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Principles for Effective Gun Policy

Cover Page Footnote

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PUBLIC POLICY PERSPECTIVES PRINCIPLES FOR EFFECTIVE GUN POLICY

Philip J. Cook*

Jens Ludwig**

INTRODUCTION

It is easy to believe that any moderate program to reduce gun violence is doomed by the simple fact that there are over 200 million guns in circulation. Yet research suggests a more upbeat conclusion. It is not necessary to do away with legitimate private ownership of guns to reduce gun misuse by youths and criminals. Moderate measures can lead to worthwhile results. Some feasible approaches have demonstrated success, and others appear promising even though not yet fully evaluated. A good place to start in seeking effective gun policy is with the evidence.

Of course, in an area so contentious, it is difficult to sort out the credible research findings. The debate is typically engaged with anecdotes and slogans.² Rather than ignore this reality, we use three familiar pro-gun bumper-sticker slogans to organize a discussion of several of the basic empirical issues. Finding that the evidence points in quite a different direction, we offer our own conclusions. First, a promising strategy for reducing gun violence is to make guns a legal liability to criminals, a goal that can be furthered through a variety of both regulatory and law enforcement tactics. Second, while existing "supply side" regulations on gun transfers (what most people mean by

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^{1.} Philip J. Cook & Jens Ludwig, Guns in America: Results of a Comprehensive National Survey on Firearms Ownership and Use 1 (1996).

^{2.} See Dan M. Kahan & Donald Braman, More Statistics, Less Persuasion: A Cultural Theory of Gun-Risk Perceptions, 151 U. Pa. L. Rev. 1291, 1299-1302 (2003) (asserting that individual positions on gun policy reflect cultural worldview, with facts and substantive arguments having little or no actual influence); see also Philip J. Cook & Jens Ludwig, Pragmatic Gun Policy, in Evaluating Gun Policy 1, 31-33 (Jens Ludwig & Philip J. Cook eds., 2003) (suggesting that worldview is surely important, but that dispassionate analysis of the evidence is attainable and essential to reducing gun violence).

"gun control") do not appear to have had much effect,³ several innovative approaches to shrinking the illicit market are worth serious consideration. Translating these conclusions into catchy new slogans is an exercise we leave to the reader.

I. GUNS DON'T KILL PEOPLE - PEOPLE KILL PEOPLE

This familiar slogan suggests that it is not the weapon type that matters, but rather the intention of the assailant. The reality, however, is that violent confrontations usually do not have a predetermined outcome, and there is an important "instrumentality" effect.⁴

Relative to other types of readily available weapons, guns are intrinsically more lethal, providing the assailant with the power to kill quickly, at a distance, and with little effort or sustained intent.⁵ The evidence shows that if a gun is deployed during a violent encounter, the chance that someone will die or be seriously injured is increased.⁶ The slogan should be revised to say: "Guns don't kill people; they just make it real easy." That accounts in part for the fact that while only a small fraction of assaults involve guns, two-thirds of homicides do.⁷ In short, guns intensify violence.

The widespread availability of guns helps account for the most prominent and distinctive feature of crime in the United States. While it is often said that the United States is an exceptionally violent country, with some explanations referencing the frontier tradition or southern culture, a closer look at the data indicates that we do not have an exceptionally high volume of violence—our rates of assault and robbery are comparable to those in some other developed

^{3.} See infra note 90 and accompanying text.

^{4.} See David Hemenway, Private Guns, Public Health 45-47 (2004); Gary Kleck, Targeting Guns: Firearms and Their Control 167-74 (1997); Philip J. Cook, The Technology of Personal Violence, in 14 Crime and Justice: A Review of Research 1, 1 (Michael Tonry ed., 1991); Garen Wintemute, Guns and Gun Violence, in The Crime Drop in America 45, 45-47 (Alfred Blumstein & Joel Wallman eds., 2000).

^{5.} See Hemenway, supra note 4, at 45-46.

^{6.} See Franklin Zimring, Is Gun Control Likely to Reduce Violent Killings?, 35 U. Chi. L. Rev. 721, 735-37 (1968); Franklin E. Zimring, The Medium is the Message: Firearm Caliber as a Determinant of Death from Assault, 1 J. of Legal Stud. 97, 113 (1972); see, e.g., Philip J. Cook, Robbery Violence, 78 J. Crim. L. & Criminology 357, 371-72 (1987) (reporting that robberies with guns are three times as likely to result in the death of the victim than robberies with knives). Cook's analysis of variations in robbery murder rates in large cities indicates that changes in those rates over time are closely linked to changes in the underlying robbery rate, and that an increase in gun robbery is associated with a larger proportional increase in murder than is a similar increase in non-gun robbery.

^{7.} FBI, U.S. Dep't of Justice, Crime in the United States 2002: Uniform Crime Reports 23, 38 (2003).

^{8.} Fox Butterfield, All God's Children: The Bosket Family and the American Tradition of Violence 8-9 (1995).

countries.⁹ But the rate of gun use in these crimes is much higher.¹⁰ The result, as pointed out by Franklin Zimring and Gordon Hawkins in *Crime Is Not the Problem*, is a homicide rate several times that found in other developed countries.¹¹

It is fair to say that Michael Moore's film *Bowling for Columbine*¹² has educated far more people about guns than the social science literature, and we are often asked about Moore's assertions about the lessons of the Canadian experience. The movie's message is that Canada is like the United States in having lots of guns, yet it has a far lower homicide rate, suggesting that guns per se are not the problem.¹³ As it turns out, however, gun ownership in Canada is only about half as common as in the United States, and handgun ownership still rarer.¹⁴ More importantly, other aspects of Canadian society lead that country to have a lower rate of violent crime than the United States. It is the *combination* of widespread gun ownership with a high rate of violence in the United States that produces such deadly results. Canada has less of both dimensions.

^{9.} Hemenway, supra note 4, at 2.

^{10.} Franklin É. Zimring & Gordon Hawkins, Crime Is Not the Problem: Lethal Violence in America 50 (1997).

^{11.} Id. at 8; see also Hemenway, supra note 4, at 46.

^{12.} Bowling for Columbine (United Artists/Alliance Atlantis 2002). In the movie, Moore investigates the roots of the high rate of homicide by firearm in the United States.

^{13.} In 2000, the Canadian homicide rate was 1.8 per 100,000 people, compared with 5.5 per 100,000 people in the United States during that year. See Bureau of Justice Statistics, Office of Justice Programs, U.S. Dep't of Justice, Bureau of Justice Crime & Justice Data http://bjsdata.ojp.usdoj.gov/dataonline/Search/Crime/State/statebystaterun.cfm?statei d=52 (last revised Apr. 14, 2003) (providing the U.S. data); Statistics Can., The Daily, Statistics (July 2001) (providing 19, the Canada data), http://www.statcan.ca/Daily/English/010719/d010719b.htm.

^{14.} Richard Block, Dep't of Justice, Can., Firearms in Canada and Eight Other Western Countries: Selected Findings of the 1996 International Crime (Victim) Survey 3-6 (1998), available at http://canada.justice.gc.ca/en/ps/rs/rep/wd97-3a-e.pdf.

STATES AND CANADA FOR 2000 ¹⁵				
	United States	Canada		

TABLE 1. COMPARISON OF CRIME RATES BETWEEN THE UNITED

	United States	Canada
Aggravated Assault/100,000	323.6	8
Robbery/100,000	144.9	87.8
Criminal Homicide/100,000	5.5	1.8
Gun Homicide/100,000	3.6^{16}	0.6
Handgun Prevalence	19.6	2.317
(% of households)		
Overall gun Prevalence	32.5	17
(% of households)		

While the conclusion that the type of weapon matters would seem to be common sense, it is often ignored. Conventional legal and criminological interpretations of homicide place more emphasis on motivation, intent, and character than on the type of weapon used by an assailant. But the evidence suggests that regardless of intent and character, a successful effort to separate guns from violence would sharply reduce the number of victims killed in domestic violence, 19 robberies, 20 and routine altercations. 21

16. This statistic is derived from the fact that approximately sixty-five percent of murder weapons in 2000 were firearms. See FBI, supra note 15, at 18. Sixty-five percent of 5.5—the total number of criminal homicides per 100,000 people—yields 3.6 gun homicides per 100,000 people.

17. Note that unlike the other data in this table, this statistic is for 1996, not 2000.

See generally Block, supra note 14.

19. Jacquelyn C. Campbell et al., Risk Factors for Femicide in Abusive Relationships: Results from a Multisite Case Control Study, 93 Am. J. Pub. Health

^{15.} United States data is taken from a number of sources. James A. Davis et al., General Social Surveys, 1972-2002, Study No. 3728, at http://www.icpsr.umich.edu/ (last visited Sept. 23, 2004) (unpublished data on file with authors, authors' calculation of gun prevalence from unpublished data); FBI, U.S. Dep't of Justice, Crime in the United States 2000: Uniform Crime Reports 15, 30, 35 (2001) (providing crime rates). Canada data is similarly taken from a number of sources. Block, supra note 14, at 6 (providing handgun prevalence data); Can. Centre for Justice Statistics, Canadian Crime Statistics 2000, at 16 (2001) (providing aggravated assault rate), available at http://www.sunsite.ualberta.ca/Canada/justice/statistics/2000_crime_e.pdf; **Firearms** Gun Control, http://www.guncontrol.ca/Content/FirearmsMisuse.html (last visited Sept. 23, 2004) (providing gun homicide rate); GPC Research, Fall 2000 Estimate of Firearms http://www.cfc-Ownership, available ccaf.gc.ca/en/general_public/news_releases/GPC/survey.pdf (last visited Sept. 23, 2004) (providing overall prevalence data); Statistics Can., supra note 13.

^{18.} See generally Marvin E. Wolfgang, Patterns in Criminal Homicide (1958); Marvin E. Wolfgang, A Tribute to a View I Have Opposed, 86 J. Crim. L. & Criminology 188 (1995). In the 1970s and subsequently, a number of states adopted sentence-enhancement provisions for use of a firearm in crime. Jon S. Vernick & Lisa M. Hepburn, State and Federal Gun Laws: Trends for 1970-99, in Evaluating Gun Policy, supra note 2, at 345, 392-98.

A. Social Costs

Knowing that guns intensify violence does not in itself support a conclusion that gun violence is a serious problem for our society. A majority of homicide victims are themselves involved in criminal activity or at least have criminal records, and for that reason some commentators discount the value of the lives lost.²² But this perspective is not only mean-spirited, it is also myopic in conceiving of the "cost" as borne only by those who are wounded or killed.

In fact, gun violence creates a considerable economic and social burden, widely shared, that goes well beyond the disability and death inflicted on immediate victims. As one tangible indication, residents seek to move out of neighborhoods afflicted with lethal violence;²³ by one estimate, seventy people leave on average for every killing.²⁴ Even for those who can afford to live in low-crime neighborhoods, the threat of gun violence may have some distorting effect on day-to-day decisions regarding work and play, and creates concern about the risks that remain to friends and family.²⁵ Indeed, gunfire has a unique ability to terrorize a community; there are no "drive-by knifings" and few people are wounded by stray razorblades. A program that could reduce the threat of gun violence would be worth something to most households. In particular, a national survey found that the average household would be willing to pay \$239 per year in increased taxes for a thirty percent reduction in gun use in assault.²⁶

The impact of gun violence on the community is generally illustrated by the effects of the extraordinary reduction in homicide rates during the 1990s. According to the Federal Bureau of Investigation ("FBI"), criminal homicide dropped nationwide from 9.8 per 100,000 in 1991 to a low of 5.5 in 2000 (with a slight increase since then).²⁷ Many large cities enjoyed an equal or larger

^{1089, 1089 (2003);} Elizabeth Richardson Vigdor & James A. Mercy, *Disarming Batterers: The Impact of Domestic Violence Firearm Laws, in Evaluating Gun Policy, supra* note 2, at 157, 197-201.

^{20.} Cook, supra note 6, at 373-76.

^{21.} See Hemenway, supra note 4, at 54 ("You're just as likely to get punched in the mouth in a bar in Sydney [Australia] as in a bar in Los Angeles. But you're 20 times as likely to be killed in Los Angeles.") (alteration in original) (citation omitted).

^{22.} Philip J. Cook & Jens Ludwig, Gun Violence: The Real Costs 23, 188-91 (2000).

^{23.} Id. at 92-93; Julie Berry Cullen & Steven D. Levitt, Crime, Urban Flight, and the Consequences for Cities, 81 Rev. Econ. & Stat. 159, 159 (1999).

^{24.} Cook & Ludwig, supra note 22, at 104.

^{25.} See generally Cook & Ludwig, supra note 22; Philip J. Cook & Jens Ludwig, The Costs of Gun Violence Against Children, 12 Future Child. 87 (2002).

^{26.} Jens Ludwig & Philip J. Cook, The Benefits of Reducing Gun Violence: Evidence from Contingent-Valuation Survey Data, 22 J. Risk & Uncertainty 207, 218 (2001).

^{27.} Bureau of Justice Statistics Crime & Justice Data Online, supra note 13.

proportional reduction in serious violence.²⁸ This remarkable change has contributed to the renaissance of a number of inner city communities. A recent analysis estimates that the fall in violent crime in New York City accounts for about one-third of the post-1994 boom in property values.²⁹

B. Who Can Be Trusted?

Guns intensify violence, and it is guns in the hands of violent or reckless people that are of particular concern. While guns are intrinsically dangerous and could end up being misused in most any household,³⁰ the fact is that the risk of gun misuse is quite concentrated. In particular, it appears that a majority of killers have arrest records.³¹ Gun possession by violence-prone and criminally-involved individuals poses much higher costs for society than gun possession by more responsible people.³² That suggests another edit on the slogan: "Guns don't kill people; violent and impulsive people kill people—usually with guns."

In designing gun policy, it is important to determine whether "violence-prone" people can be identified from available records.

^{28.} See Bureau of Justice Statistics Crime & Justice Data Online, at http://bjsdata.ojp.usdoj.gov/dataonline/Search/Crime/Local/TrendsInOneVarLarge.cf m (last revised Jan. 16, 2003) (providing searchable data that demonstrates that cities including New York, Los Angeles, and Chicago enjoyed significant drops in violent crime between 1991 and 2000).

^{29.} Amy Ellen Schwartz et al., Has Falling Crime Driven New York City's Real Estate Boom?, 14 J. Housing Res. 101, 131-32 (2003).

^{30.} Recent research using case control methods demonstrates that gun possession is a strong positive correlate of the likelihood that a batterer will eventually kill his intimate partner. See Campbell et al., supra note 19, at 1094. More generally, a gun in the home has been shown to be a risk factor for homicide victimization, but only for gun homicide, after controlling for several other household characteristics. See generally Arthur L. Kellermann et al., Gun Ownership as a Risk Factor for Homicide in the Home, 329 New Eng. J. Med. 1084 (1993); Douglas J. Wiebe, Homicide and Suicide Risks Associated with Firearms in the Home: A National Case-Control Study, 41 Annals Emergency Med. 771 (2003). Other studies have documented that guns kept in the home are widely misused against other members of the household. See, e.g., Deborah Azrael & David Hemenway, 'In the Safety of Your Own Home': Results from a National Survey of Gun Use at Home, 50 Soc. Sci. & Med. 285, 290 (2000). A case control study in Washington state found that handgun purchase by a member of the family was associated with a substantial increase in homicide risk—with typically very long lags between purchase and killing. Peter Cummings et al., The Association Between the Purchase of a Handgun and Homicide or Suicide, 87 Am. J. Pub. Health 974, 974, 976 (1997). Whether these studies have identified a direct causal relationship is not clear, but the logic of availability for misuse is compelling.

^{31.} See generally Don B. Kates & Daniel D. Polsby, The Myth of the "Virgin Killer": Law-Abiding Persons Who Kill in Fit of Rage (2000) (unpublished manuscript, on file with the authors).

^{32.} On the other hand, there appears to be a close connection between the general prevalence of gun ownership and the availability of guns to criminals. Philip J. Cook & Jens Ludwig, *Does Gun Prevalence Affect Teen Gun Carrying After All?*, 42 Criminology 27, 27-28 (2004).

Federal law prohibits anyone with a felony conviction or under indictment from possessing a gun; those convicted of domestic violence or under a restraining order are also prohibited.³³ Licensed dealers must initiate a criminal history check on buyers before transferring a weapon.³⁴ Criminal history records have improved in recent years (with some help from federal programs), and around 200,000 would-be buyers are blocked from purchasing guns every year by routine administrative records checks.³⁵

Age as well as crime involvement is relevant to judging dangerousness. Common sense would suggest that a gun in the hands of an unsupervised child poses an unacceptable risk.³⁶ On this matter there appears to be popular consensus, incorporated in federal and state laws.³⁷

II. AN ARMED SOCIETY IS A POLITE SOCIETY

Does widespread gun ownership deter crime? The argument that private gun ownership is of positive benefit to the community rests on a claim that it does deter crime—as asserted, for example, by economist John R. Lott, Jr. in his book *More Guns, Less Crime*. But the best empirical evidence does not support this position. There is little correlation (either across jurisdictions or over time) between the volume of violent crime and the prevalence of gun ownership. For residential burglary, the evidence indicates that rates increase with gun prevalence, perhaps because guns have value to burglars. A very active topic of research in this area has been the evaluation of concealed-carry laws. Lott and others have published findings suggesting that states which eased restrictions on concealed carrying have experienced a reduction in homicide and perhaps other types of

In 1999, when checks on prospective purchasers of rifles and shotguns were added [to the federal requirement for background checks on handgun purchasers], some 204,000 persons—2.4% of those who applied—were denied the purchase. Approximately 70% of denials are for felony convictions or indictments, 10% are for domestic violence misdemeanor convictions, 3% are for domestic violence restraining orders, and the remainder are for other reasons.

Garen J. Wintemute, Where the Guns Come from: The Gun Industry and Gun Commerce, 12 Future Child. 54, 67 (2002).

^{33.} Vernick & Hepburn, supra note 18, at 350, 352.

^{34.} Id. at 351.

^{35.} One author has noted:

^{36.} See Cook & Ludwig, supra note 32, at 28.

^{37.} Vernick & Hepburn, supra note 18, at 351-52.

^{38.} See John R. Lott, Jr., More Guns, Less Crime: Understanding Crime and Gun Control Laws (1998).

^{39.} See generally Mark Duggan, More Guns, More Crime, 109 J. Pol. Econ. 1086 (2001).

^{40.} See generally Philip J. Cook & Jens Ludwig, Guns and Burglary, in Evaluating Gun Policy, supra note 2, at 74.

But these findings have been effectively rebutted by crimes.41 subsequent research, and it now appears that easing concealed-carry restrictions has little effect on crime rates.⁴²

Even if widespread gun ownership in a community offers little (if any) crime deterrent, there may still be some crime-related benefit. Gun owners are occasionally able to interrupt a burglary or stop an assailant from causing serious injury, but it has proven difficult to develop a reliable estimate of just how often that happens in practice. Surveys provide a wide range of estimates, depending on the precise wording of questions and how they are posed to respondents.⁴³ Estimates that there are millions of self-defense uses per year have been reported, but are far out of line with reliable evidence about crime rates and gunshot injuries, and hence have little credibility.44 A more reasonable estimate from the National Crime Victimization Survey, which is still subject to some challenge on methodological grounds, is that there are about 100,000 instances per year in which someone uses a gun to defend against an assault or break-in.45

Regardless of the objective risks and benefits of gun ownership, it often confers a sense of security upon the members of households who choose to own guns.⁴⁶ That subjective benefit is relevant in assessing the public interest.⁴⁷

III. WHEN GUNS ARE OUTLAWED, ONLY OUTLAWS WILL HAVE **GUNS**

If this familiar slogan is not a tautology, it suggests something about the likelihood that criminals will comply with restrictions on gun markets and gun possession. Will youths and criminals do whatever it takes to obtain their guns? The short answer is "no." Although some

41. See John R. Lott, Jr. & David B. Mustard, Crime, Deterrence, and Right-to-

43. See Philip J. Cook et al., The Gun Debate's New Mythical Number: How Many Defensive Gun Uses Per Year?, 16 J. Pol'y Analysis & Mgmt. 463, 464 (1997).

Carry Concealed Handguns, 26 J. Legal Stud. 1, 64-65 (1997); John R. Lott, Jr., Editorial, Gun Control Misfires in Europe, Wall St. J., Apr. 30, 2002, at A16.

42. See generally Ian Ayres & John J. Donohue III, Shooting Down the "More Guns, Less Crime" Hypothesis, 55 Stan. L. Rev. 1193 (2003); Dan A. Black & Daniel S. Nagin, Do Right-to-Carry Laws Deter Violent Crime?, 27 J. Legal Stud. 209 (1998); John J. Donohue, The Impact of Concealed-Carry Laws, in Evaluating Gun Policy, supra note 2, at 287; Duggan, supra note 39; Jens Ludwig, Concealed-Gun-Carrying Laws and Violent Crime: Evidence from State Panel Data, 18 Int'l Rev. L. & Econ.

^{44.} See Hemenway, supra note 4, at 66-69. See generally David Hemenway, Survey Research and Self-Defense Gun Use: An Explanation of Extreme Overestimates, 87 J. Crim. L. & Criminology 1430 (1997); Gary Kleck & Marc Gertz, Armed Resistance to Crime: The Prevalence and Nature of Self-Defense with a Gun, 86 J. Crim. L. & Criminology 150 (1995).

^{45.} See Cook et al., supra note 43, at 468. See generally Cook, supra note 4.

^{46.} Cook & Ludwig, supra note 1, at 43.

^{47.} See generally Philip J. Cook et al., Gun Control, in Crime: Public Policies for Crime Control 291 (James Q. Wilson & Joan Petersilia eds., 2002).

violent people are highly motivated to obtain a gun for self-protection or to perpetrate their crimes, that is not the rule. In fact, most violent crime is not committed with guns. For example, only about forty percent of hold-ups, muggings, and other robberies—crimes for which a gun provides a real advantage to the perpetrator—are committed with guns. Most robberies are committed with knives, clubs, or force. Furthermore, several studies of violent youth gangs have found that only a minority of the members have ready access to a gun at any point in time. Based on interview studies with inner-city youths and criminals, there appear to be a number of reasons why they might be without a gun, including some who say that guns are too expensive or hard to find. The point is, the relevant group—the group that is violence prone or involved in crime—is far from homogeneous in any dimension, including their determination to obtain a gun and keep it handy.

48. FBI, supra note 7, at 32.

^{49.} See Cook, supra note 6, at 363.

^{50.} See Terence P. Thornberry et al., Gangs and Delinquency in Developmental Perspective 128 (2003) (stating the percentage of male gang members and nonmembers who carry or own guns); Beth Bjerregaard & Alan J. Lizotte, Gun Ownership and Gang Membership, 86 J. Crim. L. & Criminology 37, 43, 56 (1995) (stating that in a study of teenage male gang members, the prevalence of gun ownership for self-protection during three successive "waves" was 24.4%, 30.6%, and 36.7%, respectively, and the prevalence of gun ownership for sporting purposes was 0%, 11.1%, and 13.3%, respectively).

^{51.} See Joseph F. Sheley & James D. Wright, In the Line of Fire: Youth, Guns, and Violence in Urban America 57-74 (1995); James D. Wright & Peter H. Rossi, Armed and Considered Dangerous: A Survey of Felons and Their Firearms 128-29, 133 (1994) (finding that the cost of a gun and the difficulty in obtaining a gun factored—albeit as the lowest-ranking factors—into the decision of those surveyed to carry weapons other than guns); Philip J. Cook et al., Regulating Gun Markets, 86 J. Crim. L. & Criminology 59, 64 (1995); Cook & Ludwig, supra note 32, at 31 (noting that of prisoners who committed their crime while armed with something other than a gun, twenty-eight percent reported that it was "too much trouble to get [a gun]" and twenty-eight percent responded that a gun "costs too much").

TABLE 2: PERCENTAGE OF SERIOUS VIOLENT CRIMES INVOLVING GUNS IN 2002⁵²

	FBI Uniform Crime Reports	National Crime Victimization Survey
Criminal Homicide	66.7	_
Aggravated Assault	19.0	26.5
Robbery	42.1	25.6
Rape	_	4.6

Indirect evidence on this matter comes from studies of other types of risky behavior. While parents of adolescents may find it hard to believe, the research evidence is clear: rates of youthful drinking, smoking, reckless driving, and criminal activity are all influenced to some extent by rational considerations of cost and consequence.⁵³ Prices, regulations, and legal sanctions can all influence the overall rates of participation.

A direct indication that even criminally active people can be persuaded to give up guns comes from systematic evaluations of policy interventions. The best known one is probably Boston's Operation Ceasefire, instituted by a consortium of law enforcement agencies in 1996 in response to a very high rate of gun violence among local gangs.⁵⁴ Gang members were directly informed by the police that the entire gang would be held accountable if any one member was known to have misused a gun.⁵⁵ An abrupt and sustained drop in deadly gang violence followed.⁵⁶ Figure 1 depicts the annual gunhomicide counts from 1981 to 1999 for youths age fifteen to twenty-

^{52.} FBI, *supra* note 7, at 23, 32, 38; Bureau of Justice Statistics, Office of Justice Programs, U.S. Dep't of Justice, Criminal Victimization in the United States, 2002 Statistical Tables, National Crime Victimization Survey, at tbl. 66, *available at* http://www.ojp.usdoj.gov/bjs/pub/pdf/cvus02.pdf.

^{53.} See generally Philip J. Cook & Michael J. Moore, Environment and Persistence in Youthful Drinking Patterns, in Risky Behavior Among Youths: An Economic Analysis 375 (Jonathan Gruber ed., 2001) [hereinafter Risky Behavior Among Youths] (discussing drinking); Thomas S. Dee & William N. Evans, Teens and Traffic Safety, in Risky Behavior Among Youths, supra, at 121 (discussing reckless driving); Jonathan Gruber & Jonathan Zinman, Youth Smoking in the United States: Evidence and Implications, in Risky Behavior Among Youths, supra, at 69 (discussing smoking); Steven D. Levitt, Juvenile Crime and Punishment, 106 J. Pol. Econ. 1156 (1998) (discussing criminal activity generally).

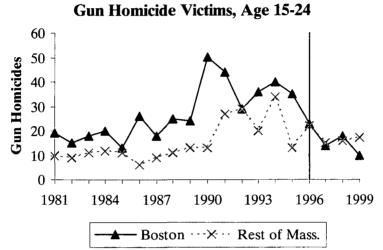
^{54.} See generally Anthony A. Braga et al., Measuring the Impact of Operation Ceasefire, in Reducing Gun Violence: The Boston Gun Project's Operation Ceasefire 55 (2001).

^{55.} *Id*.

^{56.} Id.

four, for Boston (Suffolk County), and for the rest of Massachusetts, which can be considered a sort of control group.⁵⁷

FIGURE 1: GUN HOMICIDE VICTIMIZATIONS, AGE 15-24, BOSTON AND THE REST OF MASSACHUSETTS FROM 1981 TO 1999⁵⁸



Operation Ceasefire is the most dramatic, but there are other instances in which special police efforts to keep guns off the street have been carefully evaluated and also found effective.⁵⁹ In particular, evaluations of intensive police patrols directed against illicit carrying in Pittsburgh (and perhaps Kansas City and Indianapolis as well) find evidence suggestive of a deterrent effect.⁶⁰ There have been mixed

^{57.} See Jeffrey Fagan, Policing Guns and Youth Violence, 12 Future Child. 133, 137 (2002) (making a similar comparison, and concluding that the drop in youth homicides was not confined to Boston, but rather shared across Massachusetts cities, suggesting that the intervention in Boston may not deserve much credit). Note, however, that the time series for the other towns in Massachusetts with populations of 25,000 to 50,000 drops the year before the intervention and then actually increases in 1996, the first year of the Boston intervention. Id. In any event, Anthony A. Braga and his co-authors choose to use other large cities as a control, rather than the rest of Massachusetts. See Anthony A. Braga et al., Problem-Oriented Policing, Deterrence, and Youth Violence: An Evaluation of Boston's Operation Ceasefire, 38 J. Res. Crime & Delinquency 195, 209-15 (2001).

^{58.} Nat'l Ctr. for Health Statistics, U.S. Dep't of Health & Human Servs., Mortality Detail and Multiple Cause of Death, Study No. 3874 (1981); and Multiple Cause of Death, Study Nos. 9880 (1982), 9879 (1983), 9811 (1984), 9812 (1985), 9723 (1986), 9724 (1987), 6299 (1988), 6257 (1989), 6319 (1990), 6320 (1991), 6546 (1992), 6799 (1993), 2201 (1994), 2392 (1995), 2702 (1996), 3085 (1997), 3306 (1998), 3473 (1999) (unpublished data, on file with authors), at http://www.icpsr.umich.edu/ (last visited Sept. 23, 2004) (allowing visitors to search study by study).

^{59.} See generally Fagan, supra note 57.

^{60.} See generally Jacqueline Cohen & Jens Ludwig, Policing Crime Guns, in Evaluating Gun Policy, supra note 2, at 217; Edmund F. McGarrell et al., Reducing

results from evaluations of policies to increase sentences for illicit carrying and other gun crime. Project Exile, a widely touted program started in Richmond, Virginia, which seeks long sentences for felons convicted of illicit gun possession, appears to have had negligible effect on gun violence.⁶¹ But systematic evaluations have concluded that a well-publicized law requiring a mandatory prison sentence for illicit carrying in Massachusetts—the Bartley-Fox Amendment—had some success in reducing gun use in assault.⁶²

For many criminals, a gun is a desirable but not essential tool. Even modest changes in the legal consequences of gun use, or in the cost or difficulty of obtaining one, will make a difference to some.

A. Gun Prevalence and Criminal Use

While gun ownership is widespread in the United States as a whole, there are large geographic differences in just *how* widespread. Figure 2 depicts the household prevalence for handgun ownership and ownership of any type of weapon, by census division. Note that handgun ownership tracks closely with any gun ownership across divisions. The prevalence of any gun ownership is twice as high in the deep South as in the northeast, with the other divisions in between. State-level rates of gun ownership differ still more, ranging from about thirteen percent (in Hawaii and Massachusetts) to over fifty-five percent (in several states of the deep South).⁶³

The challenge of keeping guns away from youths and criminals increases with the general prevalence of gun ownership. Correlational evidence demonstrates that youths and criminals are more likely to carry and misuse guns in communities in which guns are prevalent.⁶⁴ As a result, case-fatality rates are elevated in robberies and assaults in gun-dense communities.⁶⁵ The highest homicide rates tend to occur in communities that combine a high rate of violence with a high rate of gun ownership.⁶⁶ A reasonable conclusion is that gun control

Firearms Violence Through Directed Police Patrol, 1 Criminology & Pub. Pol'y 119 (2001); Lawrence W. Sherman & Dennis P. Rogan, Effects of Gun Seizures on Gun Violence: 'Hot Spots' Patrol in Kansas City, 12 Just. Q. 673 (1995).

^{61.} See generally Steven Raphael & Jens Ludwig, Prison Sentence Enhancements: The Case of Project Exile, in Evaluating Gun Policy, supra note 2, at 251.

^{62.} Act of July 30, 1974, ch. 649, 1974 Mass. Acts 645 (codified at Mass. Ann. Laws ch. 269 § 10 (Law. Co-op. 1992)). See generally Glenn L. Pierce & William J. Bowers, The Bartley-Fox Gun Law's Short-Term Impact on Crime in Boston, 455 Annals Am. Acad. Pol. & Soc. Sci. 120 (1981).

^{63.} Deborah Azrael et al., State and Local Prevalence of Firearms Ownership: Measurement, Structure, and Trends, 20 J. Quantitative Criminology 43, 58-60 (2004). 64. See generally Philip J. Cook, The Effect of Gun Availability on Robbery and

^{64.} See generally Philip J. Cook, The Effect of Gun Availability on Robbery and Robbery Murder: A Cross-Section Study of Fifty Cities, 3 Pol'y Stud. Rev. Ann. 743 (1979); Cook & Ludwig, supra note 32; Duggan, supra note 39.

^{65.} See Philip J. Cook & Jens Ludwig, Litigation as Regulation: Firearms, in Regulation Through Litigation 67, 78 (W. Kip Viscusi ed., 2002).
66. Id. at 77-78.

measures that reduced the prevalence of guns in a community would reduce the prevalence of gun use in assault and hence the homicide rate.⁶⁷ However, the gun-control policies adopted by the federal and state governments in the United States are not intended to reduce the general rate of gun ownership, but rather to bar acquisition and possession by those who are prohibited by reason of age or criminal record.⁶⁸

FIGURE 2: HOUSEHOLD PREVALENCE OF GUN AND HANDGUN OWNERSHIP—CENSUS DIVISION AVERAGES FOR 1996-2000⁶⁹

🗆 Firearm % 🔳 Handgun % **■**35.3 East South Central **3** 53.0 West North Central 142.0 25.0West South Central 40.3 South Atlantic 40.0 Mountain 40.0 East North Central ☑ 37.0 **Pacific** 32.3 New England 24.7 Middle Atlantic 20.3 0 10 20 30 40 50 60 Percent of Households

Household Gun Prevalence by Census Division

^{67.} See Robert L. Ohsfeldt & Michael A. Morrisey, Firearms, Firearms Injury, and Gun Control: A Critical Survey of the Literature, 13 Advances Health Econ. & Health Services Res. 65, 69-70 (1992).

^{68.} See generally Cook & Ludwig, supra note 65; Franklin E. Zimring, Firearms and Federal Law: The Gun Control Act of 1968, 4 J. Legal Stud. 133 (1975).

^{69.} This figure is based on data from a series of surveys. James A. Davis et al., General Social Surveys, 1972-2002, Study No. 3728 (unpublished data, on file with authors), at http://www.icpsr.umich.edu/ (last visited Sept. 23, 2004) (allowing visitors to search study by study). Census divisions contain the following states: East South Central—Alabama, Kentucky, Mississippi, Tennessee; West North Central—Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; West South Central—Arkansas, Louisiana, Oklahoma, Texas; South Atlantic—Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia; East North Central—Illinois, Indiana, Michigan, Ohio, Wisconsin; New England—Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island,

What is the mechanism that links gun prevalence to criminal gun use? Guns are certainly versatile tools, and may be put to uses that were never considered at the time they were acquired. In some cases an assault is perpetrated by a family member with a gun that has been in the home for many years. But in practice that scenario is relatively rare, and the motivations for acquisition are closely linked to actual use. In particular, guns used in crime tend to be acquired shortly before the use. 70 The "career" of a criminal tends to be quite short typically a handful of years.⁷¹ So stopping the transactions that arm each new cohort would eliminate most criminal misuse in a few years' time. Most transactions that move guns to high risk people and criminal uses are directly from the diffuse inventory in private hands. In particular, guns move from the licit to illicit circulation as the result of theft from a home or vehicle, or private sale in what is known as the secondary market,⁷² or short-term loans and rental arrangements.⁷³ That is not the whole story; some of the guns used in crime are sold by licensed dealers to criminals or their straw purchasers, as suggested by the disproportionate number of crime guns that are less than a year old and by the results of law enforcement investigations of "dirty" dealers.⁷⁴ But most crime guns come from diffuse sources.⁷⁵

B. Gun Policy: A Pragmatic Approach

The evidence suggests that slogans are generally a poor guide to designing effective policy. In sum, that evidence strongly suggests that

Vermont; and Middle Atlantic-New Jersey, New York, Pennsylvania.

^{70.} See Franklin E. Zimring, Street Crime and New Guns: Some Implications for Firearms Control, 4 J. Crim. Just. 95, 104 (1976) (recognizing for the first time that newer handguns contribute disproportionately to the crimes that result in gun confiscation); see also Philip J. Cook & Anthony A. Braga, Comprehensive Firearms Tracing: Strategic and Investigative Uses of New Data on Firearms Markets, 43 Ariz. L. Rev. 277, 295 (2001) (reporting that of the violent-crime-involved guns submitted for tracing by law enforcement agencies in 1999, about fifteen percent had been first sold at retail within one year, and about one-third within three years). Since most crime guns are not purchased at retail by the criminal, we know that the elapsed time from the last transaction (purchase, theft, loan) must be less than the time since the first retail sale. See id. at 296. Unfortunately, there is not much direct evidence on that matter, but some interview data suggests that there is often a close temporal connection. See Cook et al., supra note 51, at 64-65.

^{71.} See 1 Panel on Research on Criminal Careers, Nat'l Research Council, Criminal Careers and "Career Criminals" 94 (Alfred Blumstein et al. eds., 1986) ("Research on the length of criminal careers indicates, first, that careers are reasonably short, averaging about 5 years for offenders who are active in index offenses as young adults."). Note, however, that "this average hides major differences across offenders." 1 Id. at 5.

^{72.} Cook et al., supra note 51, at 68.

^{73.} See Sheley & Wright, supra note 51, at 46-50.

^{74.} Wintemute, supra note 35, at 60-62.

^{75.} See Anthony A. Braga et al., The Illegal Supply of Firearms, in 29 Crime and Justice: A Review of Research 319, 337-40 (Michael Tonry ed., 2002) [hereinafter 29 Crime and Justice]; Cook & Braga, supra note 70, at 291-94.

gun use intensifies violence and has considerable cost to the community; that widespread gun ownership has little deterrent effect on the residential burglary or other types of crime, although it does provide a means of self-defense and peace of mind to some; and that the extent to which youths and criminals carry and misuse guns depends not just on their weapon-related preferences, but also on gun prevalence and the legal consequences of gun misuse.

We organize the discussion of policy alternatives around two large topics, which are essentially "demand" and "supply" or, alternatively, "availability" and "use." The "demand" topic includes policies intended to make guns a legal liability to criminals, in the sense of increasing the likelihood or severity of punishment for those who choose to use guns in their criminal activity. The "supply-availability" topic includes policies intended to reduce the availability of guns to those who are proscribed from possessing them. We do not have much to say here about the possibilities for removing access to guns by suicidal people, although it is an important topic in its own right. The

1. Increasing the Legal Liability to Those Who Misuse Guns

If criminals know that carrying a gun or using a gun in crime will increase the likelihood or severity of legal consequences, then some will substitute other weapons or modify their behavior to reduce the need for a weapon.⁷⁷ What is required is that guns receive priority in law enforcement, prosecution, and sentencing. The legal authority for giving priority to reducing gun violence over violence with less lethal weapons is generally available. Operation Ceasefire demonstrated that such an effort can be usefully tailored to the violence problems that are causing the greatest concern in a jurisdiction.⁷⁸ That success helped spawn the federal program known as Project Safe Neighborhoods, in which local jurisdictions are encouraged to develop gun-enforcement programs in conjunction with U.S. attorneys.⁷⁹ Further, most states create the possibility of a gun-emphasis policy in

^{76.} See generally David A. Brent, Firearms and Suicide, 932 Annals N.Y. Acad. Sci. 225 (2001); Mark Duggan, Guns and Suicide, in Evaluating Gun Policy, supra note 2, at 41; Matthew Miller & David Hemenway, Firearm Prevalence and the Risk of Suicide: A Review, 2 Harv. Health Pol'y Rev. 29 (2001); Matthew Miller & David Hemenway, The Relationship Between Firearms and Suicide: A Review of the Literature, 4 Aggression & Violent Behav. 59 (1999).

^{77.} See generally Philip J. Cook & James A. Leitzel, "Perversity, Futility, Jeopardy": An Economic Analysis of the Attack on Gun Control, 59 Law & Contemp. Probs. 91 (1996).

^{78.} See generally George Tita et al., Reducing Gun Violence: Results from an Intervention in East Los Angeles (2003); David M. Kennedy et al., Youth Violence in Boston: Gun Markets, Serious Youth Offenders and a Use-Reduction Strategy, 59 Law & Contemp. Probs. 147 (1996).

^{79.} See Project Safe Neighborhoods, America's Network Against Gun Violence, at http://www.psn.gov (last visited Sept. 21, 2004).

the courts by specifying sentencing enhancements for use of a gun in criminal assaults and other crimes.⁸⁰ In particular, a recent study suggests that domestic violence has become less deadly as a result of state and federal laws that provide criminal penalties for gun possession and use by domestic batterers.⁸¹

Some gun-emphasis programs in law enforcement are more cost-effective than others. Project Exile is an example of a program that despite the favorable publicity given the initial implementation in Richmond, has not been effective in reducing gun violence. Its commendable goal of combating a wave of gun violence in the early 1990s was to be achieved by the threat of severe sentences for one group: those banned from gun possession due to their criminal record. One explanation for the apparent ineffectiveness of this program is its focus on increasing the severity of punishment rather than the likelihood. Deterrence research suggests that crime is generally more responsive to changes in the perceived likelihood of punishment, than to changes in the severity. 83

In line with the goal of increasing the likelihood of punishment for gun crime are programs intended to help police identify a suspect in a criminal shooting, or generate evidence against a suspect in a shooting. It is now routine in many jurisdictions for law enforcement agencies to trace confiscated guns through the data system that is managed by the Bureau of Alcohol, Tobacco, Firearms and Explosives ("ATF").⁸⁴ A successful trace links the gun to the first retail purchaser. Most traces begin with the serial number and model of the gun, which is checked against the records of the manufacturer or importer, then the distributor, and then the licensed dealer who sold it at retail. There are several loose links in this chain, and only about half of trace attempts are successful.⁸⁵ It is also true that most crime guns are transferred one or more times following the first retail sale, and those transfers are usually not recorded in any official record.⁸⁶

The tracing system could be improved in a variety of ways. California, for example, requires that all handgun transfers be registered with a state agency, which creates the possibility of following a handgun along the chain of transfers following the first

^{80.} See generally Vernick & Hepburn, supra note 18.

^{81.} Vigdor & Mercy, supra note 19, at 183-88.

^{82.} See generally Raphael & Ludwig, supra note 61.

^{83.} See Philip J. Cook, Reducing Injury and Death Rates in Robbery, Policy Analysis, Winter 1980, at 21, 26-28; Daniel S. Nagin, Criminal Deterrence Research at the Outset of the Twenty-First Century, in 23 Crime and Justice: A Review of Research 1, 33-36 (Michael Tonry ed., 1998).

^{84.} Cook & Braga, supra note 70, at 277.

^{85.} Id. at 290.

^{86.} See Julius Wachtel, Sources of Crime Guns in Los Angeles, California, 21 Policing: Int'l J. Police Strategies & Mgmt. 220, 221-24 (1998).

retail sale.⁸⁷ While that system has not been adopted in other states due to opposition by those who assert that government cannot be trusted with registration records, there are more limited changes that would still be useful—for example, a requirement that licensed dealers report the model and serial number (but not the buyer) for each gun that they sell, so that the tracing process could bypass the distribution chain and identify the right dealer directly, including for guns sold secondhand by dealers.

ATF also compiles a database with ballistic information on crimescene bullets, shell casings, and recovered guns.⁸⁸ This database creates the possibility of documenting (or discovering) that two or more shootings involved the same gun. Maryland and New York have taken this idea one step further, requiring that new handguns sold in those states be test fired, and the ballistics information recorded.⁸⁹ Whether this requirement will prove useful remains to be seen.

In general the "demand side" approach is promising because for many criminals the choice of whether to carry and use a gun depends in part on the consequences. Law enforcement should seek to tip the balance by making the legal consequences more severe and salient.

2. Reducing Gun Availability

The evidence that availability matters comes from the analysis of how weapon choice in crime is influenced by the prevalence of gun ownership in a county or state; as noted above, the likelihood that a robber or assailant will use a gun, or that a teenager will carry one, is closely related to availability in that sense. On the other hand there is little evidence that regulations on gun commerce have been effective at reducing interpersonal gun violence.⁹⁰

The Federal Gun Control Act stipulates that only licensed dealers are authorized to receive interstate shipments of guns, and that these

^{87.} Violence Prevention Research Program, Handgun Commerce in California, 1999, at 1 (2002), available at http://www.ucdmc.ucdavis.edu/vprp/Hgcomm99.pdf.

^{88.} See generally Bureau of Alcohol, Tobacco, Firearms and Explosives, National Integrated Ballistic Information Network, ATF's NIBIN Program (May 2003), at http://www.atf.gov/nibin/nibin.pdf.

^{89.} See, e.g., Johns Hopkins Univ. Ctr. for Gun Policy & Research, Fact Sheet, The Maryland "Responsible Gun Safety Act of 2000," at http://www.jhsph.edu/gunpolicy/MDlaw_summary.pdf (last visited Sept. 21, 2004) (discussing the Maryland statute).

^{90.} See generally Kleck, supra note 4; Lott, supra note 38; Gary Kleck & E. Britt Patterson, The Impact of Gun Control and Gun Ownership Levels on Violence Rates, 9 J. Quantitative Criminology 249 (1993). A caution: the lack of definitive results reflects in part the technical problems of conducting evaluations of this sort. The challenge is to sort out the effect of a typically modest policy change from all the other factors influencing crime rates. Relatively small reductions in homicide rates may well be lost in the statistical "noise," and there has been extensive debate in the technical literature on how best to control for other systematic sources of variation. See Hemenway, supra note 4, at app. A.

dealers must initiate background checks on buyers to determine whether they are eligible to purchase.⁹¹ The background check for handgun sales was imposed nationwide in 1994 together with a mandatory waiting period as part of the law named in honor of James Brady, President Reagan's press secretary who was shot during the assassination attempt against Reagan in 1982. In 1998, the legal requirement was expanded to include sales of rifles and shotguns, at the same time that an "instant" background check provision replaced the waiting period. Since 1994, hundreds of thousands of would-be buyers have been denied as a result of the discovery of a criminal record or other disqualifying condition during the background check.⁹³ But our evaluation found that the law had no measurable effect on gun homicide rates or overall homicide rates. That evaluation contrasted homicide trends in thirty-two states that instituted a background check as a result of the federal law in 1994 (the "treatment" states), with the eighteen "control" states that already had such a requirement in place.

^{91.} Gun Control Act of 1968, Pub. L. No. 90-618, 82 Stat. 1213 (codified in scattered sections of 18 U.S.C. and 26 U.S.C.). See also Vernick & Hepburn, supra note 18, at 350-52; Zimring, supra note 68, at 148-57.

^{92.} James B. Jacobs, Can Gun Control Work? 97-98 (2002).

^{93.} Michael Bowling et al., Bureau of Justice Statistics, U.S. Dep't of Justice, Background Checks for Firearm Transfers, 2002, at 2 (2003), available at http://www.ojp.usdoj.gov/bjs/pub/pdf/bcft02.pdf.

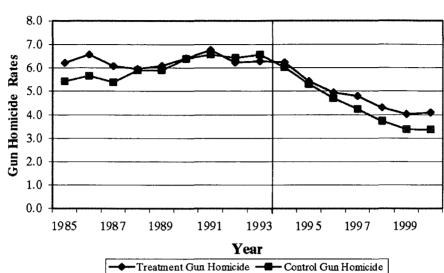


FIGURE 3: TRENDS IN HOMICIDE VICTIMIZATION RATES FOR AGE 25+94

It should be noted that the Brady Law has had a large effect on interstate-trafficking patterns, and in particular has reduced the flow of guns from lax-control states to more tightly regulated states.⁹⁵ It is certainly plausible, then, that this law reduced gun availability in places like Chicago and Boston. But evidence from gun use in homicide provides no support for this conjecture.⁹⁶

95. See Cook & Braga, supra note 70, at 303-07; D.W. Webster et al., Relationship Between Licensing, Registration, and Other Gun Sales Laws and the Source State of Crime Guns, 7 Inj. Prevention 184, 186-88 (2001).

96. See generally Philip J. Cook & Jens Ludwig, The Effects of the Brady Act on Gun Violence, in Guns, Crime, and Punishment in America 283 (Bernard E. Harcourt ed., 2003). This finding also has implications for what may be learned from gun policy evaluations that focus on interstate transfer of firearms as the outcome of interest. See generally Webster et al., supra note 95; Douglas S. Weil & Rebecca C. Knox, Effects of Limiting Handgun Purchases on Interstate Transfer of Firearms, 275 JAMA 1759 (1996). After all, even dramatic changes in this measure need not translate into changes in the rate of gun crime.

^{94.} Philip J. Cook, Evidence-Based Gun Policy, Address Before the Eighth HELP Network Conference 10 (Apr. 18. 2004), http://www.helpnetwork.org/pdf/2004%20Conference/Phil%20Cook.pdf. presented at the HELP Network Conference was based on calculations using mortality data files from 1985 to 2000 obtained through the Centers for Disease Control and Prevention, National Center for Injury Prevention & Control, WISOARS Injuries: Mortality http://webappa.cdc.gov/sasweb/ncipc/mortrate.html (last reviewed Mar. 4, 2004). For an earlier and slightly different interpretation of the same data, see Jens Ludwig & Philip J. Cook, Homicide & Suicide Rates Associated with Implementation of the Brady Handgun Violence Prevention Act, 284 JAMA 585, 588 (2000).

Some states and localities have extended federal regulations: Illinois requires that gun owners have a state-issued identification card:97 several states restrict sales of handguns to one per month per individual buyer; other states impose a waiting period or require some version of registration on handgun sales.⁹⁸ Chicago (in 1982) and Washington, D.C. (in 1976) have banned residents from acquiring handguns and restricted the operation of gun dealers within city limits.99 The effects of the Washington ban have been evaluated several times; the data do suggest a reduction in gun use in criminal violence in the early years following the ban. 100 But the huge spike in youth homicide that occurred in the city during the late 1980s, when Washington became the "murder capital," undercuts the case for effectiveness.¹⁰¹ The Chicago ban in 1982 has not been evaluated systematically, although the homicide victimization rate for black males ages ten to twenty-four in Cook County, Illinois rose sharply between 1984 and 1998.¹⁰² To determine whether gun availability declined in response to the Chicago ban, we analyzed the best available proxy for the prevalence of gun ownership, the percentage of suicides with guns. Figure 4 depicts the time series before and after the ban, both for Cook County (which includes Chicago) and the rest of Illinois (as a sort of control group). There is some decline in this percentage in Chicago during the first three years, but then a long upward trend that is not matched by the rest of the state. It appears

^{97.} See Vernick & Hepburn, supra note 18, at 378 (stating that in Illinois, there is a maximum thirty-day waiting period in order to receive a Firearm Owner Identification Card (Permit)).

^{98.} Id. at 353-57.

^{99.} See Chi., Ill. Municipal Code § 8-20-050, -170 (LEXIS through Council Journal 2004); D.C. Code Ann. § 7-2502.01-.02, (LEXIS through 2004 Act 15-441).

^{100.} The ban on handgun acquisition in Washington, D.C. was imposed in 1976, and was associated with an initial reduction in gun crime and homicide. See generally Edward D. Jones III, The District of Columbia's "Firearm Control Regulations Act of 1975": The Toughest Handgun Control Law in the United States - Or Is It?, 455 Annals Am. Acad. Pol. & Soc. Sci. 138 (1981); Colin Loftin et al., Effects of Restrictive Licensing of Handguns on Homicide and Suicide in the District of Columbia, 325 New Eng. J. Med. 1615 (1991). The latter evaluation was challenged on the grounds that the control group—the D.C. suburbs—was not adequate. See generally Chester L. Britt et al., A Reassessment of the D.C. Gun Law: Some Cautionary Notes on the Use of Interrupted Time Series Designs for Policy Impact Assessment, 30 Law & Soc'y Rev. 361 (1996). But see David McDowall et al., Using Quasi-Experiments to Evaluate Firearm Laws: Comment on Britt et al.'s Reassessment of the D.C. Gun Law, 30 Law & Soc'y Rev. 381 (1996) (comparing gun homicide and suicide trends in Washington with what was observed in other nearby cities). Of particular interest is Baltimore, which experienced a reduction in gun homicides around the time of the D.C. ban, but no decline in gun suicides. Id. at 384-85.

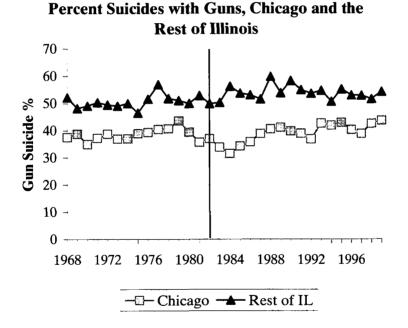
^{101.} The black male homicide victimization rate for ages ten through twenty-four in the District of Columbia climbed from 65.3 per 100,000 people in the mid 1980s to 512 per 100,000 people in the early 1990s. See Philip J. Cook & John H. Laub, After the Epidemic: Recent Trends in Youth Violence in the United States, in 29 Crime and Justice, supra note 75, at 1, 19.

^{102.} Id.

reasonable to conclude that any effect of the ban on gun prevalence was temporary.

That such regulations have not had measurable effects on gun availability to criminals may be a reflection of the ease with which these regulations are circumvented by the informal, secondary market, or the limits of available statistical techniques to detect modest policy impacts. Because many local gun control measures appear to be undermined in part by across-state gun trafficking, there is some chance that similar laws enacted at the federal rather than state level could be more effective. But currently there is no direct evidence to support this conjecture.¹⁰³

FIGURE 4: TREND IN PERCENT SUICIDE WITH GUN IN CHICAGO AND THE REST OF ILLINOIS¹⁰⁴



103. See Jacobs, supra note 92, at 125-36 (offering a skeptical perspective on the possibilities of keeping guns from criminals).

^{104.} Nat'l Ctr. for Health Statistics, U.S. Dep't of Health & Human Servs., Mortality Detail and Multiple Cause of Death, Study No. 3874 (1981); Multiple Cause of Death, Study Nos. 3905 (1968-1973), 3906 (1974-1978), 3895 (1979), 3897 (1980), 9880 (1982), 9879 (1983), 9811 (1984), 9812 (1985), 9723 (1986), 9724 (1987), 6299 (1988), 6257 (1989), 6319 (1990), 6320 (1991), 6546 (1992), 6799 (1993), 2201 (1994), 2392 (1995), 2702 (1996), 3085 (1997), 3306 (1998), 3473 (1999) (unpublished data, on file with authors), at http://www.icpsr.umich.edu/ (last visited Sept. 23, 2004) (allowing visitors to search study by study). Note that the Chicago data is for Cook County in its entirety.

Most of the transfers that supply criminals with their guns are off-the-books sales or loans in which the immediate source is someone other than a licensed dealer. One segment of this secondary market consists of one-time deals between friends, neighbors, or family members, but there are also more organized segments of the market. One important structure in this market is the gun show, where would-be buyers and sellers come together in a large "flea market" where the main item of exchange is guns. There are also some individuals and illicit organizations that traffic in guns over an extended period, or that serve to broker deals that bring buyers and sellers together. In some cases the guns are new, having been acquired from a licensed dealer through a straw purchase or even off-the-books sale by the dealer.

Over thirty lawsuits have been brought against the firearms industry by cities and other plaintiffs, asserting among other things that the manufacturers and dealers have been negligent or worse in their business practices.¹⁰⁸ One goal of these suits has been to force the industry to take greater responsibility to ensure that retailers follow the rules and take steps to ensure that their customers are legitimate. These lawsuits have identified and documented a good deal of irresponsible and even criminal behavior on the part of licensed dealers, and it would surely be a step in the right direction if they were compelled to follow the rules or shut down.¹⁰⁹ Still, direct evidence on how much could be accomplished by this approach is not available.

Because most of the transfers that arm criminals occur in the secondary market, it is of particular interest to analyze possibilities for effective intervention. There are a variety of possibilities, from requiring that all transfers be channeled through licensed dealers and duly recorded (a requirement that could be strengthened if the transferor were otherwise to be held liable for any injuries caused by the gun), to increased efforts to police gun shows and shut down gun traffickers, to adoption of a federal rule that dealers could not make multiple handgun sales to the same individual. Another promising "pressure point" for reducing gun availability is theft, which accounts

^{105.} See generally Violence Policy Ctr., More Gun Dealers Than Gas Stations: A Study of Federally Licensed Firearms Dealers in America (1992); Wintemute, supra note 35.

^{106.} See supra note 72 and accompanying text.

^{107.} See supra note 74 and accompanying text.

^{108.} See Cook & Ludwig, supra note 65, at 92-93; Stephen P. Teret & Patti L. Culross, Product-Oriented Approaches to Reducing Youth Gun Violence, 12 Future Child. 119, 129 (2002).

^{109.} Wintemute, supra note 35, at 61.

^{110.} Virginia, Maryland, and California now limit handgun sales by dealers to one per customer per month. Vernick & Hepburn, *supra* note 18, at 356. The first such regulation was adopted in Virginia, which had been a major source for gun trafficking to the Northeast. Consequently, this flow was greatly reduced. Weil & Knox, *supra* note 96, at 1760.

for a flow of over a half million guns into the secondary market each year;¹¹¹ theft could be reduced if owners could be induced to lock their guns.

Guns are not subject to federal consumer product safety regulation, so existing restrictions on gun design have been imposed by specific legislation.¹¹² The 1934 National Firearms Act greatly restricted the private ownership of automatic weapons, sawed-off-shotguns, hand grenades, and other weapons associated with gangland violence. 113 This law certainly makes sense on the face of it, and appears to have been quite effective. In 1994, Congress adopted a modest extension (the Violent Crime Control and Law Enforcement Act) that banned production and transfer of certain semiautomatic "assault" weapons but did not restrict the circulation of the current stock of such guns, or forbid the manufacture of very similar weapons that meet the technical requirements of the law. 114 That law was sunsetted in 2004, and it was not renewed by Congress. A ban on certain small cheap handguns ("Saturday Night Specials") in Maryland appears to have reduced handgun homicide in that state, without affecting other types of homicide.115

More intriguing is the effort, partially funded by the federal government, to develop "smart" guns that would only be usable by the rightful owner. Unfortunately that effort has been guided by the very narrow goal of protecting law enforcement officers from being shot by their own weapon. Various designs are under consideration. For example, it might be possible to equip a gun with a safety mechanism that prevented the gun from firing unless it

^{111.} See Cook & Ludwig, supra note 1, at 30; Kleck, supra note 4, at 90-94.

^{112.} Teret & Culross, supra note 108, at 128. A recent study analyzed unintentional firearms deaths to determine what proportion was preventable by three safety devices: personalization devices, loaded chamber indicators, and magazine safeties. See generally J.S. Vernick et al., Unintentional and Undetermined Firearm Related Deaths: A Preventable Death Analysis for Three Safety Devices, 9 Inj. Prevention 307 (2003). The conclusion is that incorporating such devices into firearm design had the potential of saving hundreds of lives each year. Id.

^{113.} See National Firearms Act, ch. 757, 48 Stat. 1236 (1934); Vernick & Hepburn, supra note 18, at 350; Zimring, supra note 68, at 138, 149.

^{114.} Vernick & Hepburn, supra note 18, at 351-52. See generally Public Safety and Recreational Firearms Use Protection Act, Pub. L. No. 103-22, 108 Stat. 1996 (1994) (codified at 18 U.S.C. § 921 note); Jeffrey A. Roth et al., Impact Evaluation of the Public Safety and Recreational Firearms Use Protection Act of 1994 (1997).

^{115.} See generally Daniel W. Webster et al., Effects of Maryland's Law Banning "Saturday Night Special" Handguns on Homicides, 155 Am. J. Epidemiology 406 (2002).

^{116.} See Owner-Authorized Handguns: A Workshop Summary 14-17 (Lance A. Davis & Greg Pearson eds., 2003) [hereinafter Owner-Authorized Handguns]. See generally Philip J. Cook & James A. Leitzel, "Smart" Guns: A Technological Fix for Regulating the Secondary Market, 20 Contemp. Econ. Pol'y 38 (2002); Teret & Culross, supra note 108; Stephen P. Teret & Daniel W. Webster, Reducing Gun Deaths in the United States: Personalized Guns Would Help—And Would Be Achievable, 318 Brit. Med. J. 1160 (1999).

"recognized" the palm print of the person holding the gun, though any such high-tech biometric approach raises questions of reliability and cost. 117 In any event, a different, more ambitious goal should be considered. Design changes that made it convenient for the owner to lock his gun (while keeping the gun readily available for self-defense) could be helpful in reducing the large flow of stolen guns, thereby reducing one important source of guns to youths and criminals.¹¹⁸ Locking guns could also prevent children from unauthorized use of a gun in the household. While trigger locks are widely distributed and would be sufficient for this purpose if they were actually used, an internal keyed lock is more convenient and hence likely to be more widely used by owners. Several manufacturers already sell models with internal locks, 120 and Maryland now requires that all new handguns be equipped with integrated mechanical locking devices.¹²¹

It seems plausible that a requirement that new handguns be equipped with an internal locking mechanism operated by a separate key would pass a cost-benefit test. Its effectiveness in reducing unauthorized transfers would increase over time as an ever higher percentage of the guns in circulation were sold after the requirement If practical "smart" technology is some day went into effect. available, then that would be still better, depending on the details of its design.

CONCLUSION

The problems of gun violence are large, pervasive, and multifaceted. (Indeed, our discussion has virtually ignored one major facet of the gun problem, suicide—not because we deem it unimportant, but because to some extent it is a distinct topic, both with respect to the evidence and the array of promising policies.) Even interventions that reduce deaths by a percentage point or two may well be worthwhile, since that amounts to hundreds of deaths per year. The criminal justice system has front-line responsibility, but police and prosecutors do not always place appropriately high priority on separating guns from violence. Other agencies and organizations are also in a position to make a difference. Most obviously, the firearms industry could take greater responsibility for designing and marketing guns in ways that would reduce the costs engendered by the misuse of its product. Mental health agencies should ensure that the standard

^{117.} Owner-Authorized Handguns, supra note 116, at 15-16.

^{118.} See supra note 112 and accompanying text.

^{119.} See Hemenway, supra note 4, at 135. See generally Trudy Ann Karlson & Stephen W. Hargarten, Reducing Firearm Injury and Death: A Public Health Sourcebook on Guns (1997); Stephen P. Teret & Garen J. Wintemute, Policies to Prevent Firearm Injuries, Health Aff., Winter 1993, at 96.

^{120.} Karlson & Hargarten, supra note 119, at 132.

^{121.} Teret & Culross, supra note 108, at 128.

protocol for responding to the needs of a suicidal person should always include attention to his or her access to lethal weapons.¹²²

The way forward in the effort against gun violence is partly a matter of common sense, coupled with an experimental frame of mind. The evidence demonstrates that it is not a quixotic or futile endeavor, and the goal of separating guns from violence is worthy of a considerable investment.

^{122.} Cook & Ludwig, *supra* note 2, at 13-14 (discussing Mark Duggan's findings that gun availability directly impacts the suicide rate). *See generally* Duggan, *supra* note 76.

Notes & Observations