought back both striped uniforms for prisoners and chain gangs. Texas and other states are speeding death row inmates to dates with the executioner.

Meanwhile, the U.S. Congress has passed a major piece of anticrime legislation every two years since 1980. The 1994 omnibus federal crime bill was two parts law enforcement, one part prevention. It contained over \$20 billion for more cops and prisons. The six separate substitute crime bills that Republicans pushed through the House in early 1995 were pure law enforcement. For example, the House's Violent Criminal Incarceration Act of 1995 establishes \$10.5 billion in grants to states that impose longer prison terms on violent offenders and keep felons confined for 85 percent or more of their terms.

It may appear that all the trends are toward stronger punishments, but that would be an exaggeration. States have done away with "rehabilitation programs," but renamed and expanded them to the point where in many states more than half of every prison dollar is now spent on things other than security basics. States did move away from indeterminate sentencing in the 1970s, but by mid-1995 at least 20 states had reinstated it, and only 13 states had enacted minimum sentences (ranging from 25 percent to 85 percent in most places) to be served behind bars. In 1991, fully 47 percent of criminals with one violent felony conviction offense, 31 percent with two offenses and 23 percent with three offenses were not even sentenced to prison. Such data on felony sentencing help to explain a rather striking finding reported by Joan Petersilia (1995a, p. 19), former president of the American Society of Criminology: in 1991, "there were approximately 372,500 offenders convicted of violent crime in prison, and approximately 590,000 outside in the community on probation and parole! Overall, we can conclude that nearly three times as many violent offenders (1.02 million) were residing in the community as were incarcerated in prison." And as Table 1 indicates, violent offenders released from prison in 1992 served an average of 48 percent of their time behind bars. Even convicted murderers served only 5.9 years of 12.4 year terms.

Likewise, where "three strikes" laws have taken effect, prosecutors have begun to exercise their discretion in bringing charges in ways that spare many thrice-convicted violent felons one-way tickets to the big house. Executions are up in a few states, but the overall number remains relatively low. From 1977 through 1993 America experienced over 350,000 murders. During that same period, 226 convicted murderers were executed, and in 1993 about 2,700 were on death row. Congress has passed wave upon wave of crime legislation, but as I have argued elsewhere, most of that legislation has had little practical effect one way or the other (DiIulio et al., 1995). Finally, even under the Violent Criminal Incarceration Act of 1995, states in which prisoners serve on average less than half of their time in confinement can still qualify for most of the available federal funds.

Table 1
Time Served in Confinement by Violent Offenders Released in 1992

<i>Type of Offense</i>	<i>Average Sentence</i>	<i>Average Time Served^a</i>	<i>Percentage of Sentence Served</i>
All violent	89 months	43 months	48%
Homicide	149	71	48
Rape	117	65	56
Kidnapping	104	52	50
Robbery	95	44	46
Sexual assault	72	35	49
Assault	61	29	48
Other	60	28	47

^a Includes jail credit and prison time.

Source: Bureau of Justice Statistics, *Prison Sentences and Time Served for Violence*, April 1995, p. 1.

Crime Fears: Rational or Reactionary?

For most Americans—indeed, for most citizens who live outside the nation’s inner cities—crime is not any sort of an immediate, everyday threat. To my knowledge, there is not a single empirical study that demonstrates that crime has “spilled over” from high-crime inner cities to affluent central city districts, inner-ring suburbs, edge cities or rural heartlands. So why is the mass American public so concerned about crime? The standard explanation offered by pundits and criminologists is that the public’s crime fears are reactionary, bred by media hype and fed by demagogic politicians. But the public opinion survey data, and basic facts about how the justice system actually operates, make the mass public’s concerns about crime seem more rational than reactionary.

Target Hardening

In just about every major public opinion survey since January 1994, crime has been ranked ahead of unemployment, the deficit, environmental pollution and other issues as the main problem facing the country today. But while nearly all Americans now feel more threatened by crime than they did in the past, urban Americans feel more threatened than suburban or rural Americans, urban blacks feel more threatened than urban whites, and central city blacks feel more threatened than other urban blacks (DeFrances and Smith, 1994). For example, in 1991 about 7.4 percent of all households, 16.5 percent of black households, and 22.7 percent of central city black households identified crime as a major neighborhood problem. Between 1985 and 1991, the fraction of rural households that identified crime as a major neighborhood problem remained fairly stable, rising from 1.4 percent to 1.9 percent. But the fraction of black central city households that did so nearly doubled from 11.8 percent to 22.7 percent.

Likewise, a number of recent surveys, including one conducted by the Black Community Crusade for Children (1994), have found that black urban children, who are far more likely than black urban adults to be murdered or victimized by many types of violent crime, ranked their top five present life concerns as follows: kids carrying guns (70 percent); violence in school (68 percent); living in a dangerous neighborhood (64 percent); involvement with gangs (63 percent); and involvement with people who cause trouble (63 percent).

Such survey findings appear to mirror the objective risks of criminal victimization faced by Americans of given residential and racial characteristics. All of this seems perfectly rational.

More broadly, consider the implications of the fact that most anticrime efforts in this country are private, not public or governmental. They consist of the countless financial, locational and organizational decisions made each day by families, businesses and neighborhood groups in an effort to render the environments in which law-abiding people live, work, shop, attend school and play relatively impervious to crime. We lock our doors and install burglar alarms. We counsel our teenagers to be careful and to avoid driving through “bad neighborhoods.” We relocate our families and our businesses. We make crime-sensitive investment decisions. We watch the neighbors’ homes when they are on vacation. We hire private security guards. We form neighborhood watch groups. Were it not for these private anticrime efforts—these target-hardening behaviors, as I sometimes call them—America’s crime problem would undoubtedly be far worse. Part of the reason for such high rates of criminal victimization among inner-city blacks is that the law-abiding people of these communities experience a relative lack of the financial and political resources needed to target-harden their homes, stores, parks and schools (DiIulio, 1996).

To my knowledge, no one has attempted to measure or monetize what Americans spend on target-hardening. Loose estimates have been made that twice as much is now spent on private security services as on public police, but no rigorous work on the costs of “rent-a-cops,” let alone of the entire range of target-hardening activities, is presently available.

But no one would be terribly surprised to learn that Americans are investing more of their own money, time and effort in target hardening today than they did five, 10, or 15 years ago. If that is so, then the mass public’s crime fears are more understandable. What average Americans seem to sense is that, for all of the private, corporate and community-based anticrime initiatives, for all of the disposable income spent on security devices, for all of the costly behavioral changes, and for all of the neighborhood rallies, they have gained only marginal and temporary relief from murder and mayhem.

Revolving-Door Justice

A majority of Americans of every demographic description are convinced that existing government policies do not do nearly enough to protect law-abiding citizens from convicted violent and repeat criminals. In 1993 and again in 1994, Gallup

(1994) found that only one public institution elicited less public confidence than did the U.S. Congress—namely, the criminal justice system.

Most criminologists, however, remain sanguine about how the system operates. In their view, the real problem is not revolving-door justice but its opposite—public policies that incarcerate too many convicted criminals for too long. The national media routinely side with the experts. A typical example is the *Time* magazine cover story (Lacayo, 1994, pp. 51, 55) that declared in bold letters that “outraged Americans” who favor “lock ’em up” policies fail to see that “prisons have failed” and that “imposing longer sentences may only increase the crime rate.”

There is plenty of reliable data that can be used to referee this dispute between the people and many of the experts. Much of it, in my view, supports the views held by average Americans.

First, we have been overloading the streets faster than we have been overcrowding the prisons. As Table 2 indicates, more than two-thirds of the 5.1 million people under correctional supervision in 1994 were *not* incarcerated. Nationally, about 3 million persons were on probation, 1 million were in prison, 690,000 were on parole, and 484,000 were in jail. Between 1980 and 1994, the parole population and the prison population both grew by 213 percent. Other BJS data indicate that in 1992, over 10 million violent crimes were committed, but just 3.3 million were reported to the police. About 641,000 led to arrests, barely 165,000 to convictions (over 90 percent of which were plea-bargained down from the original charges), and only 100,000 or so to prison sentences, which on average ended before the convict had served even half his time behind bars.

Who really goes to prison? Based on BJS sample survey data representing 711,000 state prisoners in 1991, Greenfeld (1993, p. 11) has estimated that fully 94 percent of state prisoners have been convicted of a violent crime or served a previous sentence to probation or incarceration. Performing the same analysis on BJS data sets on state prisoners in 1974, 1979 and 1986 yields virtually the same results: over 90 percent of state prisoners have been, and continue to be, violent or repeat offenders.¹ In 1991, 61 percent of federal prisoners were serving a sentence for a violent crime or were either on probation or incarcerated in the past.

The idea that prisons are teeming with petty, first-time drug offenders and persons convicted of mere possession is simply false. According to the BJS (1993) sourcebook of justice statistics, of the 241,709 new court commitments to 35 state prison systems in 1991, 72,423 (30 percent) were drug law violators, 16,632 (6.8 percent) of them for possession, the remaining 55,791 (23.2 percent) for drug trafficking and other drug crimes. Of the 36,648 new court commitments to federal prisons in 1991, 14,564 (42 percent) were drug law violators, 703 (2 percent) for

¹ It is worth noting that many criminologists simply refuse to acknowledge these BJS data on prisoners. For example, many criminologists and journalists prefer to cite the results of a report prepared by an advocacy group that asserted that most prisoners are petty, nonviolent offenders. The “study” was based on loosely structured interviews with 154 incoming prisoners across three states; for a summary and critique, see Logan (1991).

Table 2
Number of Adults on Probation, in Jail or Prison, or on Parole, 1980–1994

<i>Year</i>	<i>Total Estimated Correctional Population</i>	<i>Probation</i>	<i>Jail^a</i>	<i>Prison</i>	<i>Parole</i>
1980 ^b	1,840,400	1,118,097	182,288	319,598	220,438
1985	3,011,500	1,968,712	254,986	487,583	300,203
1990	4,348,000	2,670,234	403,019	743,382	531,407
1991	4,536,200	2,729,322	424,129	792,535	590,198
1992	4,763,200	2,811,611	441,781	851,205	658,601
1993	4,943,900	2,903,160	455,500	909,186	678,100
1994	5,135,900	2,962,166	483,717	999,808	690,159
Percentage change					
1993–94	4%	2%	6%	10%	2%
1980–94	179%	165%	165%	213%	213%

Notes: Every year some states update their counts. Counts for probation, prisons and parole population are for December 31 each year. Jail population counts are for June 30 each year. Prisoner counts are for those in custody only. Because some persons may have multiple statuses, the sum of the number of persons incarcerated or under community supervision overestimates the total correctional population.

^a Includes convicted and unconvicted adult inmates.

^b Jail count is estimated.

Source: Bureau of Justice Statistics, 1995b.

possession, the remaining 13,861 (40 percent) for drug trafficking and other drug crimes. Most imprisoned drug traffickers are hardly low-level dealers. For example, a recent BJS report (1994b) reveals that the average quantity of drugs involved in federal cocaine trafficking cases was 183 pounds, while the average for marijuana traffickers was 3.5 tons.

By the same token, while it is true that a large fraction of persons committed to prisons each year are parole violators, there is no evidence to support the oft-repeated assertion that most of the violations are “merely technical.” For example, Petersilia (1995b) found that some 45,954 (55 percent) of the 84,194 persons admitted to California prisons in 1991 were indeed parole violators. But only 3,116 of them (6.7 percent of parole violator admissions) were technical violators. The other 42,834 parole violator admissions (96 percent of parole violator admissions) were responsible for thousands and thousands of new crimes, including 255 who were convicted of murders.

This finding on parole violators is not terribly surprising. After all, based on national data gathered and analyzed by the BJS, we have long known that about a third of all violent crime arrestees are on probation (16 percent), parole (7 percent) or pretrial release (12 percent) at the time of their arrest. A recent BJS study by Robyn Cohen (1995) found that 45 percent of state prisoners were persons who, at the time they committed their offense, were on probation or parole. The 162,000 probation violators committed at least 6,400 murders, 7,400 rapes, 10,400 assaults

and 17,000 robberies, while under supervision in the community for an average of 17 months. The 156,000 parole violators committed at least 6,800 murders, 5,500 rapes, 8,800 assaults and 22,500 robberies, while under supervision in the community for an average of 13 months. Of arrested murderers who were convicted, acquitted or otherwise disposed of in 1992 in urban courts, 38 percent were on probation, parole or in some other criminal justice status at the time of the murder. Data on particular jurisdictions—like a Florida Department of Corrections (1993) study or some of my own ongoing work on Virginia—reinforce such national findings.

Clearly, probation and parole permit lots of known, convicted criminals to do lots of crime while under “supervision” on the streets. Based on the largest national data set of its kind ever analyzed, Langan (1994) found that half of all probationers simply do not comply with the terms of their probation, and only a fifth of the violators ever go to jail for their noncompliance. Likewise, in their RAND Corporation studies of intensive supervision programs for high-risk California probationers, Petersilia and Turner (1990, p. 98) concluded that these programs “are not effective” and are “more expensive than routine probation and apparently provide no greater guarantees for public safety.” Likewise, in their RAND Corporation research on high-risk Texas parolees, Turner and Petersilia (1992, p. 34) concluded that the “results were the opposite of what was intended,” as the programs produced neither fewer crimes nor lower costs than routine parole.

Such findings on the amount of serious crime committed by probationers and parolees and the failure of intensive supervision programs have led some to conclude that three-strikes laws are the “only answer.” Consider the case of California. Opponents of the California three-strikes measure stressed that it would lead to the lifetime incarceration of mere “nonviolent” offenders. In examining data provided to me by the California Department of Corrections (DOC), I found that in 1992, about 16 percent of the offenders admitted to the system were classified by the DOC as “nonviolent.” Some 82 percent of these offenders, however, had one or more prior convictions, and nearly a third had been incarcerated three times or more as adults. The much-publicized 1994 case of the California felon whose “third strike” was stealing a slice of pizza in a mall sounds positively damning until you get all the facts. The facts are that this man had four prior felony convictions in nine years, five suspended sentences, and numerous bouts on probation. His sentence was not life but 25 years to life. Also, it is worth noting that as California has implemented the three-strikes law, the number of parolees requesting interstate transfers has surged. Three strikes laws are no cost-effective panacea; but neither should they be dismissed out of hand.

Still, it is silly to suppose that three-strikes laws or other get-tough policies are the sole and sufficient answers to America’s crime woes. Prisons can protect us from known, convicted, repeat criminals. But crime is mainly a function of demographic and other factors over which no government—certainly no limited, constitutional government—can or should exercise much direct control. Along with incarceration

or a greater police presence, some oft-discussed alternatives include Head Start and employment training. But whether these alternative policies can reduce the rate at which America produces people who commit serious crimes remains a wide-open question. The challenge is to identify policies that can make a positive contribution at the margin by preventing or reducing crime at a reasonable human and financial cost. It is a challenge for which policy-oriented economists are especially well suited, all the more if they begin by rethinking deterrence.

Bad Homes, Genes, Incentives and Souls

The history of thinking about crime and punishment in America is a history of intellectual fashions and policy fads. Sometimes the emphasis has been on families, peers, values, norms and the socialization process (“bad homes”); other times, on physical or biological explanations (“bad genes”); at still other times, on the system of criminal opportunities, penalties and rewards (“bad incentives”); and running through it all, from the days of the Puritans to the present, some have rejected all structural, material and determinist explanations in favor of spiritual ones (“bad souls”).

Whatever views one prefers, the irrefutable fact is that being born healthy to loving parents or guardians (of whatever socioeconomic status) is about the luckiest accident that can befall a human being. But boys who get off to a bad start are at serious risk of getting into serious trouble with the law before their voices change and of ending up in prison before their hair thins. In a superb synthesis of the best scientific studies on the causes of crime, Wilson and Hernstein (1985, pp. 508-509) counseled that we must “rivet our attention on the earliest stages of the life cycle,” for “after all is said and done, the most serious offenders are boys who begin their criminal careers at a very early age.”

For example, 75 percent of violent juvenile offenders have suffered abuse by a family member; over half of all prisoners come from single-parent families; over 60 percent of juveniles in custody and over a quarter of adult prisoners have parents who abused alcohol or drugs; nearly a third of adult prisoners have a brother with a prison or jail record. In short, every bit of data we have indicates that very bad boys *do* come disproportionately from very bad homes in very bad neighborhoods. They are severely abused and neglected. They witness or are victimized by extreme acts of violence. Life for them is truly Hobbesian—solitary, poor, nasty, brutish and short.

Of course, the underlying logic of the get-tough position is also Hobbesian. Try as we might, there is ultimately very little that we can do to alter the early life experiences that make some boys criminally “at risk.” Neither can we do much to rehabilitate them once they have crossed the prison gates. Let us, therefore, do what we can do to deter them by means of strict criminal sanctions, and, where deterrence fails, to incapacitate them. Let the government Leviathan lock them up and, when prudence dictates, throw away the key.

The get-tough position is seductive because the concept of deterrence is so simple and pervasive. The average law-abiding citizen has little trouble believing that, if crime does not pay, then fewer crimes will be committed. If the penalties for crimes could be made more swift, certain and severe, then, undoubtedly, we would have less crime. (On drives to academic conferences I have noted that even criminologists who have critiqued deterrence theories pump their brakes when a highway patrol car appears.)

Since Wilson (1975) almost single-handedly rehabilitated the deterrence literature, a number of empirically solid “deterrence works” studies have appeared, not a few of them by economists. For example, Tauchen (1994) and her colleagues have recently found robust evidence of a general deterrence effect from policing. Likewise, Dale O. Cloninger (1994) and others have found evidence that police presence deters the commission of violent crimes by increasing the risk of being punished for committing those crimes. More broadly, it makes obvious sense to pursue policies that reduce the net material benefits of crime relative to legitimate work, whether by decreasing the probability of escaping detection and sanctions, or by increasing the availability of jobs, or both.

Beyond Becker

But as Wilson (1994, p. 56) has recently argued, we need to understand “that people facing the same incentives often behave in characteristically different ways because they have been habituated to do so,” while “changing incentives will not alter the behavior of poorly habituated people as much as we would like, at least in the near term.” In particular, work by Fleisher (1995) and other urban ethnographers suggests that today’s crime-prone boys are too radically present oriented and self-regarding for any type of conventional criminal deterrence to work.

By radically present oriented, I mean that they are almost completely incapable of deferring gratifications for the sake of future rewards. In their lives, there has never been a stable relationship between doing “what’s right” and being rewarded and doing “what’s wrong” and being punished. Many, in some cases most, of the adults in their lives have been persons who are themselves deviant, delinquent or criminal. Such discipline as they may have received at the hands of parents or other adults has been almost purely arbitrary: the first three times they commit a given prohibited act, nothing happens; the fourth time they get screamed at; the fifth and sixth times nothing happens; the seventh time they get punched in the head; the eighth time nothing happens; and so on. Those crime-prone kids who abuse alcohol or illegal drugs—and many of them do—become even more radically present oriented. Their lived experience, the most powerful teacher of all, counsels that kids who look ahead, stay in school, and “do the right thing” often end up just as jobless, hopeless and miserable as kids who do crime.

Some economists have begun to take such realities into account. For example, in their fine study of work and crime, Witte and Tauchen (1994, p. 4) model the individual as choosing a level of criminal activity rather than the time to allocate to crime “because studies indicate that most criminal acts are unplanned.” They also

allow for “the possibility of nonmonetary gains from crime.” Such work is clearly a step in the right direction. But the extraordinary degree to which today’s young street criminals are present oriented, and the extent to which they do crime for fun as well as for profit, has yet to be taken fully into account by economists. “You never think about doing thirty,” one young prisoner told me, “when you don’t expect to live to thirty.”

I suspect that super-impulsive time orientations are analytically tractable. But imagine a radically present-oriented young man who is also unable to feel joy or pain at the joy or pain of others. He is capable of committing the most heinous acts of physical violence for the most trivial reasons (for example, a perception of slight disrespect) without feeling remorse or losing any sleep. He fears neither the stigma of arrest nor the pains of imprisonment. In prison or out, he lives by the code of the streets, a code that reinforces rather than restrains his hair-trigger mentality. If he is part of a gang, then going to prison is very nearly a good “career move.” And the things he gets for behaving criminally in a radically present-oriented, totally self-regarding way—money, drugs, status, sex—are their own immediate rewards. So for as long as his youthful energies hold out, he does what comes naturally: murders, assaults, rapes, robs, burglarizes and deals deadly drugs.

I do not have to “imagine” such young men. I have spent years going in and out of county lockups, jails and prisons. These boys are for real, and more are on the way.

If there is a model of criminal deterrence in the literature that mirrors such behavioral propensities, I have yet to come across it. Until economists develop such a model, the suspicion will remain that their notions of deterrence are valuable solely in the seminar room, that their understanding of crime is purely academic. It will not do to make further refinements to conventional deterrence models. Models that assume that young urban street predators are but a highly impulsive breed of middle-aged economics professors are not only intellectually idle, but (should anyone actually be foolish enough to act on them) downright dangerous. The reality simply does not fit the theory; economists need a new theory, one way beyond the confines of the Becker model.

Do Prisons Pay?

As much as I would urge economists to rethink deterrence, I plead guilty to believing that economists who are interested in crime have even more important fields to till. Near the top of my list are studies that would enhance our understanding of the social costs and benefits of alternative sentencing options.

Traditional criminologists tend to reject such work because, they assert, it involves ill-defined sins like “quantifying the unquantifiable” or “trespassing on jurisprudential verities.” In some cases, they are innocent of such basic economics concepts as opportunity costs and diminishing marginal returns, and they are not on speaking terms with any of the relevant economics literatures (for example, the literature on economic valuations of life and limb). In other cases, they know just

enough economics to critique benefit-cost studies on the basis of analytical mistakes or conceptual confusions. For example, noted criminologists Zimring and Hawkins (1995, pp. 74, 170) write of the “myth of the optimum” and profess that economic perspectives on imprisonment as an instrument of deterrence or incapacitation “come to no natural stopping point in their claim on penal resources as long as there are criminals to punish.” Of course, precisely the opposite is true. Among other virtues, well-constructed benefit-cost analyses can help to identify the point at which the costs of imprisoning the n th offender (or class of offenders) exceed the benefits.

Indeed, I suspect that what really troubles most criminologists about the economic approach is that it forces everyone to specify their basic assumptions, detail the limits of their methods, and come clean about precisely how they measure or monetize the benefits and costs of any given sentencing option. How, for example, should we decide whether it’s worth the money to imprison a convicted criminal? 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 deter 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.

As columnist Ben Wattenberg so vividly put it, everyone grasps, “A thug in prison can’t shoot your sister.” Few criminologists (and no average citizens) doubt that if we emptied the prisons tonight we would have more crime tomorrow. But how much serious crime is averted each year by keeping those convicted criminals who are sentenced to prison behind bars, as opposed to alternative sentences? Do the social benefits of imprisonment, measured only as an incapacitation tool, exceed the social costs? In short, for what types of offenders under what conditions do “prisons pay”?

A first step—and only a first step—in answering this question is to estimate how many crimes prisoners commit when free. Based on large prisoner self-report surveys in two states (Wisconsin in 1990, New Jersey in 1993), my own work with Anne Morrison Piehl finds that state prisoners commit a median of 12 nondrug felonies in the year prior to their imprisonment (DiIulio and Piehl, 1991; Piehl and DiIulio, 1995). Other recent studies offer higher estimates. For example, Levitt (1994, p. 25) has estimated that “[i]ncarcerating one additional prisoner reduces the number of crimes by approximately 13 per year, a number in close accordance with the level of criminal activity reported by the median prisoner in surveys.” Likewise, Marvell and Moody (1994, p. 136) have estimated that “in the 1970’s and 1980’s each additional state prisoner averted at least 17 index crimes. . . . For

several reasons, the real impact may be somewhat greater, and for recent years a better estimate may be 21 crimes averted per additional prisoner.”

The fact remains, however, that some small but as yet undetermined fraction of imprisoned state and federal drug law violators are neither major drug traffickers nor persons who have committed lots of serious nondrug felonies. At present, it is impossible to know how many low-level “drug-only” offenders—first-time or repeat criminals whose only crimes, or most serious crimes, have been low-level drug crimes or mere possession—are behind bars in America today. From most of the empirical research on the subject, there would appear to be little public safety (incapacitation) argument for keeping drug-only offenders behind bars: a low-level drug offender sent away is quickly replaced by a new one.

Is there a public retribution argument for incarcerating drug-only offenders, or for incarcerating any given category of convicted criminals, from mass murderers to drug-only offenders, from high-rate property thieves to high school graffiti vandals? I am in the early stages of research on this question, using a public opinion survey to find out what people express a willingness to pay for.² My betting at this point is that for most types of offenders, including high-rate property offenders, most people want most violent and repeat criminals imprisoned for most felony crimes. But I am doubtful that they feel that way about drug-only offenders and drug possession cases.

A great deal of work remains to be done on the social costs and benefits of imprisonment and other sentencing options. There are countless complexities here that economists are especially well suited to sorting out in ways that do not bias bottom-line estimates one way or the other.

For example, the hidden costs of incarceration include losses in worker productivity and employability. Likewise, long-term imprisonment spells geriatric inmates and associated health care costs. But many incarcerated persons enter prison with anemic work records, a history of welfare dependence and a fair probability of having to rely on government to pay for their health care whether or not they are incarcerated.

By the same token, while going to prison undoubtedly lowers the overall life prospects of some, it unquestionably raises the future well-being of others. There is now a good deal of evidence on the positive efficacy of certain types of prison-based education and drug treatment programs. And as Gaes (1994) and others have found, despite the conventional wisdom about the harmful effects of prison crowding, the data simply do not support the view that inmates suffer greater levels of violence, illness or other problems when prisons are crowded.

² Essentially, we will be asking respondents to specify what fraction of the prison dollar they would be willing to spend to incarcerate given types of offenders if they knew with certainty that incarcerating them would yield zero incapacitation, deterrence, or rehabilitation value. Conceptually, this is a measure of the pure retribution value associated with imprisonment. In addition, we will be asking respondents questions that confront them with the present and potential opportunity costs (less money for schools, long-term prisoners who cannot find gainful postrelease employment) of imprisonment decisions for each category of offenders.

Also, economists should prove especially adept at shedding light on why per capita corrections spending varies so much from one jurisdiction to the next, why spending has risen so sharply in some places but not in others, and where the greatest opportunities for efficiency gains may lie. For example, prison operating costs in Texas grew from \$91 million in 1980 to \$1.84 billion in 1994, about a tenfold increase in real terms, while the state's prison population barely doubled. In Pennsylvania and other big states, corrections spending has grown much more slowly. Before we can get a real policy-relevant handle on the social costs and benefits of incarceration versus other sentencing options, economists will need to dig much deeper than criminologists have dug into the basic public finance questions related to crime and punishment.

Crime and Social Capital

Still, I would trade any help that economists might provide on rethinking deterrence and on the social costs and benefits of competing sentencing alternatives for a promise that a critical mass of economists would devote themselves to theoretical and empirical research on crime in relation to social capital. As defined by James S. Coleman (1990, p. 302), social capital is like "other forms of capital" that make "possible the achievement of certain ends that would not be attainable in its absence." Likewise, Robert D. Putnam (1993, p. 167) defines social capital as "features of social organization, such as trust, norms, and networks, that can improve the efficiency of society by facilitating coordinated actions."

Civic associations, churches, parent-teacher groups, community-based amateur sports leagues, social clubs—all of these institutions and others count as part of the stock of a neighborhood's social capital. As Putnam (1993, p. 173) has argued, "The denser such networks in a community, the more likely that its citizens will be able to cooperate for mutual benefit"—cleaning up streets, socializing children, combatting crime and more.

To think in terms of crime and social capital is to stand at the intersection of traditional liberal beliefs about "root causes" and traditional conservative beliefs about the primacy of private institutions. The concept of social capital is a useful way of leveraging what I believe to be an emerging intellectual and popular consensus that community-oriented solutions to the crime problem are the only ones that can reap real dividends. It seems certain that no amount of incarceration, no mix of intermediate sanctions, and no menu of prevention programs can bend crime trends in the absence of an overriding commitment by both government and the private sector to target human, financial and social resources on at-risk children in sinking neighborhoods.

But what kinds of efforts to replenish social capital make sense? On the one hand, economists are needed to help ferret out the truth about the negative externalities associated with such little-studied phenomena as the geographic concentration of liquor outlets in poor, inner-city neighborhoods. Based on my own limited research on the subject (DiIulio, 1995), I strongly suspect that liquor use and abuse is a far bigger "crime problem" than illegal drug use and abuse, and that the

concentration of liquor outlets in inner-city neighborhoods fuels disorder and crime.

On the other side of the social capital divide, economists are needed to help uncover the truth about the positive externalities associated with religious institutions. Criminologist T. David Evans (1995, p. 212) and others find that even under poor socioeconomic conditions, religion (churchgoing and related activities) serves as “an insulator against crime and delinquency.” This squares with Freeman’s (1986) finding that church attendance is a better predictor of who escapes poverty, drug addiction and crime than income, family structure and other variables. I suspect that the negative externalities generated by concentrating liquor outlets in these areas drown out the positive externalities generated by the activities of the churchgoing folks who constitute most of what remains of the living, breathing social capital of these places. I suspect that either zoning out liquor stores or increasing religious congregations would have a bigger crime-reduction effect in many high-crime neighborhoods than either putting more cops on the beat or putting more drug dealers in prison. I suspect—but nobody knows, or has even begun to try to find out.

A body of first-rate, cross-disciplinary research by economists that specifies the conditions under which we can fight crime by replenishing or preserving social capital would be both intellectually fascinating and politically compelling.

Envy, Contempt and Results

As Henry Aaron (1994, p. 19) has recently noted in these pages, other social scientists “look on economists with a mixture of envy and contempt.” No doubt most criminologists feel both sentiments toward economists, and few would welcome colonization by the American Economic Association.

What matters, however, is not how other social scientists feel toward economists but what economists can contribute. I would love to see economists take a real disciplinary crack at Americans’ number one domestic policy concern, and, in the bargain, risk exposure to a real-life “prisoner’s dilemma” or two. I trust that the results would speak eloquently for themselves.

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