

# Crime Control Through the Private Use of Armed Force\*

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*Legal defensive violence by private citizens armed with firearms is a significant form of social control in the United States. Evidence indicates that private gun use against violent criminals and burglars is common and about as frequent as legal actions like arrests, is a more prompt negative consequence of crime than legal punishment and is often far more severe. In 1980 about 1,500-2,800 felons were legally killed by gun-wielding civilians, about 8,700-16,000 were nonfatally wounded and guns were used defensively about one million times. Victim resistance with guns is associated with lower rates of both victim injury and crime completion for robberies and assaults than any other victim action, including nonresistance. Survey and quasi-experimental evidence is consistent with the hypothesis that the private ownership and use of firearms deters criminal behavior.*

In his 1972 Presidential Address to the American Sociological Association, William Goode argued that because sociologists share a humanistic tradition that denies the importance of physical coercion, they have failed to accurately assess the degree to which social systems rest on force. While affirming his personal dislike for the use of force, Goode urged social analysts to put aside their "kindly bias" against the effectiveness of threats and punishment and recognize the degree to which force is a crucial element in the social structure, in democracies as well as tyrannies, in peacetime as well as in war. He stated that "in any civil society . . . everyone is subject to force. All are engaged in it daily, not alone as victims but as perpetrators as well . . . We are all potentially dangerous to one another" (Goode, 1972:510). This paper addresses the social control effects of private citizens' uses of guns in response to predatory criminal behavior, particularly violent crime and residential burglary.

The prevalence and defensive use of guns in America are important topics for many research questions, yet they have been almost entirely ignored. For example, the "routine activities" approach to crime sees criminal incidents as the result of the convergence of "likely offenders and suitable targets in the absence of capable guardians" (Cohen and Felson, 1979:590). While this view has broadened criminologists' interests beyond the supply of "likely offenders," it ignores the extent to which being armed with a deadly weapon would seem to be an important element of capable guardianship. Given that about half of U.S. households and a quarter of retail businesses keep firearms (Crocker, 1982; U.S. Small Business Administration, 1969), gun ownership must surely be considered a very routine aspect of American life and of obvious relevance to the activities of criminals.

Victimology is concerned with, among other things, the response of victims to their victimization. Yet, despite evidence that people buy guns to defend against becoming victims of crimes (Kleck, 1984), victimology scholars have largely ignored victim gun ownership and use. Similarly, the recent wave of interest in private crime control has been largely limited to either the "privatization" of police and corrections services and the use of commercial security services by businesses and other large institutions (e.g., Cunningham and Taylor, 1985) or to nonforceful private crime control efforts like neighborhood watch activities (Greenberg et al., 1984). Finally, nearly all of the considerable literature on deterrence of criminal behavior focuses on the effect of public criminal justice agencies. Conventional definitions of deterrence are often limited to the crime preventive effects of legal punishment, arrest and prosecu-

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tion (e.g., Gibbs, 1975). This precludes considering private ownership and use of firearms as a deterrent to crime. That victim gun use may be one of the most serious risks a criminal faces is only beginning to be recognized (Wright and Rossi, 1986).

Without denying the possible criminogenic effects of gun ownership, I want to establish as plausible and worthy of research the hypothesis that when citizens own and use guns to defend themselves, the amount of violent crime is reduced to a degree that could rival the effect of the criminal justice system. Toward that end I consider three kinds of evidence: the frequency and nature of private citizens' defensive uses of firearms against criminals, the effectiveness and risks of such actions and the potential deterrent impact on crime of defensive gun ownership and use. Finally, I discuss the implications of this evidence for crime control policy (see also, Kleck, 1987).

## **The Frequency and Types of Defensive Gun Use**

### ***Overall Use, Including Display and Firing***

At least six national and state-wide surveys have asked probability samples of the adult population about defensive gun use. The most informative of the surveys is the 1981 Hart poll of 1,228 registered voters (see Table 1). It is the only survey to cover a national population, ask about defensive uses in a specific, limited time period, ask the question of all respondents, distinguish civilian use from police and military uses and distinguish uses against humans from uses against animals. Note, however, that the five other national and state surveys, while not as satisfactory as the Hart poll, yield results that are compatible with the results of that survey. These results as reported here have never been published; they were obtained privately from Peter D. Hart Research Associates, Inc. (Garin, 1986).<sup>1</sup> In this survey, 6 percent of the adults interviewed replied "yes" to the question: "Within the past five years, have you yourself or another member of your household used a handgun, even if it was not fired, for self-protection or for the protection of property at home, work, or elsewhere, excluding military service or police work?" Those who replied "yes" were then asked "Was this to protect against an animal or a person?" Of the total sample, 2 percent replied "animal," 3 percent "person" and 1 percent "both." Therefore, 4 percent of the sample reported gun use against a person by someone in their household.

Like crime victimization prevalence figures, the defensive gun use percentages are small. They represent, however, large numbers of actual uses. In 1980 there were 80,622,000 U.S. households (U.S. Bureau of the Census, 1982). Extrapolating from the 4 percent Hart figure yields an estimate of 3,224,880 households with at least one person who used a handgun defensively during the period 1976-1981. Conservatively assuming only one use per household and dividing by five (the number of years covered), I estimate there were about 645,000 defensive uses of handguns against persons per year, excluding police or military uses.<sup>2</sup>

The Hart sample was of registered voters, who are older and wealthier than the general public. This implies a population less frequently victimized by crime, especially by violent crime, and thus less likely to have used a gun defensively. Since gun ownership increases with income (Wright et al., 1983:107-8), however, there should be more gun owners in a sample of registered voters. It is unclear what the net effects of these sample biases might be on the estimate of defensive uses.

1. This poll was sponsored by the now defunct National Alliance Against Violence. The Hart firm has conducted polls for many well-known political figures, including former Vice President Walter Mondale and Senators Edward Kennedy, Frank Church and the late Hubert Humphrey. The data cannot be analyzed further because the original data set has been lost and only a record of the marginals remains.

2. The 95 percent confidence interval estimate of the proportion of household handguns used defensively against persons over the five year period is .0290-.0510, implying from 468,000 to 822,000 uses per year.

**Table 1 • Defensive Gun Use, Information from Six Surveys**

<i>Survey</i>	<i>Field Poll</i>	<i>Cambridge Reports</i>	<i>DMI<sup>a</sup></i>	<i>DMI<sup>a</sup></i>	<i>Hart Poll</i>	<i>State of Ohio</i>
Area Covered	California	U.S.	U.S.	U.S.	U.S.	Ohio
Year of Interviews	1976	1978	1978	1978	1981	1982
Population covered	noninstitutionalized adults	noninstitutionalized adults	registered voters	registered voters	registered voters	"residents"
Gun Type Covered	handguns	handguns	all guns	all guns	handguns	handguns
Time Span of Use	ever/1,2 years	ever	ever	ever	5 years	ever
Distinguished Uses	No	No	No	Yes	Yes	No
Against Persons						
Excluded Military, Police Uses	Yes	No	Yes	Yes	Yes	No
"Self-defense" or "protection"?	Protection	Protection or self-defense	Protection	Protection	Protection	Self-defense
Defensive question asked of:	All Rs	Protection handgun owners	All Rs	All Rs	All Rs	Handgun owners
Defensive question refers to:	Respondent	Respondent	Household	Household	Household	Respondent
Percent Who Used Gun	8.6 <sup>b</sup>	3	15	12/7 <sup>c</sup>	4	6.5
Percent Who Fired Gun	2.9	2	6	n.a. <sup>d</sup>	d.k. <sup>e</sup>	2.6

## Notes:

- a. DMI = Decision/Making/Information
- b. 8.6 percent ever, 3 percent in past two years, 1.4 percent in past year.
- c. Defensive uses against persons or animals, 12 percent. Use against persons only, 7 percent
- d. n.a. = not available
- e. d.k. = don't know

## Sources:

Field Institute (1976); Cambridge Reports (1978); DMI (1978); Garin (1986); Ohio (1982).

The Hart survey asked only about handgun use, ignoring defensive uses of the far more numerous longguns (rifles and shotguns). And the DMI (Decision-Making-Incorporated) surveys, which did ask about all gun types, did not ask about a specific time period. The best all-guns estimate is based on an extrapolation of the Hart survey handgun results. According to the December, 1978 DMIB survey (Table 1), 45 percent of respondents in handgun-owning households reported handguns were owned primarily for "self-defense and protection at home," while the corresponding figure for all gun types combined was 21 percent. It was estimated that at the end of 1978, the total private stock of handguns in the United States was about 47 million and the stock of all guns was about 156 million (Kleck, 1984:112). Combining these figures, there were about 21 million handguns and 33 million guns of all types, including handguns, owned primarily for protection or defense in December, 1978. If among guns owned primarily for defense, we assume both types of guns are equally likely to be so used, we can multiply the handguns defensive uses figure of 645,000 by the ratio  $^{33}/_{21}$  to very roughly estimate that guns of all types are used for defensive purposes about one million times a year.

The magnitude of these figures can be judged by comparison with an estimate of the total number of crimes in which guns were somehow used in 1980, based on the Uniform Crime Reports (UCR) count of homicides and National Crime Survey (NCS) victimization survey estimates of assaults, robberies and rapes. Including minor assaults in which the gun was not fired and including both crimes reported to the police and unreported crimes, the total for handguns was about 580,000, while the corresponding figure for all gun types was about 810,000 (Kleck, 1986b:307). Thus the best available evidence suggests that handguns may be used about as often for defensive purposes as for criminal purposes, and guns of all types are used substantially more often defensively than criminally.

### *Firing*

Most of the surveys listed in Table 1 did not delve into the exact circumstances in which guns were used defensively or the manner in which they were used. However, most did ask whether the gun was fired. Results generally indicate the gun was fired in somewhat less than half of the defensive uses; the rest of the times the gun presumably was merely displayed or referred to in order to threaten or frighten away a criminal.

### *Killings and Woundings*

Although shootings of criminals represent a small fraction of defensive uses of guns, Americans shoot criminals with a frequency that must be regarded as remarkable by any standard. While the FBI does not publish national statistics on all types of self-defense killings, its unpublished counts of civilian justifiable homicides (CJH) gathered through the Supplementary Homicides Reports (SHR) program provide a starting point for producing a national estimate. For a variety of reasons the FBI SHR totals for CJHs represent only a minority of all civilian legal defensive homicides (CLDHs). First, some cases which even police label as CJHs are not reported as such to the FBI. Wilbanks (1984:3) helps explain this by noting that some police in Dade County (Miami) were unwilling to spend much time recording homicides where prosecution of the killer was not to be pursued. Second, many homicides ultimately ruled noncriminal by prosecutors or judges are reported to the FBI as criminal homicides because that is how the initial police investigation labelled them. Third, and most significantly, in jurisdictions which follow legal distinctions between justifiable and excusable homicides fairly closely, most CLDHs will be recorded as excusable rather than justifiable, and thus will not be counted by the FBI (Kleck, 1987). Cases in which the killer legally defends only against an assault, i.e., purely self-defense killings, are defined by the FBI as "excusable"

homicides; but those in which the killer is the victim of some other felony *in addition to* assault, e.g., cases in which a robbery, burglary or rape victim kills a criminal committing the related felony, are defined as "justifiable" homicides.

Because no national data exist distinguishing the different types of CLDHs, we must rely on data from single legal jurisdictions such as cities and counties. Table 2 summarizes information on the legal classifications of homicides in six unusually detailed local homicide studies. Although the true distribution of homicides may differ somewhat from city to city, the results suggest that there also are sharp differences from place to place in the way authorities classify homicides as noncriminal. For example, row 12 of the table indicates that the fraction of intentional civilian homicides labelled as CLDHs varies from 1.6 percent to 19.5 percent over the six studies. Because the Detroit and Dade County results are more "middling," are from two regionally distinct parts of the country and are also the most recent, they seem more likely to be representative of the contemporary United States. I use these results, in combination with the national SHR counts of civilian justifiable homicides, to roughly estimate national CLDH totals. The reader should note that because Detroit and Dade County are high crime areas, it is possible that a higher fraction of their homicides are declared justifiable, but we have no data sufficient to test this.

One way to estimate these totals is to assume that self-defense homicides grow out of criminal threats to life, as indexed by murders and nonnegligent manslaughters reported to the FBI, and that the ratio of the former to the latter will be roughly the same for the United States as it is for Detroit and Dade County. In the 1980 Uniform Crime Reports a combined total of 1,062 killings in these two local areas were counted by the FBI as murders and nonnegligent manslaughters (U.S. FBI, 1981:74,107). Row 11 of Table 2 shows that 145 killings were CLDHs, giving a ratio of the latter to the former of 0.1365. Multiplying this number times the national total of 23,044 murders and nonnegligent manslaughters (U.S. FBI, 1981:41) yields an estimate of 3,146 CLDHs for the United States in 1980. Another estimation method is to use the national counts of civilian justifiable homicide reported to the FBI as a starting point and adjust for its incomplete coverage of CLDHs. In 1980 there were 145 CLDHs in our two sample jurisdictions, of which only 36 were reported to the FBI as CJHs (tabulations from 1980 SHR dataset, ICPSR, 1984), a ratio of 4.167 CLDHs to every CJH counted in the SHR program. Multiplying this times the 1980 national SHR total of 423 CJHs yields an estimate of 1,704 CLDHs. Of the 423 CJHs, 379 or 89.6 percent involved guns, so our best estimate is that from 1,527 ( $.896 \times 1,704$ ) to 2,819 ( $.896 \times 3,146$ ) felons were legally killed by gun-wielding civilians in self-defense or some other legally justified cause in 1980.

These estimates are rough, but they support the claim that civilians use guns to legally kill a large number of felons each year. The various estimates are summarized in Table 3, along with data on justifiable homicides by police officers, included for comparative purposes. The police homicide estimates are simple totals as compiled by the vital statistics system (Estimation Method I, U.S. NCHS, 1983:Table 1:35-36), which were then doubled (Estimation Method II) because only about half of the killings by police are reported as such to the national vital statistics system (Sherman and Langworthy, 1979:552). FBI/SHR counts of police justifiable homicides are also reported here. Regardless of which counts of homicides by police one uses, the results indicate that civilians legally kill far more felons than police officers do.

Nonfatal woundings by guns are far more frequent than fatal shootings. Cook (1985) reviewed data which indicate that about 15 percent of gunshot wounds are fatal, implying a ratio of about 5.67 (85/15) nonfatal gun woundings to each fatal one. If the same applies to legal civilian defensive shootings, there were about 8,700-16,600 nonfatal, legally permissible woundings of criminals by gun-armed civilians in 1980. Therefore, the rest of the one million estimated defensive gun uses, over 98 percent, involved neither killings nor woundings but rather warning shots fired or guns pointed or referred to.

**Table 2 • Number Civilian Legal Defensive Homicides by Category in Six Local Studies**

Row	Homicide Category <sup>a</sup>	Study, Location, Period Covered					
		<i>Bensing and Schroeder (1960); Cuyahoga County (Cleveland), 1947-1953</i>	<i>Wolfgang (1958); Philadelphia, 1948-1952</i>	<i>Rushforth et al. (1977); Cuyahoga County (Cleveland), 1958-1974</i>	<i>Lundsgaarde (1977); Houston, 1969</i>	<i>Dietz (1983); Detroit, 1980</i>	<i>Wilbanks (1984); Dade County (Miami), 1980</i>
(1)	Total sample homicides	662	625	3371	c. 312	583	569
(2)	Criminal homicides	505	588	n.a. <sup>e</sup>	282	493	478
(3)	Murders, nonnegligent manslaughters	505	c. 502 <sup>b</sup>	n.a.	281	487	478
(4)	Estimated unintentional excusable homicides	d.k. <sup>f</sup>	23	n.a.	≤ 12	c. 4	5
(5)	Involuntary/negligent manslaughters	d.k.	c. 86 <sup>b</sup>	d.k.	1	6	0
(6)	Justifiable police homicides	35	14	c. 110	10	13	14
(7)	Estimated intentional civilian homicides <sup>c</sup>	627	502	c. 3261	c. 289	560	550
(8)	Justifiable civilian homicides (CJH)	122	8	c. 329	19	16	72
(9)	CJH reported on SHRs <sup>d</sup>	n.a.	n.a.	n.a.	n.a.	12	24
(10)	Other civilian legal defensive homicides	0	n.a.	d.k.	≤ 1	57	0
(11)	Total civilian legal defensive homicides (CLDH) <sup>e</sup>	122	8	c. 329	≤ 20	73	72
(12)	Ratio, (11)/(7)	.195	.016	.101	≤ .069	.130	.131
(13)	Ratio, (11)/(1)	.184	.013	.098	≤ .064	.125	.127
(14)	Ratio, (11)/(3)	.242	.024	n.a.	≤ .071	.150	.151

Notes:

- a. Homicides were classified according to their final legal classifications as reported in the study, whether police, coroner, or court-determined.
- b. 14.7% of criminal homicide offenders prosecuted were charged with involuntary manslaughter.  $.147 \times 588 = 86$ .  $588 - 86 = 502$ .
- c. Row (7) = (1) - (4) - (5) - (6); Row (11) = (8) + (10).
- d. SHRs = Supplementary Homicide Reports of the FBI.
- e. n.a. = not available, usually because authors did not report any frequencies for such categories.
- f. d.k. = don't know

Sources:

Bensing and Schroeder (1960: 5,59,80); Wolfgang, (1958: 24,228,301,303); Rushforth et al. (1977: 531-33); Lundsgaarde (1977: 68-69,162,219,236,237); Dietz (1983: 203); Wilbanks (1984: 29-30,57,70-72,154).

**Table 3 • Number Reported and Estimated Police and Civilian Legal Defensive Homicides, by Homicide Type, U.S., 1980**

<i>Homicide type</i>	<i>Justifiable Homicides, Reported to FBI/SHR<sup>a</sup></i>	<i>Estimated Legal Defensive Homicides</i>	
		<i>Method I<sup>b</sup></i>	<i>Method II<sup>b</sup></i>
Police, gun	368	303	606
Police, nongun	14	8	16
Police, total	382	311	622
Civilian, gun	379	2819	1527
Civilian, nongun	44	327	177
Civilian, total	423	3146	1704

## Notes:

a. SHR = Supplementary Homicide Reports.

b. Estimation methods — see text.

## Sources:

Analysis of 1980 U.S. Supplementary Homicide Reports computer tape; U.S. NCHS (1983:35-36).

## Effectiveness and Risks of Armed Resistance to Criminals

It has been argued that resistance by crime victims, especially forceful resistance, is generally useless and even dangerous to the victim (Block, 1977; Yeager et al., 1976). Evidence is moderately consistent with this position as it applies to some forms of resistance. However, the evidence does not support the claim as it pertains to resistance with a gun.

### *Preventing Completion of the Crime*

The figures in Table 4 are from analysis of the 1979-1985 incident-level files of the National Crime Survey (NCS) public use computer tapes (ICPSR, 1987b). They contain information on over 180,000 sample crime incidents reported by nationally representative samples of noninstitutionalized persons aged 12 and over. The surveys asked respondents if they had been victims of crimes. Those who reported crimes involving personal contact with the offender were asked if they used any form of self-protection, if they were attacked, if they suffered injury and if the crimes were completed. For assaults, "completion" means injury was inflicted; thus completion data convey nothing beyond what injury data convey. For robberies, "completion" refers to whether the robber took property from the victim. The figures in column 1 of Table 4 show that victims who resisted robbers with guns or with weapons other than guns or knives were less likely to lose their property than victims who used any other means of resistance or who did nothing.

### *Avoiding Injury*

Attack and injury rates for each self-protection method are reported in columns two and three for robbery and columns five and six for assault. For both robbery and assault, victims who used guns for protection were less likely either to be attacked or injured than victims who responded any other way, including those who did not resist at all. Only 12 percent of gun resisters in assault and 17 percent in robberies suffered any kind of injury.

After gun resistance, the course of action least likely to be associated with injury is doing nothing at all, i.e., not resisting. However, passivity is not a completely safe course either

**Table 4 • Attack, Injury and Crime Completion Rates in Robbery and Assault Incidents, by Self-Protection Method, U.S., 1979-1985<sup>a</sup>**

<i>Method of Self-Protection</i>	Robbery				Assault		
	<i>(1) Percent Completed</i>	<i>(2) Percent Attacked</i>	<i>(3) Percent Injured</i>	<i>(4)<sup>b</sup> Number Times Used</i>	<i>(5) Percent Attacked</i>	<i>(6) Percent Injured</i>	<i>(7)<sup>b</sup> Estimated Number Times Used</i>
Used gun	30.9%	25.2%	17.4%	89,009	23.2%	12.1%	386,083
Used knife	35.2	55.6	40.3	59,813	46.4	29.5	123,062
Used other weapon	28.9	41.5	22.0	104,700	41.4	25.1	454,570
Used physical force	50.1	75.6	50.8	1,653,880	82.8	52.1	6,638,823
Tried to get help or frighten offender	63.9	73.5	48.9	1,516,141	55.2	40.1	4,383,117
Threatened or reasoned with offender	53.7	48.1	30.7	955,398	40.0	24.7	5,743,008
Nonviolent resistance, including evasion	50.8	54.7	34.9	1,539,895	40.0	25.5	8,935,738
Other measures	48.5	47.3	26.5	284,423	36.1	20.7	1,451,103
Any self-protection	52.1	60.8	38.2	4,603,671	49.5	30.7	21,801,957
No self-protection	88.5	41.5	24.7	2,686,960	39.9	27.3	6,154,763
Total	65.4	53.7	33.2	7,290,631	47.3	29.9	27,956,719

**Notes:**

a. See U.S. Bureau of Justice Statistics (1982) for exact question wordings, definitions, and other details of the surveys.

b. Separate frequencies in columns (4) and (7) do add to totals in "Any self-protection" row since a single crime incident can involve more than one self-protection method.

**Sources:**

Analysis of incident files of 1979-1985 National Crime Survey public use computer tapes (ICPSR, 1987b).



since 25 percent of robbery victims and 27 percent of assault victims who did not resist were injured anyway.

Finally, columns four and seven show that using guns for protection in robberies and assaults is considerably less common than milder, less forceful methods not requiring weapons. This presumably is at least partly due to the fact that so many crimes occur in circumstances where victims do not have effective access to their guns.

Some analysts of robbery data have assumed that where crimes involve victims who resisted and were also injured, resistance somehow caused the injury by provoking the offender into an attack (e.g., Yeager et al., 1976). Although the NCS does not yet routinely ask questions about the sequence of attack and self-protection acts by the victim, such questions were included in a special Victim Risk Supplement questionnaire administered to 14,258 households as part of the regular NCS in February of 1984. In only 9.8 percent of assaults involving both forceful self-protective actions and attack did the actions occur before the attack. For assaults involving nonforceful self-protective actions, only 5.7 percent of the actions preceded the attack. For cases involving both robbery and attack, forceful self-protective actions never preceded attack, while in only 22 percent of similar incidents involving nonforceful self-protective actions did the actions precede the attack. Thus, even among the minority of cases where forceful self-protective acts were accompanied by attacks on the victim, few incidents support the contention that the victim's defensive action provoked the attack.

## **Crime Control Effects of Civilian Gun Ownership and Use**

When victims use guns to resist crimes, the crimes usually are disrupted and the victims are not injured. This does not necessarily imply that such resistance has any general deterrent effect on crimes. Whether criminals are deterred by the prospect of armed resistance is an issue separate from how effective defensive gun use is for victims who resist. In this section, I consider the kinds of crimes most likely to involve victim defensive gun use and the kinds of crimes most likely to be deterred by such use. I also consider evidence on the deterrent effect of civilian gun ownership and on the effects of possible confrontation by a gun-wielding citizen on burglars and burglaries in occupied homes.

### ***Crimes Involving Defensive Gun Use***

What crimes are defensive gun users defending against? Evidence from NCP surveys suggests that about 64,000 rapes, robberies and assaults involved a victim using a gun for self-protection in 1983 (U.S. Bureau of Justice Statistics, 1985c:12,69,70). However, this figure is unreliable since it is well established that victim surveys seriously underestimate violent crime among nonstrangers (Gove et al., 1985:464-65). Because such crimes are especially likely to occur in the home, where guns are available to their owners, the victim surveys must also underestimate victim defensive uses of guns. Further, commercial robberies are no longer covered in these surveys, and the doubts victims may have about the legality of their gun uses may further contribute to an underreporting of defensive uses. Finally, since crimes involving victim gun use usually involve neither property loss nor victim injury, victims are especially likely to forget or otherwise fail to report them to interviewers, just as they fail to report them to police.

There are no published data on the number of defensive gun uses in burglary. The best that can be done is to estimate the number of opportunities for victim gun use. NCS data indicate that about 12.7 percent of residential burglaries occur while a household member is present (U.S. Bureau of Justice Statistics, 1985a:4) and that there were an estimated 6,817,000

household burglaries in 1980 (U.S. Bureau of Justice Statistics, 1982:22). Averaging the results of two national surveys in 1980, I estimate that about 46 percent of U.S. households have at least one gun (Crocker 1982:255). If it is assumed that gun ownership is at least as high in burglarized homes as in homes in general, about 400,000 residential burglaries occurred in gun-owning households while a household member was present ( $6,817 \times 0.127 \times 0.46 = 398,249$ ).

If all of the opportunities for victims to use guns during burglaries were actually taken, they would constitute about 40 percent of the estimated one million annual defensive gun uses. However, two very different sources of information suggest that burglary-related uses are less numerous than that and that assaults at home are the most common crimes involving victim gun use. Table 5 displays the results of the 1976 Field poll of California (Field Institute, 1976) and data from medical examiner records concerning civilian justifiable homicides committed in Dade County in 1980 (compiled from Wilbanks, 1984:190-374). The Field poll addresses only handgun use and indicates locations of gun uses, while the medical data cover all gun types but do not usually indicate the location of homicides. Nevertheless, the results are consistent concerning the crimes with which defensive gun uses are associated.

**Table 5 • Crimes Associated with Defensive Uses of Guns, Frequency and Percent**

1976 Survey of California Adults <sup>a</sup>			1980 Dade County (Miami) <sup>b</sup>		
<i>Crime</i>	<i>Frequency</i>	<i>Percent</i>	<i>Crime</i>	<i>Frequency</i>	<i>Percent</i>
Assault or rape at home	40	41	Assault	46	64
Assault elsewhere	20	21	Rape	1	1
Theft at home	19	20	Burglary	6	8
Theft elsewhere	11	11	Robbery	19	26
All other reasons for use	7	7			
Total	97	100%	Total	72	100%

Notes:

- a. Handgun use only
- b. Civilian justifiable homicides

Sources:

California survey, Field Institute (1976); Dade County justifiable homicides compiled from short narrative descriptions in Wilbanks (1984: 190-374).

The California survey data indicate that 62 percent of uses are connected to assault or rape. The medical examiner data indicate a figure of 65 percent for these offenses, while also showing that nearly all of these uses are connected to assault rather than rape. "Theft at home" in the California survey includes burglary, and the justifiable homicide data suggest that burglary accounts for most of the cases in this category. "Theft elsewhere" in the California survey includes retail store robberies, and the robbery category among justifiable homicides may consist largely of uses linked to such crimes. This interpretation is supported by information on the locations of civilian justifiable homicides in California in 1982, 86 percent of which involved guns. Police records showed that 32 percent occurred in the killer's residence, 23 percent in a business location (especially in robbery-prone businesses like liquor stores and bars), 14 percent on the street or sidewalk and 30 percent elsewhere (California 1983:67). This set of California homicides excludes pure self-defense homicides (i.e., killings not involving any other felonies besides an assault on the defender) and thus is not strictly comparable with the Dade County defensive homicides, most of which are pure self-defense killings. This at least partially accounts for the smaller share of California homicides occurring in the home, since it means that cases like those involving women defending themselves against abusive husbands or boyfriends would ordinarily be excluded. Therefore the Califor-

nia data do not undercut the conclusion that most defensive gun uses occur in the home and involve defense against assaults. Home defenses against burglars and retail store defenses against robbers each account for substantial minorities of the uses.

### *Gun Deterrable Crimes*

If there is a deterrent effect of defensive gun use, it would depend on a criminal being able to realistically anticipate a potential victim using a gun to disrupt the crime. The types of crimes most likely to be influenced by this possibility are crimes occurring in homes—where victims might have access to a gun—and in the kinds of business establishments where proprietors keep guns, i.e., crimes such as residential burglary, assault in the home and retail store robbery. About one in eight residential burglaries occurs while a household member is present (U.S. Bureau of Justice Statistics, 1985a:4), and, by definition, all robberies, rapes, assaults and homicides involve direct contact between a victim and an offender. In many of these incidents the offender has the initiative, often taking the victim by surprise. Further, the situations often develop too quickly for victims to get to their guns. The most common single location for violent crimes, especially homicides and assaults between intimates, is in or near the home of the victim or the home of both victim and offender (U.S. Bureau of Justice Statistics, 1980:22; Curtis, 1974:176).

Strategic attributes of some crime types make them better than average candidates for disruption by armed victims. For example, violent acts between intimates are typically part of a persistent, ongoing pattern of violence (Wilt et al., 1977). While prospective victims of such violence may not ordinarily be able to predict the exact time of the next violent episode, they often are able to recognize the usual precursors of repetitive violence. Wives and girlfriends of violent men, for example, may understand well the significance of their husband/boyfriend getting drunk and verbally abusive. This implies a distinct tactical difference between violence among intimates and other crimes. Victims of intimate violence can take advantage of behavioral cues which serve as advance warning signs and ready themselves accordingly. In the most threatening situations, advance preparations could include securing a weapon.

### *Deterrence Effects*

Demonstrating deterrent effects of criminal justice system punishment has proven difficult (e.g., Blumstein et al., 1978) and the same must certainly be true for the private use of force, which is even less well measured than the risk-generating activities of the criminal justice system. Therefore, the following evidence should be regarded only as suggestive. Nevertheless, while more limited in quantity, this evidence is quite diverse, consistent and in some ways as compelling as evidence cited in favor of the deterrence thesis for criminal justice system activity.

Results from deterrence research have been highly mixed and often negative. Why should we expect deterrence from the armed citizenry when the criminal justice system appears to have so little impact? The deterrence doctrine states that punishment deters as its certainty, severity and celerity (promptness) increase (Gibbs, 1975). One obvious difference between the risk from criminal justice activity and that from civilian gun use for the criminal is that the maximum potential severity of citizen self-help is far greater than legal system responses to crime. The maximum legal penalty a burglar, robber or even a murderer is likely to face is a few years in prison; only 20 persons were legally executed, all for murders, between mid-1967 and mid-1984 (U.S. Bureau of Justice Statistics, 1984). Since thousands of criminals are killed by gun-wielding private citizens every year, criminals following a "minimax" strategy (i.e., acting to minimize their chances of experiencing the maximum po-

tential negative consequence of their actions) should be influenced more by the risks of civilian gun use than by risks from the legal system. How many criminals are guided by such a strategy is unknown.

The frequency of defensive gun uses roughly equals the total number of U.S. arrests for violent crime and burglary, which numbered about 988,000 in 1980 (U.S. FBI, 1981:190). Being threatened or shot at by a gun-wielding victim is about as probable as arrest and substantially more probable than conviction or incarceration. This is not surprising since there are only about 600,000 police officers in the United States, fewer than a quarter of whom are on duty at any one time (U.S., Bureau of the Census, 1982:184). There are, on the other hand, tens of millions of civilians with immediate access to firearms, obviously well motivated to deter or disrupt crimes directed at themselves, their families or their property.

Finally, victims almost always use guns defensively within minutes of the attempted crime. In contrast, when an arrest occurs, it can follow the crime by days or even weeks. At the very quickest, it comes after the minutes it takes a patrol car to respond to a citizen's call. In any case, the average celerity of even arrest is much lower than for citizen gun use, while the celerity of conviction and punishment is lower still.

*Evidence from Surveys of Criminals.* There is direct, albeit not conclusive, evidence on the deterrent effects of victim gun use from surveys of apprehended criminals. Wright and Rossi (1986) interviewed 1,874 felons in prisons in ten states and asked about their encounters with armed victims and their attitudes towards the risks of such encounters. Among felons who reported ever committing a violent crime or a burglary, 42 percent said they had run into a victim who was armed with a gun, 38 percent reported they had been scared off, shot at, wounded or captured by an armed victim (these were combined in the original survey question) and 43 percent said they had at some time in their lives decided not to do a crime because they knew or believed the victim was carrying a gun (my tabulations from ICPSR, 1986).

Concerning the felons' attitudes towards armed victims, 56 percent agreed with the statement that "most criminals are more worried about meeting an armed victim than they are about running into the police," 58 percent agreed that "a store owner who is known to keep a gun on the premises is not going to get robbed very often," and 52 percent agreed that "a criminal is not going to mess around with a victim he knows is armed with a gun." Only 27 percent agreed that "committing a crime against an armed victim is an exciting challenge" (my tabulations from ICPSR, 1986). Further, 45 percent of those who had encountered an armed victim reported that they thought regularly or often about the possibility of getting shot by their victims. Even among those without such an encounter the figure was 28 percent (Wright and Rossi, 1986:149). These results agree with earlier findings from less sophisticated surveys of prisoners (Firman, 1975; Link, 1982).

Many objections to prison survey research on deterrence concern flaws the correction of which would tend to strengthen conclusions that there are deterrent effects. For example, Zimring and Hawkins (1973:31-32) discuss the "Warden's Survey fallacy" whereby wardens concluded that the death penalty could not deter murder since all the killers on death row to whom they spoke said the penalty had not deterred them. Clearly, prisoners are biased samples of criminals and prospective criminals since their presence in prison itself indicates that deterrence was not completely effective with them. However, prison survey results supporting a deterrence hypothesis are all the more impressive in light of this bias. Such doubts about the validity of prisoners' responses to surveys are discussed throughout the Wright and Rossi book (1986, but especially 32-38). Given that being "scared off" by a victim is not the sort of thing a violent criminal is likely to want to admit, incidents of this nature may well have been underreported, if misreported at all. Even more significantly, the most deterrable prospective criminals and those deterred from crime altogether will not be included in prison

samples. These results, therefore, may reflect a minimal baseline picture of the deterrent potential of victim gun use.

*Quasi-Experimental Evidence.* Increases in actual gun ownership are ordinarily fairly gradual, making interrupted time series analyses of such increases impractical. However, highly publicized programs to train citizens in gun use amount to "gun awareness" programs that could conceivably produce sharp changes in prospective criminals' *awareness* of gun ownership among potential victims. The impact of these programs can be assessed because they have specific times of onset and specific spans of operation which make it easier to say when they might be most likely to affect crime.

From October, 1966 to March, 1967 the Orlando Police Department trained more than 2,500 women to use guns (Krug, 1968). Organized in response to demands from citizens worried about a recent sharp increase in rape, this was an unusually large and highly publicized program. It received several front page stories in the local daily newspaper, the *Orlando Sentinel*, a co-sponsor of the program. An interrupted time series analysis of Orlando crime trends showed that the rape rate decreased by 88 percent in 1967, compared to 1966, a decrease far larger than in any previous one-year period. The rape rate remained constant in the rest of Florida and in the United States. Interestingly, the only other crime to show a substantial drop was burglary. Thus, the crime targeted, rape, decreased, and the offense most likely to occur where victims have access to guns, burglary, also decreased (Kleck and Bordua, 1983:282-88).

Green (1987:75) has interpreted the results of the Orlando study as indicating a partial "spillover" or displacement of rape from the city to nearby areas, i.e., a mixture of absolute deterrence of some rapes and a shifting in location of others. Unfortunately, this possibility of displacement can never be eliminated when considering any location-specific crime control effort, be it a local job training program, an increase in police manpower or patrol frequency or a gun training program.

Green also suggests that the apparent rape decrease might have been due to allegedly irregular crime recording practices of the Orlando city police department, without, however, presenting any evidence of police reporting changes over time beyond the sharp changes in the rape rates themselves. Although largely speculative, Green's comments point to potential problems that could affect interpretation of this sort of quasi-experimental evidence.

A much smaller training program was conducted with only 138 persons from September through November, 1967 by the Kansas City Metropolitan Police in response to retail businessmen's concerns about store robberies (U.S. Small Business Administration, 1969:253-56). Table 6 displays crime trends in Kansas City and its metropolitan area, as well as robbery trends in the rest of Missouri, the West North Central (WNC) region of which Kansas City is a part, and in the United States. While the frequency of robbery increased from 1967 to 1968 by 35 percent in the rest of Missouri, by 20 percent in the WNC region and by 30 percent in the United States, it essentially levelled off in Kansas City and declined by 13 percent in surrounding areas. Robberies had been increasing in the five years prior to the training program and continued to increase again in 1968. Thus, the upward trend was distinctly interrupted in the year immediately following the gun training program. This cannot be attributed to some general improvement in the social conditions generating robbery rates in the nation, region or state, given the upward trends in robbery elsewhere. Nor can the effect be attributed to improvements in conditions producing violent crime in general in Kansas City, since robbery was the only violent crime to level off. Something occurred in the Kansas City area in the 1967-1968 period which caused an upward trend in reported robberies to level off, something not generally occurring elsewhere and something not related to other violent crime categories. Interestingly, Kansas City also experienced a levelling off in its sharply upward trend in

Table 6 • Crimes Known to the Police, Kansas City and Comparison Areas, 1961-1974

Year	Kansas City, Missouri <sup>a</sup>						Kansas City SMSA <sup>c</sup> , excluding Kansas City						Robbery		
	Robbery	MNNM <sup>b</sup>	Aggravated Assault	Rape	Burglary	Auto Theft	Robbery	MNNM	Assault	Rape	Burglary	Auto Theft	Missouri excl. K.C. SMSA	West North Central	U.S.
1961	1169	49	1194	222	6020	1995	202	14	135	42	2430	622	2266	5702	106670
1962	1069	49	946	147	5337	2336	239	21	184	38	2680	840	2166	5597	110860
1963	1164	60	935	197	5600	2911	347	20	234	47	2937	958	2277	6241	116470
1964	1180	48	1126	205	6484	2701	270	26	745	83	3416	1109	2505	6594	130390
1965	1212	71	1180	209	7219	3054	261	25	770	100	4234	1148	2722	6938	138690
1966	1574	59	1315	205	7495	3689	432	27	674	124	4917	1414	2763	8022	157990
1967	2120	62	1711	231	9455	4835	644	41	760	93	6612	1925	3241	10624	202910
1968	2171	92	1995	307	10020	4929	563	33	874	170	6219	2319	4374	12724	262840
1969	2679	105	1921	375	12269	6926	559	33	879	174	6733	2810	5245	14272	298850
1970	2982	120	1805	401	11265	5570	712	38	1102	183	7554	2815	5699	16279	349860
1971	2473	103	1961	371	11550	5408	641	48	1389	173	8104	2666	5419	14582	387700
1972	2092	71	1960	344	9472	3921	742	35	1295	200	8391	2607	5513	14928	376290
1973	2333	81	2433	302	10394	3884	715	64	1288	185	10073	2554	6153	16571	384220
1974	3002	109	2575	363	13406	3719	1087	57	1856	201	12585	2761	6364	19894	442400
Percent change, 1967-68	2	48	25	33	6	2	-13	-20	15	83	-6	20	35	20	30

## Notes:

- a. Figures before 1961 for Kansas City are not comparable with later years (U.S. FBI, 1962: 131). The Kansas City Metropolitan Police Department firearms training program sessions were held in September through November 1967.
- b. MNNM = murders and nonnegligent manslaughters.
- c. SMSA = standard metropolitan statistical area.

## Sources:

Annual issues, *Uniform Crime Reports* (U.S. FBI 1962-1975).

burglary, suggesting a possible "by-product" deterrent effect much like the one indicated by the Orlando data.

The results of these natural quasi-experiments are not cited for the narrow purpose of demonstrating the short-term deterrent effects of gun training programs. Indeed, there is no evidence as to whether citizens used the training in any significant number of real-life defensive situations and no solid evidence that gun ownership increased in the program areas. These results, however, do support the argument that routine gun ownership and defensive use by civilians has an ongoing impact on crime, with or without such programs, an impact which is intensified at times when prospective criminals' awareness of potential victims' gun possession is dramatically increased. Gun training programs are just one source of increased awareness; publicity surrounding citizen gun use against criminals would be another, as would general stories in the news media about gun ownership and increases in gun sales. The two examples cited resemble instances of crime drops following gun training programs elsewhere, including decreases in grocery robberies in Detroit after a grocer's organization began gun clinics and decreases in retail store robberies in Highland Park, Michigan attributed to "gun-toting merchants" (Krug, 1968:H571).

After "subway vigilante" Bernhard Goetz used a handgun to wound four robbers on a New York City subway train on December 22, 1984, subway robberies decreased by 43 percent in the next week, compared to the two weeks prior to the incident, and decreased in the following two months by 19 percent, compared to the same period in the previous year, even though nonrobbery subway crime increased and subway robberies had been increasing prior to the shootings (*Tallahassee Democrat*, 1985; *New York Times*, 1985a, 1985b). However, because New York City transit police also greatly increased manpower on the subway trains immediately after the shootings, any impact uniquely attributable to the Goetz gun use was confounded with potential effects of the manpower increase. (There were no correspondingly large increases in police manpower in Orlando in 1966-1967 or in Kansas City in 1967-1968. See U.S. FBI, 1967-1969).

Finally, the deterrent effect of civilian gun ownership is supported by the experience of Kennesaw, Georgia, a suburb of Atlanta with a 1980 population of 5,095 (U.S. Bureau of the Census, 1983:832). To demonstrate their disapproval of a ban on handgun ownership passed in Morton Grove, Illinois, the Kennesaw City council passed a city ordinance requiring heads of households to keep at least one firearm in their homes. In the seven months following passage of the ordinance (March 15, 1982 to October 31, 1982), there were only five reported residential burglaries, compared to 45 in the same period in the previous year, an 89 percent decrease (Benenson 1982). This drop was far in excess of the modest 10.4 percent decrease in the burglary rate experienced by Georgia as a whole from 1981 to 1982, the 6.8 percent decrease for South Atlantic states, the 9.6 percent decrease for the United States, and the 7.1 percent decrease for cities under 10,000 population (U.S. FBI, 1983:45-47, 143).

### *Guns and the Displacement of Burglars from Occupied Homes*

Residential burglars devote considerable thought, time and effort to locating homes that are unoccupied. In interviews with burglars in a Pennsylvania prison, Rengert and Wasilchick (1985) found that nearly all the two hours spent on the average suburban burglary was devoted to locating an appropriate target, casing the house and making sure no one was home. There are at least two reasons why burglars make this considerable investment of time and effort: to avoid arrest and to avoid getting shot. Several burglars in this study reported that they avoided late night burglaries because it was too difficult to tell if anyone was home, explaining, "That's the way to get shot" (Rengert and Wasilchick, 1985:30). Burglars also stated they avoided neighborhoods occupied largely by persons of a different race because "You'll get shot if you're caught there" (Rengert and Wasilchick, 1985:62). Giving weight to

these opinions, one of the 31 burglars admitted to having been shot on the job (Rengert and Wasilchick, 1985:98). In the Wright-Rossi survey, 73 percent of felons who had committed a burglary or violent crime agreed that "one reason burglars avoid houses when people are at home is that they fear being shot" (unpublished tabulations from ICPSR, 1986).

The nonconfrontational nature of most burglaries at least partly accounts for the infrequency of associated deaths and injuries. Don Kates (1983:269) has argued that because victim gun ownership is partly responsible for the nonconfrontational nature of burglary, it is therefore to be credited with reducing deaths and injuries by its deterrent effects. The benefit is enjoyed by all potential burglary victims, not just those who own guns, since burglars are rarely in a position to know exactly which households have guns and thus must attempt to avoid confrontations in all their burglaries.

Under hypothetical no-guns circumstances, the worst a burglar would ordinarily have to fear is having to break off a burglary attempt if confronted by a householder who managed to call the police. A typical strong, young burglar would have little reason to fear attack or apprehension by unarmed victims, especially if the victim confronted was a woman, a smaller male or an elderly person. Further, there would be positive advantages to burglary of occupied premises since this would give the burglar a much better chance to get the cash in victims' purses or wallets.

Even under no-guns conditions, many burglars would continue to seek out unoccupied residences simply because contact with a victim would increase their chances of capture by the police. Others may have chosen to do burglaries rather than robberies because they were emotionally unable or unwilling to confront their victims and thus would avoid occupied premises for this reason. However, this certainly does not seem to be true of all burglars. Prison surveys indicate that few criminals specialize in one crime type, and most imprisoned burglars report having also committed robberies. In the Wright and Rossi survey, of those who reported ever committing a burglary, 62 percent also reported committing robberies (my secondary analysis of their dataset, ICPSR 1986). Thus, most of these burglars are temperamentally capable of confronting victims, even though they clearly prefer to avoid them when committing a burglary.

Results from victimization surveys in at least three nations indicate that in countries with lower rates of gun ownership than the United States, residential burglars are much more likely to enter occupied homes, where confrontation with a victim is possible. In the 1982 British Crime Survey, 59 percent of attempted burglaries and 26 percent of completed burglaries were committed with someone at home (Mayhew, 1987). A 1977 survey in the Netherlands found an occupancy rate of 48 percent for all burglaries, compared to 9 percent in the United States the previous year (Block, 1984:26). And Waller and Okihiro (1978:31) reported that 44 percent of burglarized Toronto residences were occupied during the burglaries, with 21 percent of the burglaries resulting in confrontations between victim and offender. The differences between the United States and Great Britain and Canada cannot be explained by differences in legal threats since the probability of arrest and imprisonment and the severity of sentences served for common crimes are at least as high in the latter nations as in the United States (Wilson, 1976:1819; U.S. Bureau of Justice Statistics, 1987).

### **Implications for Crime Control Policy**

I have argued that gun use by private citizens against violent criminals and burglars is common and about as frequent as arrests, is a more prompt negative consequence of crime than legal punishment, and is more severe, at its most serious, than legal system punishments. Victim gun use in crime incidents is associated with lower rates of crime completion and of victim injury than any other defensive response, including doing nothing to resist. Serious



predatory criminals say they perceive a risk from victim gun use which is roughly comparable to that of criminal justice system actions, and this perception appears to influence their criminal behavior in socially desirable ways.

The evidence presented here is, of course, subject to multiple, differing interpretations. I believe, however, that the simplest and most plausible interpretation is that the civilian ownership and defensive use of guns has a deterrent and social control effect on violent crime and burglary. None of the foregoing can establish exactly how many crimes are deterred by the civilian possession and use of firearms. We cannot precisely calculate the social control impact of gun use and ownership any more than we can do so for the operations of the legal system. However, available evidence is compatible with the hypothesis that gun ownership among potential crime victims may exert as much effect on violent crime and burglary as do criminal justice system activities.

The paucity of scholarly attention to civilian use of guns for defense may be partially due to the very limited visibility of such acts. No criminology text reports estimates of the frequency of defensive uses of guns. Published police-based crime statistics like those found in the Uniform Crime Reports do not cover the subject, and such incidents are rarely reported in the national news media, the Bernhard Goetz case notwithstanding. It is also possible that scholars feel shooting or threatening to shoot another person, even in self-defense, is so morally wrong that it is preferable not to address the subject at all (Goode, 1972; see also Tonso, 1984 on scholars' attitudes towards firearms). It could even be argued that to study the matter seriously might imply some endorsement and encourage the indiscriminant spread of the behavior.

Nevertheless, much social order in America may precariously depend on the fact that millions of people are armed and dangerous to each other. The availability of deadly weapons to the violence-prone probably contributes to violence by increasing the probability of a fatal outcome of combat (but see Wright et al., 1983:189-212). However, it may also be that this very fact raises the stakes in disputes to the point where only the most incensed or intoxicated disputants resort to physical conflict, the risks of armed retaliation deterring attack and coercing minimal courtesy among otherwise hostile parties. Likewise, rates of commercial robbery and residential burglary might be far higher than their already high levels were it not for the dangerousness of the prospective victims. Gun ownership among prospective victims may even have as large a crime-*inhibiting* effect as the crime-*generating* effects of gun possession among prospective criminals. This would account for the failure of researchers to find a significant net relationship between rates of crime like homicide and robbery and those measures of gun ownership which do not distinguish between gun availability among criminals and availability in the largely noncriminal general public (e.g., Cook, 1979; Kleck, 1984). The two effects may roughly cancel each other out (see also Bordua, 1986).

Guns are potentially lethal weapons whether wielded by criminals or crime victims. They are frightening and intimidating to those they are pointed at, whether these be predators or the preyed-upon. Guns thereby empower both those who would use them to victimize and those who would use them to prevent their victimization. Consequently, they are a source of both social order and disorder, depending on who uses them, just as is true of the use of force in general. The failure to fully recognize this can lead to grave errors in devising public policy to minimize violence through gun control.

Some gun laws are intended to reduce gun possession only among relatively limited "high-risk" groups such as convicted felons, e.g., laws licensing gun owners or requiring permits to purchase guns. However, other laws are aimed at reducing gun possession in all segments of the civilian population, both criminal and noncriminal. Examples would be the aforementioned Morton Grove handgun possession ban, near approximations of such bans (as in New York City), prohibitions of handgun sales (such as those in Chicago and Washington, DC) and most laws restricting the carrying of concealed weapons. By definition, laws are most

likely to be obeyed by the law-abiding, and gun laws are no different. Therefore, measures applying equally to criminals and noncriminals are almost certain to reduce gun possession more among the latter than the former. Because very little serious violent crime is committed by persons without previous records of serious violence (Kleck and Bordua, 1983), there would be little direct crime control benefit to be gained by reductions in gun possession among noncriminals, although even marginal reductions in gun possession among criminals could have crime-reducing effects. Consequently, one has to take seriously the possibility that "across-the-board" gun control measures could decrease the crime-control effects of noncriminal gun ownership more than they decreased the crime-causing effects of criminal gun ownership. For this reason, more narrowly targeted gun control measures like gun owner licensing and purchase-to-permit systems seem advisable (see Kleck, 1986a for an extended discussion).

Having an armed victim population is obviously not without risks. Some victims are also offenders, and their possession of guns may embolden them to commit assaults and other crimes they otherwise would not have attempted. And the use of guns in assaults instead of likely substitutes such as knives or fists probably increases the fraction of assaults which result in death. However, evidence gathered to date on these questions has been very mixed and is no more conclusive than the evidence presented here concerning defensive effects of guns (see Wright et al., 1983, esp. 129-38, 189-212; Kleck, 1986a). Similarly ambiguous conclusions apply to evidence concerning gun involvement in suicides and accidental deaths. The number of gun suicides which would not have occurred in the absence of guns appears to be fairly small (Kleck, 1986c). And gun accidents appear to be less a by-product of routine gun ownership and use by ordinary citizens than the result of unusually hazardous activities with guns by a small, extremely reckless minority of gun owners. For example, insurance company studies indicate that many gun accidents occur when the shooter handles a gun while intoxicated, "plays" Russian roulette with a revolver or points a loaded gun at another person "in fun." And examination of police and traffic records indicates that accidental shooters have histories of arrests for violent acts, alcohol-related arrests, traffic citations and highway crashes far in excess of those of matched controls (Kleck, 1986d).

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