

C **CRIME**

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Dedicated to the memory of Richard J. Herrnstein,
scholar, colleague, friend

PHILIP J. COOK AND
MARK H. MOORE

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GUN CONTROL

In the search for more effective ways to reduce violent crime, establishing more stringent controls on gun commerce and use has the broad support of the American public. Guns are the immediate cause of almost 40,000 deaths a year and are used to threaten or injure victims in hundreds of thousands of robberies and assaults. It makes sense that if we could find a way to make guns less readily available, especially to those inclined toward crime and violence, we could reduce the level and seriousness of crime.

But not everyone accepts this perspective on guns. Some argue that guns are the mere instruments of criminal intent, with no more importance than the type of shoes the criminal wears. If the type of weapon does not matter, then policy interventions focused on guns would have little utility. This argument is taken another step by those who argue that while the type of weapon used by the perpetrator does not matter much, the type of weapon available to the victim for use in self-defense matters a great deal. The conclusion, then, is that measures that deprive the public of their guns would increase the social burden of crime.

This point and counterpoint makes it appear as if the debate over gun control is primarily concerned with facts about the role of guns in crime and self-defense. If this were true, one might hope that empirical research might eventually resolve the matter, and the proper choice of gun control measures would become clear.

In reality, however, there are important values at stake here, and particularly conflicts concerning the proper relationship between the individual, the community, and the state. Even a definitive empirical study

eves that any infringement on the individual right to bear arms is tantamount to opening the door to tyranny. Further, empirical research in this area will never resolve all the important factual issues, so the value conflict will flourish in the face of uncertainty about the consequences of proposed gun control measures.

The purpose of this essay is to set out a framework for thinking about the steps that should be taken in the search for an effective gun control policy. We begin with a review of the more-or-less uncontroversial facts about trends in gun ownership and use, and the reasons why Americans are inclined to arm themselves. A discussion follows of the more controversial questions, whether guns influence levels or seriousness of crime. We then identify the important values at stake in adopting any gun control policy, and go on to describe the existing policies and the mechanisms by which they and other such measures have their effect. Finally, we make recommendations about promising next steps.

Gun Ownership, Use, and Misuse

Guns are versatile tools, useful in providing meat for the table, eliminating weeds and pests, providing entertainment for those who have learned to enjoy the sporting uses, and protecting life and property against criminal predators, so their broad appeal is not surprising. They are an especially common feature of rural life, where wild animals provide both a threat and an opportunity for sport. As America has become more urban and more affluent, however, the demand for guns has become increasingly motivated by the need for protection against other people.

Patterns of Gun Ownership

The December 1993 Gallup Poll estimated 49 percent of households possess a gun, a result that affirms one of the remarkable constants in American life: the fraction of American households owning a gun has remained at about 50 percent since polling on the subject began in 1959 (Kleck 1991). The same poll also estimated that 31 percent of adults personally own a gun, a result also little changed over recent decades.

While the prevalence of gun ownership has remained steady at this extraordinarily high level, it appears that the number of guns in private hands has been increasing rapidly. Since 1970 total sales of new guns have accounted for over half of all the guns sold during this century, and the total number in circulation is on the order of 200 million (1992 figures from the U.S. Bureau of Alcohol, Tobacco, and Firearms. See also Kleck [1991] and Cook [1991]). How can this volume of sales be reconciled with the flat trend in the prevalence of ownership? Part of the answer is in the growth in population

(and the more rapid growth in the number of households) during this period; millions of new guns were required to arm the baby boom cohorts. Beyond that is the likelihood that the average gun owner has increased the size of his collection (Wright 1981). The most recent Gallup Poll estimates suggest that gun-owning households average 4.5 guns, up substantially from the 1970s.¹

One addition for many gun-owning households has been a handgun. The significance of this trend toward increased handgun ownership lies in the fact that while rifles and shotguns are acquired primarily for sporting purposes, handguns are primarily intended for use against people, either in crime or self-defense. The increase in handgun prevalence corresponds to a large increase in the relative importance of handguns in retail sales: since the early 1970s the handgun fraction of new-gun sales has increased from one-third to near one-half (Cook 1993).

Some of the increased handgun sales have been to urban residents who have no experience with guns but are convinced they need one for self-protection, as suggested by the surges in handgun sales after the Los Angeles riots and other such events. But while the prevalence of handgun ownership has increased substantially over the past three decades, it remains true now as in 1959 that most households that possess a handgun also own one or more rifles and shotguns. The 1993 Gallup Poll found that just 17 percent of gun-owning households have only handguns, while 32 percent have only long guns and 51 percent of gun owners have both.

These statistics suggest that people who have acquired guns for self-protection are for the most part also hunters and target shooters. Indeed, only 13 percent of gun owners say that their guns are *strictly* for self-protection, although twice that many sometimes carry a gun for protection and fully 41 percent keep a gun loaded. Most grew up in a house with a gun and expect that their children will also have guns.

The demographic patterns of gun ownership are no surprise: most owners are men, and the men who are most likely to own a gun reside in rural areas or small towns, and were reared in such small places (Kleck 1991). The regional pattern gives the highest prevalence to the states of the Mountain West and Census Region, followed by the South and Midwest. Blacks are less likely to own guns than whites, in part because the black population is more urban.² The likelihood of gun ownership increases with income and age.

The fact that guns fit much more comfortably into rural life than urban life raises a question. In 1940, 49 percent of teenagers were living in rural areas; by 1960 that percentage had dropped to 34 and by 1990, to 27. What will happen to gun ownership patterns as new generations with less connection to rural life come along? Hunting is already on the decline: the absolute number of hunting licenses issued in 1990 was about the same as in 1970, indicating a decline in the percentage of people who hunt. Confirming evidence comes from the National Survey of Wildlife-Associated Recreation, which found that 7.2 percent of adults age sixteen and over were hunters in

1990, compared with 8.9 percent in 1970.³ This trend may eventually erode the importance of the rural sporting culture that has dominated the gun "scene." In its place is an ever greater focus on the criminal and self-defense uses of guns.

Uses of Guns against People

A great many Americans die by gunfire. The gun death counts from suicide, homicide, and accident have totaled over 30,000 for every year since 1972. In 1991 there were 38.3 thousand firearms deaths, a rate of 15 per 100,000 U.S. residents. All but 2,000 were either suicides or homicides. While homicides garner the bulk of the public concern, there were actually 800 more gun suicides than homicides. The remainder were classified as accidents or unknown.

There are different points of reference to make sense of these numbers. For example, in terms of Americans killed, a year of gun killing in the United States is the equivalent of the Korean War. Another familiar reference is highway accidents: nearly as many Americans die of gunfire as in motor vehicle crashes, and the former have shown a strong secular increase while the latter have declined.

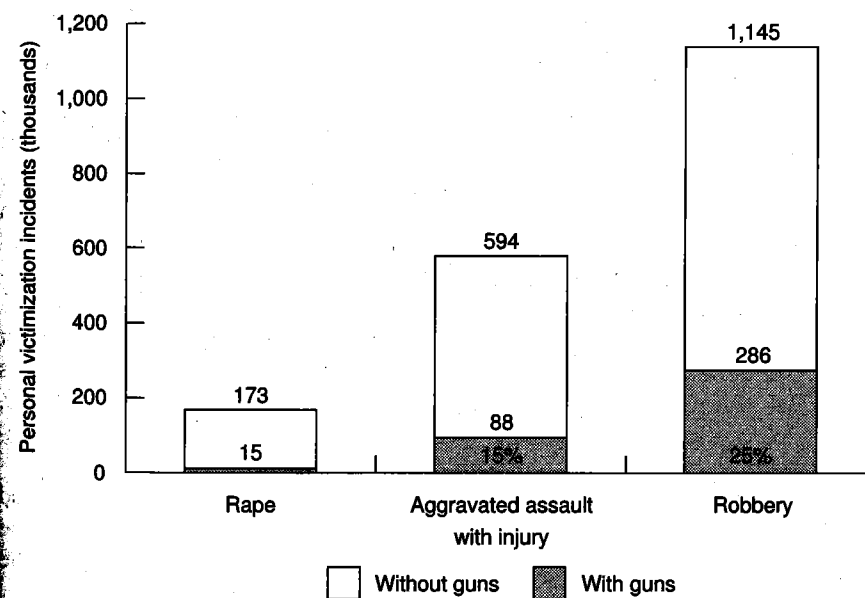
It is criminal homicide and other criminal uses of guns that cause the greatest public concern. Gun accident rates have been declining steadily over the past two decades,⁴ and suicide only seems a threat to those whose loved ones are at risk. Interestingly there has been little variation in the homicide rates over the past two decades: the homicide rate per 100,000 has fluctuated between 8.1 and 10.6. Between 60 and 70 percent of these were committed with guns, mostly (80 percent) handguns. The peak rates, occurring in 1980 and 1991, were about the same magnitude.

Homicide is not a democratic crime. Both victims and perpetrators are vastly disproportionately male, black, and quite young. With respect to the victims, homicide is the leading cause of death for black males age fifteen to thirty-four, whose victimization rate (in 1990) was ten times as high as for white males in this age range, and nearly fifty times as high as for white females.⁵ (The evidence suggests that most victims in the high-risk category are killed by people with the same demographic characteristics.) About 75 percent of the homicide victims in this age group were killed with firearms. Thus we see a remarkable disparity between the demography of gun sports and of gun crime: sportsmen are disproportionately older white males from small towns and rural areas, while the criminal misuse of guns is concentrated among young urban males, especially minorities.⁶ And it is young black men who have suffered the greatest increase in homicide rates since 1985; by 1991 the homicide victimization rate for fifteen- to twenty-four-year-olds in this group had tripled, reaching an all-time high of 159 per 100,000. Of course, most gun crimes are not fatal. For every gun homicide victim

there are roughly six gun-crime victims who receive a less-than-mortal wound (Cook 1985) and many more who are not wounded at all. Indeed, the most common criminal use of guns is to threaten, with the objective of robbing, raping, or otherwise gaining the victim's compliance; relatively few of these victims are physically injured, but the threat of lethal violence and the potential for escalation necessarily make these crimes serious. According to the 1991 National Crime Victimization Survey (NCVS), there were 286,000 gun robberies, 440,000 aggravated assaults (of which 88,000 caused injury) and 15,000 rapes in that year, for a total estimated volume of gun crimes of about 741,000. For each of these crime types, guns are used in only a fraction of all cases, as shown in Figure 12.1. When a gun is used, it is almost always a handgun, which accounts for upward of 90 percent of these crimes.

While guns do enormous damage in crime they also provide some crime victims with the means of escaping serious injury or property loss. The National Crime Victimization Survey is generally considered the most reliable source of information on predatory crime, since it has been in the field over two decades and incorporates the best thinking of survey methodologists. From this source it would appear that use of guns in self-defense against criminal predation is rather rare, occurring perhaps 65,000–80,000 times per year. This amounts to less than 1 percent of all violent crimes (McDowall, Loftin, and Wiersema 1992b). Of particular interest is the likelihood that a gun

FIGURE 12.1
Personal Crimes of Violence, 1991



will be used in self-defense against an intruder. Cook (1991), using the NCVS data, found that only 3 percent of victims were able to deploy a gun against someone who broke in (or attempted to do so) while they were at home. Remembering that half of all households have a gun, we conclude that it is quite rare for victims to be able to deploy a gun against intruders even when they have one handy.

Using other surveys, Gary Kleck has come up with far higher estimates of one million or even two million or more self-defense uses each year (1991; 1993). Indeed, Kleck concludes that guns are used more commonly in self-defense than in crime. At the moment there is no clear resolution to the puzzle of the vast disparities in the survey-based estimates.⁸ Nor is there any clear sense of how many homicides were justifiable in the sense of being committed in self-defense (Kleck 1991; Tennenbaum 1993). Of course, even if we had reliable estimates on the volume of such events, we would want to know more before reaching any conclusion. It is quite possible that most "self-defense" uses occur in circumstances that are normatively ambiguous: ironic violence within a marriage, gang fights, robberies of drug dealers, encounters with groups of young men who simply *appear* threatening. In the survey of convicted felons in prison, the most common reason offered for carrying a gun was self-defense (Wright and Rossi 1986). Self-defense conjures up an image of the innocent victim using a gun to fend off an unprovoked criminal assault, but in fact many "self-defense" cases are not so commendable.

Instrumentality and Availability

"Guns kill people" or do "people kill people"? In murder trials the killer's motivation and state of mind are explored thoroughly, while the type of weapon—usually some type of gun—is often treated as an incidental detail. There is compelling evidence that the type of weapon matters a lot in determining whether the victim lives or dies. If true, then depriving potential violent people of guns would save lives, an essential tenet of the argument for restricting gun availability. But then a second question arises. How do we use the law to deprive violent people of guns if such people are not expected to be law abiding? The saying "If guns are outlawed, only outlaws have guns" may ring true.⁹ There is also some evidence on this matter, suggesting that some "outlaws'" decision of what weapon to use is influenced by the difficulty and legal risks of obtaining and using a gun. In this section we develop the evidence on these two issues, designated "instrumentality" and "availability." The same two issues should also be included in an assessment of the self-defense uses of guns, and we do so in the latter part of this section.

Instrumentality

In some circumstances the claim that the type of weapon matters seems indisputable. There are very few drive-by knifings, or people killed accidentally by stray fists. When well-protected people are murdered it is almost always with a gun; over 90 percent of lethal attacks on law enforcement officers are with firearms, and all our murdered presidents have been shot. When lone assailants set out to kill as many people as they can in a commuter train or schoolyard, the only readily available weapon that will do the job is a gun. But what about the more mundane attacks that make up the vast bulk of violent cases?

The first piece of evidence is that robberies and assaults committed with guns are more likely to result in the victim's death than are similar violent crimes committed with other weapons. In the public health jargon, the "case fatality rates" differ by weapon type. Take the case of robbery, a crime that includes holdups, muggings, and other violent confrontations motivated by theft. The case fatality rate for gun robbery is three times as high as for robberies with knives, and ten times as high as for robberies with other weapons (Cook 1987). For aggravated (serious) assault it is more difficult to come up with meaningful probability estimates, since the crime itself is in part *defined* by the type of weapon used. (A threat delivered at gun point is likely to be classified as an aggravated assault, while the same threat delivered while shaking a fist would be classified as a simple assault.) We do know that for assaults where the victim sustains an injury, the case fatality rate is closely linked to the type of weapon (Zimring 1968 and 1972; Kleck and McElrath 1991), as is also the case for family and intimate assaults known to the police (Saltzman et al. 1992).

Case fatality rates do not by themselves prove that the type of weapon has an independent causal effect on the probability of death. Possibly it is true that the type of weapon is simply an indicator of the assailant's intent and that it is the intent, rather than the weapon, that determines whether the victim lives or dies. In this view—which has been offered as a reasonable possibility by Wolfgang (1958); Wright, Rossi, and Daly (1983); and others—the gun makes the killing easier and is hence the obvious choice if the assailant's intent is indeed to kill. But if no gun were available, then most would-be killers would still find a way. Fatal and nonfatal attacks form two distinct sets of events with little overlap, at least in regards to the assailant's state of mind.

Perhaps the most telling response to this argument is due to Franklin Zimring (1968; 1972), who concluded that there is actually a good deal of overlap between fatal and nonfatal attacks: even in the case of earnest and potentially deadly attacks, assailants commonly lack a clear or sustained intent to kill. Whether the victim lives or dies depends on the assailant's

the lethality of the weapon with which the assailant strikes the first blow or two. For evidence on this perspective, Zimring notes that in a high percentage of cases the assailant is drunk or enraged, unlikely to be acting in a calculating fashion. Zimring's studies of wounds inflicted in gun and knife assaults demonstrate the difference between life and death is evidently just a matter of chance: whether the bullet or blade found a vital organ. The point is that it is relatively rare for assailants to administer the coup de grâce that would ensure their victim's demise. For every homicide inflicted with a single bullet wound to the chest, there are two survivors of a bullet wound to the chest, and similarly for knife attacks.

Zimring's argument in a nutshell is that robbery murder is closely related to robbery, and assaultive homicide is closely related to aggravated assault; death is in effect a probabilistic byproduct of violent crime. While the law determines the seriousness of the crime by whether the victim lives or dies, the outcome is not a reliable guide to the assailant's intent or state of mind. One logical implication of this perspective is that there should be a close link between the overall volume of violent crimes and the number of murders. One study provided confirmatory evidence, demonstrating by use of data on changes in crime rates in forty-four cities that an additional 1,000 gun robberies "produces" three times as many extra murders as an additional 1,000 robberies with other weapons (Cook 1987). The instrumentality explanation for this result is simpler and more persuasive than an argument based on changes in the prevalence of homicidal intent among robbers.

Another type of intervention provides further evidence on the importance of separating guns from violent crime. A recent study, based on six states in three states, found that mandatory sentencing enhancements for those convicted of using a gun in a crime are effective in reducing the homicide rate (McDowall, Loftin, and Wiersema 1992a). Apparently these laws persuade some robbers and other violent people to substitute other weapons for guns, with the result that their attacks are less likely to be fatal.

Zimring's reasoning can be extended to a comparison of different types of guns. In the gun control debate the prime target has been the handgun, since handguns are used in most gun crimes. But rifles and shotguns tend to be more lethal than handguns: a rifle is easier to aim and the bullet travels with higher velocity than for a short-barreled weapon, while a shotgun blast spreads and causes a number of wounds when it strikes. To the extent that assailants substitute rifles and shotguns for handguns in response to handgun control measures, the result may be to increase the death rate (Kleck 1984).¹⁰ Fortunately, there is little evidence on the question of whether effective handgun control would lead robbers and other violent people to substitute long guns (more lethal) or knives (less).

"Instrumentality effects" are not limited to differences in case fatality rates. The type of weapon also appears to matter in other ways. For example, robbers are far less likely to attack and injure their victims than robbers

using other weapons, and are less likely to incur resistance (Conklin 1972; Cook 1976 and 1980; Skogan 1978). (In cases where the victim is attacked and injured, the likelihood of death in gun robberies is far higher than with knives or blunt objects, which accounts for the relatively high case fatality rate in robbery.) We also have evidence that aggravated assaults follow similar weapon-specific patterns (Kleck and McElrath 1991). The most plausible explanation for this pattern of outcomes is simply that a gun gives the assailant the power to intimidate and gain his victim's compliance without use of force, whereas with less lethal weapons the assailant is more likely to find it necessary to back up the threat with a physical attack.

The intimidating power of a gun also helps explain the effectiveness of using one in self-defense. According to one study of NCVS data, in burglary of occupied dwellings only 5 percent of victims who used guns in self-defense were injured, compared with 25 percent of those who resisted with other weapons.¹¹ Other studies have confirmed that victims of predatory crime who are able to resist with a gun are generally successful in thwarting the crime and avoiding injury (Kleck 1988; McDowall, Loftin, and Wiersema 1992b). But the interpretation of this result is open to some question. Self-defense with a gun is a rare event in crimes like burglary and robbery, and the cases where the victim does use a gun differ from others in ways that help account for the differential success of gun defense. In particular, other means of defense usually are attempted after the assailant threatens or attacks the victim, whereas those who use guns in self-defense are relatively likely to be the first to threaten or use force (McDowall, Loftin, and Wiersema, 1992b). Given this difference in the sequence of events, and the implied difference in the competence or intentions of the perpetrator, the proper interpretation of the statistical evidence concerning weapon-specific success rates in self-defense is unclear (Cook 1986 and 1991).

In sum, we postulate that the type of weapon deployed in violent confrontations appears to matter in several ways. Because guns provide the power to kill quickly, at a distance, and without much skill or strength, they also provide the power to intimidate other people and gain control of a violent situation. When there is a physical attack, then the lethality of the weapon is an important determinant of whether the victim survives. But when the assailant's purpose is robbery, intimidation, or self-defense rather than inflicting injury, then a gun appears to be more effective than other weapons in achieving that purpose, and without actual use of violence. These hypothesized effects receive support from the empirical work that has been published in this area, but that evidence surely leaves room for doubt.

Availability

If the type of weapon transforms violent encounters in important ways, as suggested in the preceding discussion, then the extent to which guns are

available to violence-prone people is a matter of public concern. "Availability can be thought of in terms of time, expense, and other costs. Violent confrontations often occur unexpectedly, and in such cases the weapons that be used are among those that are close at hand; the relevant question is whether a gun is *immediately* available. But logically the next question concerns the likelihood that when a violent confrontation occurs, a gun will be available. In particular, do the costs of obtaining a gun and keeping it handy influence the likelihood of gun use in violence?"

Arthur L. Kellermann and his associates (1992 and 1993) provide evidence on the importance of the first issue, immediate availability. In case-control studies of violent events occurring in the home, they found that the likelihood of both suicide and homicide are greatly elevated by the presence of a gun in the home. The authors selected each "control" from the same neighborhood as that in which the killing occurred, and through their matching criteria and use of multivariate statistical techniques attempted to control for other differences between the cases and controls. But there is no guarantee that this effort to control for other factors that might be confounded with gun possession was successful, so the proper interpretation of these findings remains controversial.¹² If we accept the authors' interpretation, then two positions follow:

If a member of the household owns a gun, then at-home suicide attempts and armed assaults are more likely to involve a gun than otherwise.

A gun is more deadly than other weapons would have been in these circumstances (an instrumentality effect).

From the more aggregate perspective, we can ask whether the extent to which guns are readily available in the community influences the mix of weapons used in violent crime (and suicide). A recent cross-national comparison for eleven countries indicates a strong positive correlation (.72) between household prevalence of gun ownership and the fraction of homicides committed with a gun (Killias 1992), suggesting that the overall scarcity of guns in a country influences weapon choice in violent events. But within the American context, many commentators have expressed doubt that guns are in any sense scarce, or that anyone (including youth and violent criminals) would find it more difficult to obtain a gun than, say, a kitchen knife. But national comparisons suggest otherwise.

The prevalence of gun ownership differs rather widely across urban areas, from around 10 percent in the cities of the Northeast to upwards of 50 percent in the Mountain states. (The obvious explanation for these large differences has to do with the differing importance of rural traditions in these areas.)¹³ The overall prevalence of gun ownership is highly correlated with percentage of homicides, suicides, and robberies that involve guns in

these cities (Cook 1979 and 1985). Thus, where gun ownership is prevalent in the general population, guns are also prevalent in violence. A natural explanation for this pattern is in terms of intercity differences in scarcity. Predatory criminals obtain most of their guns from acquaintances, family members, drug dealers, and other street sources, rather than from licensed dealers. The ease of making such a "connection" will be greater in a city where guns are prevalent. Further, the black markets for guns, which are the ultimate source for perhaps half or more of the crime guns, will tend to be more active in cities where gun ownership is prevalent (Wright and Rossi 1986; Wright, Sheley, and Smith 1992; Moore 1981).

It helps in thinking about the availability of guns to realize how frequently they change hands. For youthful criminals, acquiring a gun is typically not a one-time decision. One interesting statistic from a survey of inner city male high school students helps make the point: 22 percent said they currently owned a gun, while an additional 8 percent indicated that they had owned one or more guns in the past, but did not at the time of the interview. Further, the number who said they carried a gun on occasion exceeded the number who owned one, suggesting loans and other temporary arrangements are important features of this scene (Wright, Sheley, and Smith 1992). In this environment, a realistic objective for policy may be to reduce the percentage of a delinquent career in which the typical youth is in possession of a gun, rather than to strive to deprive delinquent youth of guns entirely. Where guns are relatively scarce and expensive, a youthful criminal may be slower to acquire a gun and quicker to sell it when he does, simply because keeping the gun will be more costly in terms of what other pleasures the youth has to give up in order to keep one.

Of course, for a gun to be available for use during a violent encounter, it is not enough for the assailant to have a gun—he must also be carrying it at the time. Since most violent crime occurs away from home, one important aspect of gun availability is the propensity to go armed. Most states prohibit carrying concealed, but do not treat violations as serious offenses. A notable exception is the Bartley-Fox Amendment in Massachusetts, which in 1975 legislated a mandatory one-year prison sentence for anyone convicted of carrying a gun without a license. This mandatory sentence provision received tremendous publicity at the time it was implemented. The immediate impact was clear: thousands of gun owners applied for licenses required to carry a handgun legally. Several studies analyzed subsequent trends in violent crime. Pierce and Bowers (1981) concluded that the short-term impact was to reduce the fractions of assaults and robberies involving guns and, presumably as a consequence, to reduce the criminal homicide rate (see also Deutsch [1979]). Apparently some streetwise people were deterred from carrying, and as a result were more likely to commit their robberies and assaults, when the occasion arose, with weapons other than guns. As a result of the instrumentality effect, the result was to reduce the death rate in these attacks.

In sum, we find evidence indicating that while guns are certainly a

revalent feature of the mean streets of American cities, they are not yet at the point of complete saturation. It is a remarkable fact that less than one-third of robberies are committed with a gun, despite the relative profitability of gun robbery (Cook 1976); the legal and other costs of obtaining, possessing, and carrying a gun are sufficient to discourage some violent people from doing so, at least some of the time. Stronger conclusions will necessarily await better evidence.

One important question remains. While the general availability of guns appears to influence the choice of weapons in violent crime, and the likelihood that a violent crime will result in the victim's death, does gun availability influence the overall *volume* of violent crime? The available evidence provides little reason to believe that robbery and assault rates are much affected by the prevalence of gun ownership (Cook 1979; Kleck and Patterson 1993). The fact that the United States is such a violent country¹⁴ does not have much to do with guns; the fact that our violent crimes are so deadly has much to do with guns.

The Values at Stake

Used in the manner of our rural sporting tradition, a gun provides recreation, food, and, arguably, a way of learning a sense of responsibility. When kept behind the counter of a small grocery in a high crime neighborhood, a gun may help stiffen the owner's resolve to stay in business while serving as part of the informal social control system for local youth. When used as an instrument of gang warfare, a gun becomes part of the nation's nightmare of crime that terrorizes urban residents and cuts short far too many lives.

These different uses of guns all have value to those who use them in these ways. Society as a whole, however, values some uses less highly than the individual owners. The "great American gun war" is an ongoing debate and political struggle to determine which uses will be protected, and which sacrificed to achieve some greater social good. There is widespread consensus that disarming the gangs would be a step in the right direction (a conclusion that the gang members themselves may or may not agree with), but the social value of preserving current opportunities for self-defense and sporting use is far more controversial.

The debate over gun control policy makes broad use of both consequentialist and deontological arguments. A consequentialist framework is concerned with ascertaining and valuing the consequences of proposed reform, while the deontological framework is concerned with how a proposed reform measures up in terms of its assignment of civic rights and responsibilities. Advocates on both sides tend to make use of both consequentialist and deontological claims. Thus, control advocates typically argue their case both pointing to the reductions in fatalities engendered by the proposed reform

and by insisting that gun owners, as a matter of principle, should be willing to relinquish some of their rights to own guns in the interests of achieving these benefits. The anti-control advocates argue that gun ownership serves to reduce crime rather than increase it, and that they have a constitutional right to own guns.

Much of the rhetoric in the debate stems from three broad perspectives. Two of these, the public health and welfare economics perspectives, are predominantly consequentialist, while the third is primarily deontological.

The Public Health Perspective

Public health advocates are primarily concerned with the loss of life and limb caused by the use of guns against people. They are not much concerned with whether any particular shooting is criminal or not; all loss of life is equally serious. Thus lives lost to gun accident, suicide, and criminal homicide are of equal public concern.

Assigning suicide the same importance as homicide is profoundly important in evaluating the gun "problem." There are more gun deaths from suicide than homicide, and the demographic incidence of suicide is in most respects the mirror image of homicide.¹⁵ Looking at homicide statistics we conclude that guns are a far greater problem in cities than elsewhere, especially in minority communities, and would focus gun control efforts there. But including suicide as an equally important prevention target suggests that guns are a major problem in suburban and rural areas as well.

In any event, the bottom line in the public health framework is whether a proposed control measure would reduce the incidence of injury and death. There is little concern with the value of sporting uses of guns. From this perspective, the modest pleasures associated with recreational shooting and the dubious benefits from self-defense should yield to society's overwhelming interest in reducing gun deaths. Preserving life is the paramount value in this scheme.

The Welfare Economics Framework

Like the public health framework, the welfare economics framework is predominantly consequentialist, but with a wider array of consequences and greater attention to individual preferences. It leads us to view the gun "problem" in terms of the harm inflicted on others, with much less attention to suicides and self-inflicted accidents. The socially costly uses are virtually coterminous with those that are prohibited by law. But there is no presumption that punishing criminal uses is an adequate response, and there remains the possibility that the benefits of preemptive controls on guns, such as a ban on carrying concealed, would outweigh the costs. The costs of such controls include the public costs of enforcement and the private costs of compliance

revalent feature of the mean streets of American cities, they are not yet at the point of complete saturation. It is a remarkable fact that less than one-third of robberies are committed with a gun, despite the relative profitability of gun robbery (Cook 1976); the legal and other costs of obtaining, possessing, and carrying a gun are sufficient to discourage some violent people from doing so, at least some of the time. Stronger conclusions will necessarily await better evidence.

One important question remains. While the general availability of guns appears to influence the choice of weapons in violent crime, and the likelihood that a violent crime will result in the victim's death, does gun availability influence the overall *volume* of violent crime? The available evidence provides little reason to believe that robbery and assault rates are much affected by the prevalence of gun ownership (Cook 1979; Kleck and Patterson 1993). The fact that the United States is such a violent country¹⁴ does not have much to do with guns; the fact that our violent crimes are so deadly has much to do with guns.

The Values at Stake

Used in the manner of our rural sporting tradition, a gun provides recreation, food, and, arguably, a way of learning a sense of responsibility. When kept behind the counter of a small grocery in a high crime neighborhood, a gun may help stiffen the owner's resolve to stay in business while serving as part of the informal social control system for local youth. When used as an instrument of gang warfare, a gun becomes part of the nation's nightmare of crime that terrorizes urban residents and cuts short far too many lives.

These different uses of guns all have value to those who use them in these ways. Society as a whole, however, values some uses less highly than the individual owners. The "great American gun war" is an ongoing debate and political struggle to determine which uses will be protected, and which sacrificed to achieve some greater social good. There is widespread consensus that disarming the gangs would be a step in the right direction (a conclusion that the gang members themselves may or may not agree with), but the social value of preserving current opportunities for self-defense and sporting use is far more controversial.

The debate over gun control policy makes broad use of both consequentialist and deontological arguments. A consequentialist framework is concerned with ascertaining and valuing the consequences of proposed reform, while the deontological framework is concerned with how a proposed reform measures up in terms of its assignment of civic rights and responsibilities. Advocates on both sides tend to make use of both consequentialist and deontological claims. Thus, control advocates typically argue their case both pointing to the reductions in fatalities engendered by the proposed reform

and by insisting that gun owners, as a matter of principle, should be willing to relinquish some of their rights to own guns in the interests of achieving these benefits. The anti-control advocates argue that gun ownership serves to reduce crime rather than increase it, and that they have a constitutional right to own guns.

Much of the rhetoric in the debate stems from three broad perspectives. Two of these, the public health and welfare economics perspectives, are predominantly consequentialist, while the third is primarily deontological.

The Public Health Perspective

Public health advocates are primarily concerned with the loss of life and limb caused by the use of guns against people. They are not much concerned with whether any particular shooting is criminal or not; all loss of life is equally serious. Thus lives lost to gun accident, suicide, and criminal homicide are of equal public concern.

Assigning suicide the same importance as homicide is profoundly important in evaluating the gun "problem." There are more gun deaths from suicide than homicide, and the demographic incidence of suicide is in most respects the mirror image of homicide.¹⁵ Looking at homicide statistics we conclude that guns are a far greater problem in cities than elsewhere, especially in minority communities, and would focus gun control efforts there. But including suicide as an equally important prevention target suggests that guns are a major problem in suburban and rural areas as well.

In any event, the bottom line in the public health framework is whether a proposed control measure would reduce the incidence of injury and death. There is little concern with the value of sporting uses of guns. From this perspective, the modest pleasures associated with recreational shooting and the dubious benefits from self-defense should yield to society's overwhelming interest in reducing gun deaths. Preserving life is the paramount value in this scheme.

The Welfare Economics Framework

Like the public health framework, the welfare economics framework is predominantly consequentialist, but with a wider array of consequences and greater attention to individual preferences. It leads us to view the gun "problem" in terms of the harm inflicted on others, with much less attention to suicides and self-inflicted accidents. The socially costly uses are virtually coterminous with those that are prohibited by law. But there is no presumption that punishing criminal uses is an adequate response, and there remains the possibility that the benefits of preemptive controls on guns, such as a ban on carrying concealed, would outweigh the costs. The costs of such controls include the public costs of enforcement and the private costs of compliance

or evasion) of these regulations. In principle we could determine whether they are worthwhile by comparing these costs with the benefits stemming from whatever reductions in gun crime are accomplished.

In this calculus of cost and benefit, where does self-defense fit in? For most gun owners, the possibility that the gun will prove useful in fending off a robber or burglar is one source of its value.¹⁶ Indeed, if guns had no value as self-protection, a ban on possession of guns in the home would quite likely be worthwhile, since other, sporting uses of guns could be preserved by allowing people to store firearms in shooting clubs and use them under regulated conditions. This arrangement would be akin to the military policy of controlling the use of rifles and ammunition by servicemen on military bases, and is somewhat more liberal than the current policy governing fireworks in most states (and far looser than policies regulating the distribution of high explosives). So we believe that the self-defense uses of guns are more important than sporting uses in assessing the costs of restrictions on home possession and carrying in urban areas.

Some have even argued that the private valuation of guns in this respect understates their public value, because the widespread possession of guns has a general deterrent effect on crime (Snyder 1993; Kleck 1991). Indeed, a survey of imprisoned felons found that a paramount concern in doing their crimes was the prospect of meeting up with an armed victim (Wright and Rossi 1986). What we do not know is whether the predominant effect on criminal behavior is desisting, or displacement to victims who are not likely to be armed, or a change in technique. If the latter two predominate, then the externality is negative rather than positive (Clotfelter 1993).

Thomas Jefferson offered another reason why gun ownership and use may be undervalued in private decisions, as explained in this quotation: "A strong body makes the mind strong. As to the species of exercises, I advise gun. While this gives a moderate exercise to the body, it gives boldness, enterprise and independence to the mind. Games played with the ball and cards of that nature, are too violent for the body and stamp no character on the mind."¹⁷

If gun sports are especially suited to building character, then perhaps these sports should be viewed as "merit" goods on a par with the opera or museum, and deserving of subsidy by the public. (But Jefferson would probably have changed his mind about the relative merits of guns and ball games if he could have foreseen the invention of baseball).

"Rights and Responsibilities" Perspective

A welfare economics framework helps organize the arguments pro and con for gun controls, and suggests a procedure for assigning values. But those who believe in the "right" to bear arms, it is not a completely

satisfactory approach. The debate over gun control can and should be conducted, at least in part, in the context of a framework that defines the appropriate relationship between the individual, the community, and the state.

Very much in the foreground of this debate lies the Second Amendment, which states, "A well regulated Militia, being necessary to the security of a free State, the right of the people to keep and bear Arms, shall not be infringed."

The proper interpretation of this statement has been contested in recent years. Scholars arguing the constitutionality of gun control measures focus on the militia clause, and conclude that this is a right given to state governments. Others assert that the right is given to "the people" rather than to the states, just as are the rights conferred in the First Amendment, and that the Founding Fathers were very much committed to the notion of an armed citizenry as a defense against both tyranny and crime (Kates 1983 and 1992; Halbrook 1986). The Supreme Court has not chosen to clarify the matter, having ruled only once during this century on a Second Amendment issue, and that on a rather narrow technical basis.¹⁸ Indeed, no federal court has ever overturned a gun control law on Second Amendment grounds.

Regardless of the concerns that motivated James Madison and his colleagues in crafting the Bill of Rights, the notion that private possession of pistols and rifles is a protection against tyranny may strike the modern reader as anachronistic—or perhaps all too contemporary when one recalls such groups as the Branch Davidians and the Aryan Nation. Much more compelling for many people is the importance of protecting the capacity for self-defense against apolitical assailants.

Some commentators go so far as to assert that there is a public duty for private individuals to defend against criminal predation, now just as there was in 1789 (when there were no police).¹⁹ The argument is that if all reliable people were to equip themselves with guns both in the home and out, there would be far less predatory crime (Snyder 1993; Polsby 1993). Other commentators, less sanguine about the possibility of creating a more civil society by force of arms, also stress the public duty of gun owners, but with an emphasis on responsible use: storing them safely away from children and burglars, learning how to operate them properly, exercising good judgment in deploying them when feeling threatened, and so forth. In any event, the right to bear arms, like the right of free speech, is not absolute, but is subject to reasonable restrictions and carries with it certain civic responsibilities.

In conclusion, these three perspectives—public health, welfare economics, and civic rights and responsibilities—each provide arguments about the public interest that seem familiar and important. Each is well represented in the ongoing debate over the appropriate regulation of firearms. In practice, the public health perspective helps focus greater attention on suicide, while the perspective that stresses civic rights strengthens the case for protecting

defense uses of guns. We are not inclined to argue the relative merits of differing perspectives in the abstract, but will have more to say about evaluation in the next sections.

Native Gun Control Policies

Force in guns and the possession and use of guns are regulated by state, and local governments. To assess the options for reform it is helpful to understand the current array of controls and why they fail to achieve an acceptably low rate of gun violence.

Current Array of Policies

Primary objective of federal law in this area is to insulate the states from one another, so that the stringent regulations on firearms commerce adopted by the states are not undercut by the greater availability of guns in other states. The citizens of rural Wyoming understandably favor a more permissive system than those living in the crime-ridden District of Columbia, and can be accommodated if transfers between them are effectively limited. The Gun Control Act of 1968 established the framework for the current array of controls on gun transfers. All shipments of firearms (including mail orders) are limited to federally licensed dealers who are required to obey both state and local ordinances. There are also restrictions on sales of firearms to out-of-state residents.²⁰

Federal law also seeks to establish a minimum set of restrictions on the purchase and possession of guns. The Gun Control Act stipulates several categories of people who are denied the right to receive or possess a gun, including illegal aliens, convicted felons and those under indictment, and individuals who have at some time been involuntarily committed to a mental institution. People with a history of "substance abuse" are also proscribed from possessing a gun. Dealers are not allowed to sell handguns to people younger than twenty-one, or to sell long guns to those younger than eighteen, although there is no federal prohibition of gun possession by youth. Various prohibitions are implemented by a requirement that the buyer complete a form stating that he or she does not fall into any of the proscribed categories.

A number of states have adopted significant restrictions on commerce in firearms, especially handguns. As of 1993, a majority of states require that potential buyers obtain a permit or license before taking possession of a firearm. All but a few state transfer-control systems are "permissive," in that most people are legally entitled to obtain a gun. In a few jurisdictions, however, it is very difficult to obtain a handgun legally. The most restrictive is Washington, D.C., where only law enforcement officers and

security guards are entitled to obtain a handgun (Jones 1981). In 1993 Congress adopted the Brady Bill, which requires that dealers in states that lack their own screening system for handgun buyers enforce a five-day waiting period between the purchase and transfer. The dealers are required to notify law enforcement officials shortly after the purchase, in order that they might run a background check on the buyer.

State and local legislation tends to make a sharp distinction between keeping a gun in one's home or business and carrying a gun in public. All but a few states either ban concealed weapons entirely or require a special license for carrying concealed weapons. Local ordinances typically place additional restrictions on carrying and discharging guns inside city limits.

Some types of firearms are regulated more stringently than others in federal and state law. The National Firearms Act of 1934 imposed confiscatory taxes on gangster-style firearms, including sawed-off shotguns and automatic weapons (such as the Tommy gun). The Gun Control Act banned the import of small, cheap handguns,²¹ and more recently the federal government has banned the importation of certain "assault" weapons. States typically regulate handguns more closely than long guns, since the former account for most of the firearms used in crime.

Beyond this array of legislated restrictions on gun commerce and use are a variety of other approaches to reducing gun violence. A number of lawsuits have been brought in recent years that attempt to hold manufacturers, dealers, or owners accountable for the damage done by their guns. Many schools have taken steps to keep guns off school property and educate students on violence prevention. Ministers preach against gun violence, while psychologists counsel suicidal patients to remove all guns from their homes.

Some sense of the variety of possibilities here is suggested by this list of recent efforts, proposed or adopted, to extend additional control over firearms commerce and use:

1. imposing a heavy federal tax on ammunition
2. banning the sale and possession of assault rifles at the state level
3. limiting handgun sales to no more than one per month per customer
4. requiring that gun buyers pass a test demonstrating their knowledge of law and good practice in handling a gun
5. raising the fees charged to acquire a federal license for gun dealing
6. trying local drug dealers in the federal courts if they are in possession of a gun at the time of their arrest
7. offering cash, tickets to sporting events, or even toys in exchange for guns
8. establishing minimum mandatory sentences for illegally carrying guns

9. using public education campaigns and the cooperation of the television industry to stigmatize storing unlocked, loaded guns in households
10. giving the police power to revoke licenses and search intensively for guns in residences where court restraining orders have been issued against spouses
11. using magnetometers to reduce weapons carrying by teenagers in city high schools
12. developing a "parents compact" to promote parent's efforts to prevent their children from possessing or carrying guns

In the face of the rather daunting array of possibilities, policy makers need guidance on which approaches hold the most promise of reducing firearms violence, and at what cost to legitimate owners. Reliable information is difficult to obtain; even when particular control measures have been evaluated in some fashion (and such evaluations are rare in practice) the results are not going to be definitive. There will always be some degree of uncertainty in estimating the consequences of any one intervention, since there is no such thing as a controlled experiment in this area. And further uncertainty arises when we attempt to predict the consequences of implementing a similar intervention in another time and place. Still, some evidence is available concerning which general approaches show the most promise.

In searching for worthwhile reforms, we find it useful to classify alternative gun control measures into three categories:

1. those designed to affect the supply and overall availability of guns
2. those designed to influence who has these weapons
3. those designed to affect how the guns are used by the people who have them

On the basis of combined empirical evidence and logic, the generic strengths and weaknesses of each category can be sketched. The result is a rough map of the relevant terrain with some of the details missing, but nonetheless a useful guide.

Reducing Overall Supply and Availability

Many gun control measures focus on the supply and availability of the guns themselves (or, in one imaginative leap, on the ammunition that makes them deadly). The basic idea is that if guns (or ammunition) become less readily available, or more expensive to purchase, then some violence-prone people will decide to rely on other weapons instead, and gun violence will be reduced.

Within this broad strategy are a variety of tactics. We prohibit commerce

in automatic weapons and teflon-coated bullets, and impose a modest federal tax on the production of more ordinary firearms and ammunition.²² A few jurisdictions have adopted restrictive policies with respect to handguns, hoping to prevent growth in the number in circulation. Buy-back programs seek to reduce the existing stock, although these efforts have been very limited in time and space.

Many commentators have suggested that this approach is doomed by the huge arsenal of guns currently in private hands. How can we discourage violence-prone people from obtaining guns when there are already enough in circulation to arm every teenager and adult in the country?

In response, we note that the *number* of guns in circulation is only indirectly relevant to whether supply restrictions can hope to succeed; of direct consequence is the price and difficulty of obtaining a gun. Most violent crimes are not committed with guns, in part because most predatory youth are not in possession of a gun at any given point in their careers. While of course they can obtain one if they are sufficiently determined, the time and money they would have to devote to this effort have other valuable uses. And if they do happen to come into possession of a gun, through theft or other means, there remains a choice to them whether to keep it or exchange it for cash or drugs or clothing. Our discussion of availability in a previous section helps establish the evidence on these matters—availability does seem to matter, even within the current context of widespread private ownership.

Basic economic reasoning suggests that if the price of new guns is increased by amending the federal tax or other means, the effects will ripple through all the markets in which guns are transferred, including the black market for stolen guns. If the average prices of guns go up, some people—including some violence-prone people—will decide that there are better uses for their money. Others will be discouraged if, in addition to raising the money price, the amount of time or risk required for a youth obtain a gun increases. While there are no reliable estimates of the elasticity of demand for guns by youth, we submit that youth are likely to be more responsive to price than to more remote costs (such as the possibility of arrest and punishment). Those who argue that youthful offenders will do whatever is necessary to obtain their guns may have some hard-core group of violent gang members and drug dealers in mind, but surely not the much larger group of kids who get into trouble from time to time.²³

Few jurisdictions have adopted a policy intended to reduce the general availability and ownership of handguns, and none have done so for rifles and shotguns. This approach is a blunt instrument, with less public support than other gun control measures. But now a substantial increase in the federal tax is under discussion for the first time in memory. Potentially even more important is the growing possibility of successful tort litigation against manufacturers of cheap concealable handguns, which if successful would raise the price of the cheapest guns (Teret 1986).

Another approach to raising prices is to impose safety requirements on

gun manufacturers. Proposals in this area include "childproofing" guns so that they are inoperable by children; requiring that domestically manufactured guns meet the same safety requirements as imports, including protections against accidental discharge; and requiring safety devices such as trigger locks and loaded chamber indicators (Teret and Wintemute 1993). As it is now, firearms manufacturers are remarkably free of safety regulation, in part because the Consumer Product Safety Commission has no authority over personal firearms. While such regulations may be welcomed by gun buyers who are seeking some protection against gun accidents, they would have little direct effect on suicide and criminal misuse of firearms. To the extent that complying with such regulations made guns more costly, however, there could be some indirect effect comparable to raising the federal tax.

A more far-reaching proposal is to encourage the manufacture of guns that are "personalized," in the sense that they would be equipped with an electronic sensing device that would "recognize" a ring on the owner's finger, or even the owner's fingerprint. Such devices are currently under development. If they prove reliable, law enforcement agencies may adopt them to protect officers from being assaulted with their own guns. If all new handguns were equipped with such devices, it would gradually reduce the number of gun accidents and reduce the profitability of stealing guns.

Restricting Access

The second broad class of gun control policy instruments are those designed to influence who has access to different kinds of weapons. The intuitive notion here is that if we could find a way to keep guns out of the hands of "bad guys" without denying access to the "good guys," then gun crimes would fall without infringing on the legitimate uses of guns. The challenges of this type of policy are, first, to decide where to draw the line and, second, to develop effective barriers to prevent guns from crossing this line.

Who should be trusted with a gun? Federal law rules out several large groups, including drug users and illegal aliens, but there are no ready means of identifying those who fall into these categories. Public records provide some information on criminal background, and there is an important debate concerning what sort of criminal record should be disqualifying. Any felony conviction strips an individual of the right to own a gun under federal law, though many felons are able to obtain a court order allowing them to possess guns after they have served their sentences.

This approach to drawing the line rests on the premise that owning a gun is a right granted to all adults²⁴ unless they do something to disqualify themselves, such as committing a serious crime. A quite different approach would be to treat gun ownership as a privilege, as is the case, say, with driving a vehicle on public highways.²⁵ And as in the case of the driving license, one eminently sensible requirement for those who seek to acquire

a gun is that they demonstrate knowledge of how to use it safely and legally.²⁶ It is an intriguing possibility that such a requirement would engender considerable growth in the National Rifle Association's safety training programs, since many of those wishing to qualify for a license would need to enroll in such a course.

Wherever the line is drawn, there is the serious problem of defending it against illegal transfers. That task is currently being done very poorly indeed. The major loopholes stem from the widespread abuse of the federal licensing system, the lack of effective screening of those who seek to buy guns from dealers, a vigorous and largely unregulated "grey" market by which used guns change hands, and an active black market supplied by theft, scofflaw gun dealers, and interstate gun-running operations.

Federal licensing system. The U.S. Bureau of Alcohol, Tobacco, and Firearms is the agency charged with the regulation of federally licensed gun dealers. It is a small agency whose jurisdiction includes not only regulatory inspections of gun dealers but also criminal investigations of violations of federal gun laws, and both regulatory surveillance and criminal investigation of the explosives, alcohol, and tobacco industries as well. Obtaining a federal dealer's license from BATF is just a matter of paying a small fee and filling out a form, and in 1993 there were 260,000 people who had done so—far more than were genuinely in the business of selling guns to the public. BATF lacks the resources to screen applicants effectively or to inspect their operations after issuing the license (Violence Policy Center 1992). Thus, the federal licensing system, which was intended to act both as the gatekeeper in the federal system for insulating the states from each other and as a system for keeping particular groups of dangerous people from obtaining guns, is not performing as intended by Congress. Recent proposals call for a substantial increase in the licensing fee, which would reduce the number of licensees enough to make effective regulation of dealers a realistic goal.²⁷

What would effective regulation accomplish? Some dealers knowingly engage in off-the-book sales to youth, criminals, and others who are not entitled to buy a gun legally or who do not want any public record of their purchase. These people can also buy guns from nondealers (as discussed later), but a licensed dealer can offer them their pick of any new gun offered for sale by a manufacturer or importer. Their unique privilege of obtaining guns by mail order from catalogs is what provides scofflaw dealers with a profitable niche in the illicit market. There is no systematic evidence on how important these illicit dealers are in supplying the guns used in crime; occasionally a police investigation will turn up a dealer who has sold hundreds or thousands of guns illegally (Dabbs 1994).

Screening. People who seek to buy handguns from a dealer are required to submit to state permit requirements or, if there are none, a five-day

waiting period required by federal law. If the dealer and purchaser comply with this requirement, there is some chance that disqualified buyers will be identified and screened out. But felons, youth, and others who are not permitted to purchase a gun may ask a qualified friend or relative to make a "straw man" purchase from a dealer on their behalf, or find a scofflaw dealer who is willing to sell guns off the books. Most common of all is simply to purchase a gun from a nondealer.

Black and grey markets. There is a remarkably active and open market for used guns which is largely unregulated, a market where buyers and sellers find each other through "gun shows," word of mouth, or the classified ads. These transactions are often entirely legal—someone who sells a gun or two on occasion is not subject to any federal requirements except that they not knowingly sell to a felon, illicit drug user, or other person prohibited from possessing a gun.²⁸

One leak that seems particularly important in supplying criminals is theft. Household burglaries and other thefts yield approximately 400,000 firearms each year,²⁹ and for obvious reasons these guns are more likely than others to be used in robberies and other violent crime. To reduce this source of crime guns, it may be possible to impose some obligation on gun dealers and gun owners to store their weapons securely (as we now do on pharmacists who sell abusable drugs), or to step up enforcement against "fences" who happen to deal in stolen guns. Another intriguing possibility is for the police to focus more attention on disrupting local, street-level gun markets. The analogy to drug enforcement comes to mind. But gun markets appear quite different from heroin and cocaine markets for several reasons.

First, the supply of guns to this market is diffuse, involving myriad potential sellers who enter the market when they happen to have an extra gun or two, rather than the more concentrated illicit supply system that characterizes the cocaine and heroin markets. Every burglar who steals a gun then has the opportunity to become a dealer for the purpose of disposing of the gun, selling to other youth they know. Alternatively, they may sell to middlemen, although there is some evidence that fences who handle other stolen merchandise are reluctant to deal in guns. Drug dealers sometimes take guns in trade, and thus become middlemen. And police investigations occasionally turn up a licensed dealer who has been active in making illicit sales. But our impression is that the bulk of the sales in the black market are by people who have no commitment to this line of business.

Second, because guns are a durable good, and are both purchased and sold less frequently than drugs, the total number of transactions in the market is much smaller than in the illicit drug market. There are also fewer repeat buyers. This means that the illicit gun markets are less visible than drug markets in local communities, but relatively easy to penetrate by the police informants and undercover agents.

Third, because in most areas there is a large legal market standing alongside the illicit market, the prices that can be charged in the illicit market are typically lower than in other markets for guns, just as is true for stolen jewelry or televisions. The exception may be in very tight control jurisdictions, such as New York and Boston, where prices are apparently high enough to motivate a good deal of gun running from jurisdictions with weaker controls. There is some evidence that these gun-running operations tend to be small (Moore 1981).

Thus, the illicit gun market consists of a relatively large number of relatively unspecialized enterprises. It is filled with burglars who happen to find some guns next to the silver, some small entrepreneurs who brought a small stock of guns back from the South, or armed robbers or gangs who have accumulated an arsenal for their own purposes, and are sometimes willing to trade or sell a gun to a colleague. The type of enforcement that would be appropriate in attacking such markets is probably a high volume "buy and bust" operation (Moore 1983). Law enforcement agencies may be reluctant to launch an operation of this sort, given the danger inherent in dealing with guns and the legal difficulties in proving that the guns they are buying are in fact stolen and being sold illegally.

Controlling Uses

The third broad class of gun control policy instruments is concerned with limiting unsafe and criminal uses of guns. Most prominent are sentencing enhancement provisions for the use of a gun in crime. One clear advantage of this approach as compared with other gun policies is that it does not impinge on legitimate uses of guns. A recent analysis of crime trends in jurisdictions that adopted such sentencing provisions provides evidence that they can be effective in reducing the homicide rate (McDowall, Loftin, and Wiersema 1992a).

Another and far more controversial tactic is to focus local law enforcement efforts on illegal possession and carrying. The potential effectiveness of this approach is suggested by the success of the Bartley-Fox Amendment in Massachusetts, discussed earlier. This sort of gun enforcement typically requires proactive police efforts, and there is considerable variation among police departments in how much effort they direct to halting illegal possession and gun carrying (Moore 1980). The controversy over enforcement stems in part from the concern that police, if sufficiently motivated, may conduct illegal searches in the effort to get guns off the street. More fundamentally, treating illegal carrying as a serious crime puts in jeopardy millions of otherwise law abiding people who carry guns for self-protection.³⁰

Rather than a general effort to get guns off the streets, a more focused effort can be directed at prohibiting guns in particularly dangerous locations such as homes with histories of domestic violence, or bars with histories of

drunken brawls, or parks where gang fights tend to break out, or schools where teachers and students have been assaulted.³¹ Often, in seeking to reduce the presence of weapons in these particularly dangerous places, groups other than the police may be mobilized to help make the laws effective. Victimized spouses or their advocates might help enforce rules against guns in violence-prone households, liquor-licensing agencies might be enlisted to help keep guns out of bars, the recreation department might be mobilized to reduce gun carrying in public parks, and so on. The point is that there may be some particular "hot spots" for gun offenses that could be targeted as places to concentrate gun enforcement efforts much as we focus a great deal of attention on keeping guns and bombs out of airplanes.

Conclusion: What's to Be Done?

Given the important value conflicts and empirical uncertainties surrounding gun control policies, some caution in recommending public or governmental action is warranted. But recommending caution is far from recommending inaction. Indeed, we think that it is time to get on with the business of actively exploring alternative gun control initiatives to develop more effective interventions than those we now rely upon. Exploration and experimentation are urgent for several reasons.

First, the current toll of gun violence demands action. Interventions to restrict the availability of guns are unlikely to have much effect on the overall rate of violence, but they do have the potential to reduce the number of fatalities. A substantial portion of the 38,000 gun deaths each year can surely be prevented without infringing too heavily on the public fisc or individual rights. A "war on guns" seems a far more promising avenue to saving lives than the costly war on drugs.

Second, it is only through trying alternative approaches that we can hope to develop confident conclusions about what works. Learning from experience is not automatic, but it can happen if reforms are coupled with systematic evaluation. With additional evidence may come a shift in the politics of gun control as well. Currently advocates on both sides mix value statements concerning rights or social welfare with factual claims concerning potential efficacy. For example, those who assert an individual right to bear arms usually also claim that widespread private ownership of guns reduces crime, implying that the value at stake here (freedom from government interference) can be preserved without social cost. If the factual claims were sufficiently robust that advocates had to accept the fact that their position entailed real costs, we would begin to learn something about how strongly these values are actually held.

The goal of gun control policy over the next decade should be to develop and evaluate specific gun control measures that can reduce gun crimes,

suicides, and accidents, while preserving as much legitimate use of guns as possible. There is no reason to believe that there is a single best policy. Rather, we are looking for a portfolio of policies that reflects the full array of gun "problems." To some extent this portfolio should differ according to local circumstances and values, with an emphasis on suicide prevention in Iowa and street violence in Washington D.C.

Our suggestions are organized according to level of government.

Action at the Federal Level

The Federal Government is best positioned to make guns more valuable and harder to obtain, while insulating the states from one another's supply of guns. Among the next steps that appear most promising are these:

1. Raising the tax on guns and ammunition to make the cost of acquiring and owning particular kinds of guns more accurately reflect the social costs and benefits of having them. Incidentally, we would favor converting the current excise tax, which is proportional to the wholesale price, to a flat tax. Cheap handguns do as much damage as expensive ones. On the one hand, we recognize that this tax is regressive, and will be particularly burdensome on poorer people who want a gun. On the other hand, the benefit of such a tax, reductions in gun crimes and accidents, will also accrue disproportionately to the poor, who are vastly over-represented among the victims of gunshot wounds.
2. Reducing the number of federally licensed gun dealers by raising the license fee to several hundred dollars per year, while increasing BATF's capacity to regulate dealers' activities.
3. Requiring all gun transfers to pass through federally licensed dealers, with the same screening and paperwork provisions as if the gun were being sold by the dealer.
4. Stepping up criminal enforcement efforts against gun-running operations.
5. Providing funding and technical know-how to enhance the quality and completeness of state and federal criminal records files and facilitating access by law enforcement agencies to these files.³²
6. Enhancing cooperation with the local law enforcement efforts in investigating and prosecuting those who deal in stolen guns.
7. Mandating that new guns meet minimum safety requirements to reduce gun accidents, while encouraging research in devices to personalize guns.

The federal government is also in the best position to accumulate the national experience with gun control policy initiatives. Much as the National

Institutes of Health try to accelerate learning about what is effective in dealing with cancer by monitoring treatments and outcomes in nationally established protocols, so the National Institute of Justice should expedite the search for more effective gun control policies by noting and evaluating the large number of diverse policy interventions that will be launched at different levels of government over the next few years. To facilitate such evaluations, better data are needed. The Fatal Accident Reporting System is a good model. It has provided the raw material for evaluation research in traffic fatalities. A similar system for intentional violent injuries could be implemented without much difficulty.

Beyond this, the surgeon general and attorney general together could use their "bully pulpit" to help create an environment in which local governments, community groups, and private individuals would begin to change their attitudes and behaviors with respect to guns. Such measures have proven effective over the long run in reducing smoking, drunk driving, and drug use; perhaps they could become effective in changing behavior with respect to guns. Specifically, it is important to remind gun owners of the need to keep their weapons secure from theft, to transfer them only to responsible others, to keep them out of the hands of their children, and so on. The message should be: guns are dangerous, particularly in an urban environment, and it behooves owners learn how to store them safely and use them responsibly.

Action at the State Level

The agenda for each state will and should depend on its circumstances. In the past the states have been the laboratory for instituting a variety of licensing and regulatory programs, as well as establishing different sentencing schemes for use of guns in crime and for carrying illegally. Technology transfer can take place only if these innovations are subjected to careful evaluation.

A battle in the state arena looms over the extent of liability for manufacturers, sellers, and owners of guns when a gun is used to injure someone. Lawsuits based on a variety of liability theories are moving through the courts. The implicit threat posed by these lawsuits is that if manufacturers and sellers are held responsible for the damage done by handguns, the monetary liability would be prohibitive. This possibility is appealing to those who are impatient with the more moderate results achievable through the political process.

The most notable victory for the plaintiffs to date was in the Maryland courts (*Kelly v. R. G. Industries*), where the jury found the manufacturer of a small cheap handgun liable for an injury it caused (Teret, 1986). In that case the Maryland legislature enacted a law that exempted the manufacturers against such claims but at the same time established a process for banning

commerce in certain types of small, cheap handguns. Thus the plaintiff's lawyers were successful in improving the terms of political trade by changing the status quo, and the result, while still quite moderate, went farther to control guns than otherwise would have been possible.

Action at Metropolitan or Municipal Levels

Perhaps the greatest opportunities to work on reducing gun violence in the immediate future lie in the cities where the toll of gun violence—especially criminal violence, and particularly youth violence—is so high. It is there that the scales balancing the competing values of rights to gun ownership on one hand, and the social interest in reducing gun violence on the other tilts most significantly toward reducing gun violence. It is there that one might expect gun owners to willingly surrender some of their privileges, or to accept a greater public responsibility in the ways that they acquire, possess, use, and transfer their weapons.

What works against this outcome, of course, is fear of crime and the fervent belief by some that a gun will provide protection. Thus, one important goal of gun control policy at the local level should be not simply to reduce the availability of guns but to find other, less socially costly means that people can use to produce security and reduce fear. In many cities, this is one of the important goals of shifting to a strategy of community policing. Community policing is designed to help mobilize citizens into effective self-defense groups that can work in partnership with the police forces. If such groups became common, the need for individual gun ownership might abate. Another goal of community policing is to work directly on the fear of crime as well as on actual criminal victimization. To the extent that these efforts help to dissipate some ill-founded fears, these measures, too, might reduce the felt need for individual gun ownership, and with that, increase the range of feasible and desirable gun control policies.

The particular targets of city efforts against gun violence that seem important to us are three:

1. reducing gun carrying by offenders on city streets
2. reducing youth access to and use of all kinds of weapons
3. keeping guns out of places that have records of violent conflicts such as rowdy bars, homes where domestic violence often occurs, or other community "hot spots"

Exactly how to accomplish these particular objectives remains unclear, but it is not hard to list particular actions one could imagine police departments undertaking. Indeed, bringing gun crime down would be a good exercise in problem solving to turn over to an innovative police agency.

Action at the Community and Household Level

Over the long run, effective gun control may be best achieved by action at the community and household level rather than at the governmental level. Just as the battle against the costly social consequences of smoking and drinking (and to some degree, drug abuse) are now being advanced through volunteer community initiatives, so it may be that the problem of gun violence, and the role of guns in contributing to that violence, may be eased as individuals become more responsible and more attentive to their own and their neighbors' interests in deciding whether to own a gun, how to use it, and to whom to transfer it. If we get together to deal with the threat of violence, the fear that leads many to keep a loaded firearm handy may abate, thus sparing their households from this particular hazard. And in particularly risky circumstances, where there is ongoing domestic violence or a member of the household is suicidal, neighbors, counselors, and social workers must be prepared to insist that any guns be removed from the premises.

The challenge of finding the best portfolio of gun control measures is daunting in the face of our considerable uncertainty about what works and the profound disagreements about which values should be paramount. But with continuing attention to the evidence generated by the state and local innovations, and a vigorous public dialogue on the importance of both rights and responsibilities in this arena, there is every hope of doing better.

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ALCOHOL AND OTHER DRUGS

Discussions about crime control—at cocktail parties, in classrooms, and on Capitol Hill—inevitably turn to the subject of drugs. For one thing, violence among drug dealers, who in inner city neighborhoods appear to shoot each other (and occasional passersby) with frightening regularity, is at the heart of public anxiety over crime. Moreover, one of the few universally accepted propositions about crime in the United States is that active criminals are disproportionately substance abusers. In Manhattan, urine tests indicate that over three-quarters of those arrested have recently taken illicit drugs; in few major cities is the proportion less than half (National Institute of Justice 1993). A majority of jail and state prison inmates report that they were under the influence of drugs or alcohol (or both) at the time of their current offense (United States Department of Justice 1988 and 1991).

For most Americans, such statistics, bolstered by images of urban drug killings, underscore the need for vigorous drug enforcement. They see drug trafficking as inherently violent, and drug use as a catalyst for criminal (and other delinquent) behavior, both through the inhibition-reducing and aggression-stimulating effects of intoxication and through the impacts on character and lifestyle of long-term substance abuse. Since, it is widely believed, drug dealing and use lead to crime, enforcement efforts to suppress these activities will tend to reduce crime (Office of National Drug Control Policy 1994).

Others have reached a very different conclusion. In their view, it is drug policy, and not drug abuse, that is principally responsible for the observed drugs-crime connection (Nadelman 1988). Noting that many heavy users of illicit drugs commit crimes to finance their habits, they argue that prohibition and enforcement, which by raising the prices of illicit drugs make those