

JOHN R. LOTT, JR.

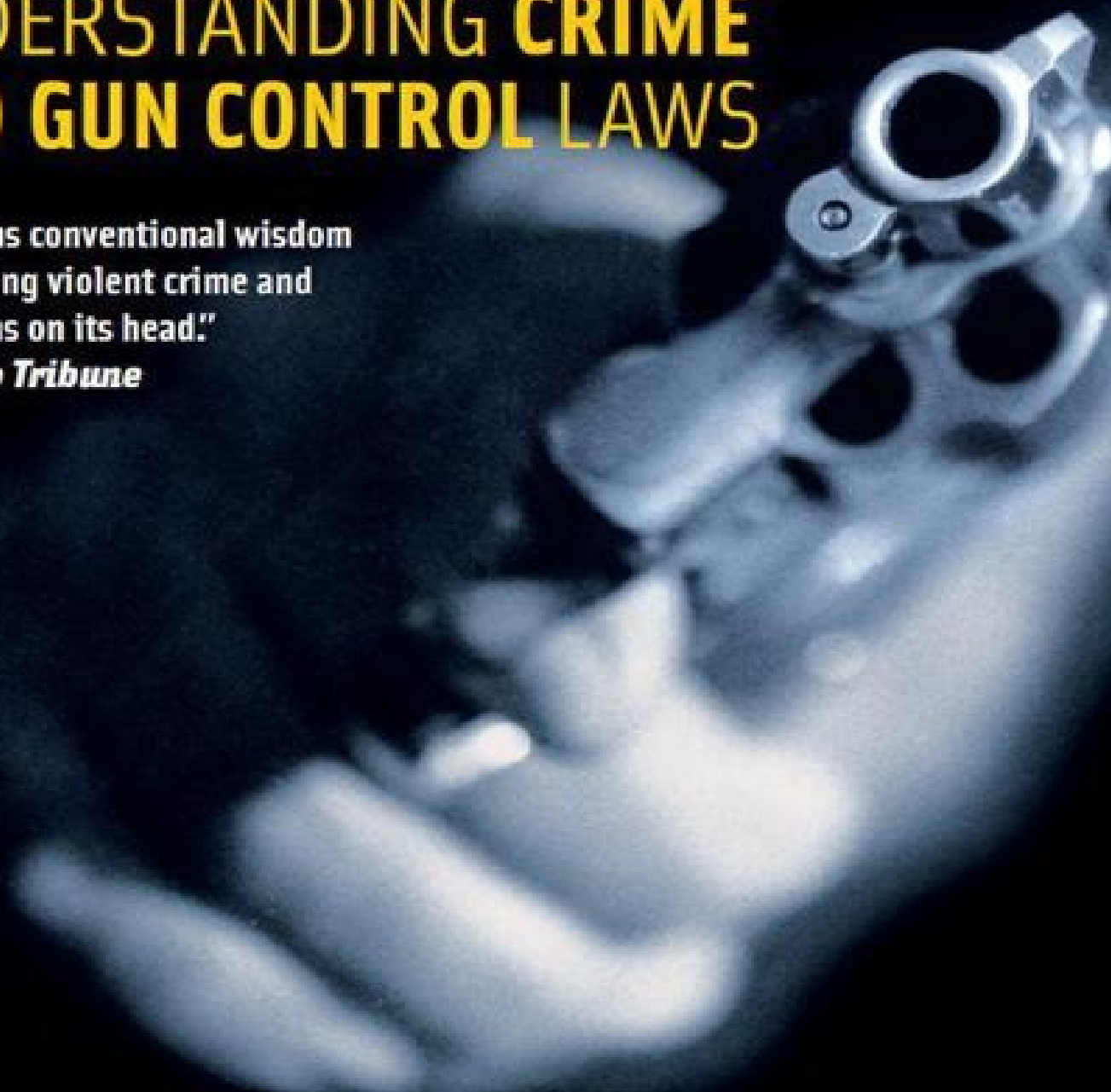
# MORE GUNS LESS CRIME

THIRD EDITION

UNDERSTANDING **CRIME**  
AND **GUN CONTROL** LAWS

"Lott turns conventional wisdom  
concerning violent crime and  
handguns on its head."

—*Chicago Tribune*



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# MORE GUNS, LESS CRIME

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## UNDERSTANDING CRIME AND GUN-CONTROL LAWS

THIRD EDITION

JOHN R. LOTT, JR.

THE UNIVERSITY OF CHICAGO PRESS  
CHICAGO AND LONDON

“Lott turns conventional wisdom concerning violent crime and handguns on its head.”

—**Chicago Tribune Books**

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“An intriguing and shocking look at crime, guns, and gun-control policy.”

—**Kirkus Reviews**

“This book is a refreshing, well-documented case for responsible gun ownership.”

—**Bookviews**

“For anyone with an open mind on either side of this subject this book will provide a thorough grounding. It is also likely to be the standard reference on the subject for years to come.”

—**Stan Liebowitz, Dallas Morning News**

“John Lott’s work to uncover the truth about the costs and benefits of guns in America is as valuable as it is provocative. Too much of today’s public debate over gun ownership and laws ignores the empirical evidence. Based on carefully proven facts, Professor Lott shatters the orthodox thinking about guns and debunks the most prominent myths about gun use that dominate the policy debate. For those who are convinced that the truth matters in formulating public policy and for anyone interested in the role of guns in our society, *More Guns, Less Crime* is must reading.”

—**Edwin Meese III, U.S. Attorney General, 1985–88**

“*More Guns, Less Crime* is one of the most important books of our time. It provides thoroughly researched facts on a life-and-death subject that is too often discussed on the basis of unsubstantiated beliefs and hysterical emotions.”

—**Thomas Sowell**

“Armed with reams of statistics, John Lott has documented many surprising linkages between guns and crime. *More Guns, Less Crime* demonstrates that what is at stake is not just the right to carry arms but rather our performance in controlling a diverse array of criminal behaviors. Perhaps most disturbing is Lott’s documentation of the role of the media and academic commentators in distorting research findings that they regard as politically incorrect.”

—**W. Kip Viscusi, Cogan Professor of Law and Director of the Program on Empirical Legal Studies, Harvard Law School**

“John Lott has done the most extensive, thorough, and sophisticated study we have on the effects of loosening gun control laws. Regardless of whether one agrees with his conclusions, his work is mandatory reading for anyone who is open-minded and serious about the gun control issue. Especially fascinating is his account of the often unscrupulous reactions to his research by gun control advocates, academic critics, and the news media.”

—**Gary Kleck, Professor of Criminology and Criminal Justice, Florida State University**

“Until John Lott came along, the standard research paper on firearms and violence consisted of a longitudinal or cross-sectional study on a small and artfully selected data set with few meaningful statistical controls. Lott’s work, embracing all of the data that are relevant to his analysis, has created a new standard, which future scholarship in this area, in order to be credible, will have to live up to.”

—**Dan Polsby, Kirkland & Ellis Professor of Law, Northwestern University**

“His empirical analysis sets a standard that will be difficult to match. . . . This has got to be the most extensive empirical study of crime deterrence that has been done to date.”

—**Public Choice**

“The most important book ever published about firearms policy. . . . [I]t should be read by everyone who cares about firearms policy, which is literally a matter of life or death. . . . [T]he more people who read *More Guns, Less Crime*, the sooner streets in every state will become safe zones for good citizens, rather than for predators.”

—**David B. Kopel, Chronicles**

“Lott impressively marshals the evidence in support of his position in his best-selling (for an academic book) *More Guns, Less Crime*. As a result, Lott has become one of the few members of the legal academy whose name is now bandied about on talk shows, in legislative sessions, and in the print media. . . . [F]or those who argue that the serious evaluation of data is an important and underutilized guide to good public policy, this book poses a real challenge. For make no mistake, Lott has painstakingly constructed a massive data set, analyzed it exhaustively, and commendably shared it with scholars across the country. In these respects, he deserves high praise for following the scientific protocol so faithfully.”

—**Ian Ayres and John J. Donohue III, American Law and Economics Review**

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# PREFACE TO THE THIRD EDITION

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Ten years have passed since the last edition of this book. Much has happened in those years. Now thirty-nine states have right-to-carry laws, a huge increase from the eighteen states with them when David Mustard and I first examined the relationship between such laws and crime. That original research in this book covered the sixteen years from 1977 through 1992. The second edition extended it by four years and covered twenty-eight states. Now, this new edition covers thirty-nine states and twenty-nine years from 1977 through 2005. That is a lot of crime data to study, especially with so many more states having adopted the law during the time.

By now, dozens of academics have published studies on right-to-carry laws using national data. These studies have either confirmed the beneficial link between gun ownership and crime or at least not found any indication that ownership *increases* crime. Not too surprisingly, depending on the precise methods used and the exact data set, the results have varied. Some claim no effect from the laws, but not a single refereed study finds the opposite result, that right-to-carry laws have a bad effect on crime.

Unfortunately, even normally level-headed scholars can get very emotional debating guns. Perhaps I am naive, but I have continued to be amazed by the great lengths people can go to attack others and to distort research. I had no idea of the political intensity of the gun issue when I entered into the hornet's nest.

Right-to-carry laws are still the focus of this new edition, but I will address questions about some new laws as well. One of them is the Castle Doctrine, which states that it is not necessary for a would-be victim to retreat as far as possible before using a gun defensively. The federal assault weapons ban will also be studied. The federal assault weapons ban started in 1994 but ended in 2004. Rarely do we get a chance to look at the impact of gun laws when they are first passed and then when they are eliminated.

Not only have laws changed, but also the Supreme Court has ruled on important gun rights cases. One case of possible historic significance was the Supreme Court striking down the DC handgun ban in June 2008. The handgun ban in Chicago is currently being challenged in the courts, and it is possible that the Supreme Court will review that case also. Since the DC ruling, there has been a lot of renewed interest in the impact of gun bans on crime and suicide rates, and those same questions will be brought up again when deciding whether the Second Amendment applies to states as well as to areas controlled by the federal government, such as DC.

The legal questions will also now focus on how much the government can regulate gun ownership and on the ability to carry guns. The courts will turn from the simple legal question of whether governments at any level can ban guns to more complicated questions of what specific regulations are to be allowed.

Since the second edition came out in 2000, I have continued working on gun-control issues. The research that John Whitley and I did on gun storage laws was published in the *Journal of Law and Economics* and is extended and updated in the new chapter. I have also updated previous research on multiple victim public shootings, work originally done together with Bill Landes. My previous work on gun show regulations and assault weapons has also been extended.

I have had a lot of help on these different projects. Research assistants have been extremely helpful with the very large data sets used in these studies. I need to thank Brian Blasé, James Knowles, and Maxim Lott for putting the new data together.

Finally, I would like to thank academics at George Mason University Law School, Chapman University Law School, the University of Florida, and the University of Miami for their help.

comments on the entirely new chapter added at the end of this book. I would also like to thank s  
anonymous referees for their comments.

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# PREFACE TO THE SECOND EDITION

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The debate set off by this book was quite astonishing to me. Despite attacks early on when my paper was published in the *Journal of Legal Studies*, I was still rather unprepared for the publicity generated by the book in 1998. This expanded edition not only discusses the ensuing political debate and responds to the various criticisms, but also extends the data set to cover additional years. Replicating the results over additional years is important, so as to verify the original research. The new extended and broadened data set has also allowed me to study new gun laws, ranging from safe-storage provisions to one-gun-a-month purchase rules. It has also allowed me to extend my study of the Brady law and its impact to its first three years. Other extensions of the data set include entirely new city-level statistics, which made it possible to account more fully for policing policies.

Since I finished writing the first edition of this book in 1997, I have continued working on many related gun and crime issues. A new section of the book draws on continued research that I am conducting with numerous talented coauthors: William Landes on multiple-victim public shootings, John Whitley on safe-storage gun laws, and Kevin Cremin on police policies. Other work was published in the May 1998 *American Economic Review* under the title “Criminal Deterrence, Geographic Spillovers, and the Right to Carry Concealed Handguns,” coauthored with Stephen Bronars. Also, an article of mine, “The Concealed Handgun Debate,” was published in the January 1998 issue of the *Journal of Legal Studies*.

I am grateful for the many opportunities to present my new research in a variety of academic forums and for the many useful comments that I have received. The research on guns and crime has been presented at (a partial listing) Arizona State University, Auburn University, the University of Chicago, Claremont Graduate School, the University of Houston, the University of Illinois, the University of Kansas, the University of Miami, New York University, the University of Oklahoma, the University of Southern California, Rice University, the University of Texas at Austin, the University of Texas at Dallas, the University of Virginia, the College of William and Mary, and Yeshiva University School of Law, as well as at the “Economics of Law Enforcement” Conference at Harvard Law School, the Association of American Law Schools meetings, the American Economic Association meetings, the American Society of Criminology meetings, the Midwestern Economic Association meetings, the National Lawyers Conference, the Southern Economic Association meetings, and the Western Economic Association meetings. Other presentations have been made at such places as the Chicago Crime Commission, the Kansas Koch Crime Commission, the American Enterprise Institute, and the Heritage Foundation.

Finally, I must thank the Yale Law School, where I am a senior research scholar, for providing me with the opportunity to write the new material that has been added to the book. I must also especially thank George Priest, who made this opportunity possible. The input of my wife and sons has been extremely important, and its importance has only been exceeded by their tolerance in putting up with the long working hours required to finish this revision.



# PREFACE TO THE FIRST EDITION

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Does allowing people to own or carry guns deter violent crime? Or does it simply cause more citizens to harm each other? Using the most comprehensive data set on crime yet assembled, this book examines the relationship between gun laws, arrest and conviction rates, the socioeconomic and demographic compositions of counties and states, and different rates of violent crime and property crime. The efficacy of the Brady Law, concealed-handgun laws, waiting periods, and background checks is evaluated for the first time using nationwide, county-level data.

The book begins with a description of the arguments for and against gun control and of how the claims should be tested. A large portion of the existing research is critically reviewed. Several chapters then empirically examine what facts influence the crime rate and answer the questions posed above. Finally, I respond to the political and academic attacks leveled against the original version of my work, which was published in the January 1997 issue of the *Journal of Legal Studies*.

I would like to thank my wife, Gertrud Fremling, for patiently reading and commenting on many early drafts of this book, and my four children for sitting through more dinnertime conversations on the topics covered here than anyone should be forced to endure. David Mustard also assisted me in collecting the data for the original article, which serves as the basis for some of the discussions in [chapters 4](#) and [5](#). Ongoing research with Steve Bronars and William Landes has contributed to this book. Maxim Lott provided valuable research assistance with the polling data.

For their comments on different portions of the work included in this book, I would like to thank Gary Becker, Steve Bronars, Clayton Cramer, Ed Glaeser, Hide Ichimura, Jon Karpoff, C. B. Kates, Gary Kleck, David Kopel, William Landes, Wally Mullin, Derek Neal, Dan Polsby, Robert Reed, Tom Smith, seminar participants at the University of Chicago (the Economics and Legal Organization, the Rational Choice, and Divinity School workshops), Harvard University, Yale University, Stanford University, Northwestern University, Emory University, Fordham University, Valparaiso University, the American Law and Economics Association Meetings, the American Society of Criminology, the Western Economic Association Meetings, and the Cato Institute. I also benefited from presentations at the annual conventions of the Illinois Police Association and the National Association of Treasury Agents. Further, I would like to express my appreciation to the John M. Olin Law and Economics Program at the University of Chicago Law School for its generous funding (a topic dealt with at length in [chapter 7](#)).

## Introduction

American culture is a gun culture—not merely in the sense that in 2009 about 124 million people lived in households that owned a total of about 270 million guns,<sup>1</sup> but in the broader sense that guns pervade our debates on crime and are constantly present in movies and the news. How many times have we read about shootings, or how many times have we heard about tragic accidental gun deaths—bad guys shooting innocent victims, bad guys shooting each other in drug wars, shots fired in self-defense, police shootings of criminals, let alone shooting in wars? We are inundated by images through the television and the press. Our kids are fascinated by computer war games and toy guns.

So we're obsessed with guns. But the big question is: What do we really know? How many times have most of us actually used a gun or seen a gun being used? How many of us have ever seen somebody in real life threatening somebody else with a gun, witnessed a shooting, or seen people defend themselves by displaying or firing guns?

The truth is that most of us have very little firsthand experience with using guns as weapons. Even the vast majority of police officers have never exchanged shots with a suspect.<sup>2</sup> Most of us receive our images of guns and their use through television, film, and newspapers.

Unfortunately, the images from the screen and the newspapers are often unrepresentative or biased because of the sensationalism and exaggeration typically employed to sell news and entertainment. A couple of instances of news reporting are especially instructive in illustrating this bias. In a highly publicized incident, a Dallas man became the first Texas resident charged with using a permitted concealed weapon in a fatal shooting.<sup>3</sup> Only long after the initial wave of publicity did the press report that the person had been savagely beaten and in fear for his life before firing the gun. In another case, a Japanese student was shot on his way to a Halloween party in Louisiana in 1992. It made international headlines and showed how defensive gun use can go tragically wrong.<sup>4</sup> However, this incident was a rare event: in the entire United States during a year, only about 30 people are accidentally killed by private citizens who mistakenly believe the victim to be an intruder.<sup>5</sup> By comparison, police accidentally kill as many as 330 innocent individuals annually.<sup>6</sup> In neither the Louisiana case nor the Texas case did the courts find the shooting to be criminal.

While news stories sometimes chronicle the defensive uses of guns, such discussions are rare compared to those depicting violent crime committed with guns. Since in many defensive cases a handgun is simply brandished, and no one is harmed, many defensive uses are never even reported to the police. I believe that this underreporting of defensive gun use is large, and this belief has been confirmed by the many stories I received from people across the country after the publicity broke on my original study. On the roughly one hundred radio talk shows on which I discussed that study, many people called in to say that they believed having a gun to defend themselves with had saved their lives. For instance, on a Philadelphia radio station, a New Jersey woman told how two men simultaneously had tried to open both front doors of the car she was in. When she brandished her gun and yelled, the men backed away and fled. Given the stringent gun-control laws in New Jersey, the woman said she never thought seriously of reporting the attempted attack to the police.

Similarly, while I was on a trip to testify before the Nebraska Senate, John Haxby—a television newsman for the CBS affiliate in Omaha—privately revealed to me a frightening experience that he had faced in the summer of 1995 while visiting in Arizona. At about 10 A.M., while riding in a car with his brother at the wheel, they stopped for a red light. A man appeared wielding a “butcher’s knife” and

opened the passenger door, but just as he was lunging towards John, the attacker suddenly turned and ran away. As John turned to his brother, he saw that his brother was holding a handgun. His brother was one of many who had acquired permits under the concealed-handgun law passed in Arizona the previous year.

Philip Van Cleave, a former reserve deputy sheriff in Texas, wrote me, “Are criminals afraid of law-abiding citizen with a gun? You bet. Most cases of a criminal being scared off by an armed citizen are probably not reported. But I have seen a criminal who was so frightened of an armed, seventy-year-old woman that in his panic to get away, he turned and ran right into a wall! (He was busy trying to kick down her door, when she opened a curtain and pointed a gun at him.)”

Such stories are not limited to the United States. On February 3, 1996, outside a bar in Texcoco, Mexico (a city thirty miles east of Mexico City), a woman used a gun to stop a man from raping her. When the man lunged at the woman, “ripping her clothes and trying to rape her,” she pulled a .25-caliber pistol from her purse and shot her attacker once in the chest, killing him.<sup>7</sup> The case generated much attention in Mexico when a judge initially refused to dismiss murder charges against the woman because she was viewed as being responsible for the attempted rape, having “enticed” the attacker “by having a drink with him at the bar.”<sup>8</sup>

A national survey that I conducted during 2002 indicates that about 95 percent of the time that people use guns defensively, they merely have to brandish a weapon to break off an attack. Such stories are not hard to find: pizza deliverymen defend themselves against robbers, carjackings are thwarted, robberies at automatic teller machines are prevented, and numerous armed robberies on the streets and in stores are foiled,<sup>9</sup> though these do not receive the national coverage of other gun crimes.<sup>10</sup> Yet the cases covered by the news media are hardly typical; most encounters reported involve a shooting that ends in a fatality.<sup>11</sup>

A typical dramatic news story involved an Atlanta woman who prevented a carjacking and the kidnapping of her child; she was forced to shoot her assailant:

A College Park woman shot and killed an armed man she says was trying to carjack her van with her and her 1-year-old daughter inside, police said Monday. . . .

Jackson told police that the gunman accosted her as she drove into the parking lot of an apartment complex on Camp Creek Parkway. She had planned to watch a broadcast of the Evander Holyfield–Mike Tyson fight with friends at the complex.

She fired after the man pointed a revolver at her and ordered her to “move over,” she told police. She offered to take her daughter and give up the van, but the man refused, police said.

“She was pleading with the guy to let her take the baby and leave the van, but he blocked the door,” said College Park Detective Reed Pollard. “She was protecting herself and the baby.”

Jackson, who told police she bought the .44-caliber handgun in September after her home was burglarized, said she fired several shots from the gun, which she kept concealed in a canvas bag beside her car seat. “She didn’t try to remove it,” Pollard said. “She just fired.”<sup>12</sup>

Although the mother saved herself and her baby by her quick actions, it was a risky situation that might have ended differently. Even though there was no police officer to help protect her or her child, defending herself was not necessarily the only alternative. She could have behaved passively, and the criminal might have changed his mind and simply taken the van, letting the mother and child go. Even if he had taken the child, he might later have let the baby go unharmed. Indeed, some conventional wisdom claims that the best approach is not to resist an attack. According to a recent *Los Angeles Times* article, “‘active compliance’ is the surest way to survive a robbery. Victims who engage in active resistance . . . have the best odds of hanging on to their property. Unfortunately, they also have much better odds of winding up dead.”<sup>13</sup>

Yet the evidence suggests that the College Park woman probably engaged in the correct action. While resistance is generally associated with higher probabilities of serious injury to the victim, n

all types of resistance are equally risky. By examining the data provided from 1979 to 1987 by the Department of Justice's National Crime Victimization Survey,<sup>14</sup> Lawrence Southwick, confirming earlier estimates by Gary Kleck, found that the probability of serious injury from an attack is 2 times greater for women offering no resistance than for women resisting with a gun. In contrast, the probability of women being seriously injured was almost 4 times greater when resisting without a gun than when resisting with a gun. In other words, the best advice is to resist with a gun, but if no gun available, it is better to offer no resistance than to fight.<sup>15</sup>

Men also fare better with guns, but the benefits are substantially smaller. Behaving passively is 1 times more likely to result in serious injury than resisting with a gun. Male victims, like females, also run the greatest risk when they resist without a gun, yet the difference is again much smaller: resistance without a gun is only 1.5 times as likely to result in serious injury than resistance with a gun. The much smaller difference for men reflects the fact that a gun produces a smaller change in a man's ability to defend himself than it does for a woman.

Although usually skewed toward the dramatic, news stories do shed light on how criminals think. Anecdotes about criminals who choose victims whom they perceive as weak are the most typical. While "weak" victims are frequently women and the elderly, this is not always the case. For example, in a taped conversation with police investigators reported in the *Cincinnati Enquirer* (October 9, 1995, p. B2), Darnell "Bubba" Lowery described how he and Walter "Fatman" Raglin robbed and murdered musician Michael Bany on December 29, 1995:

Mr. Lowery said on the tape that he and Walter "Fatman" Raglin, who is also charged with aggravated robbery and aggravated murder and is on trial in another courtroom, had planned to rob a cab driver or a "dope boy."

He said he gave his gun and bullets to Mr. Raglin. They decided against robbing a cab driver or drug dealer because both sometimes carried guns, he said.

Instead, they saw a man walking across the parking lot with some kind of musical instrument. He said as he looked out at the police, Mr. Raglin approached the man and asked for money.

After getting the money, Mr. Raglin asked if the man's car was a stick or an automatic shift. Then Mr. Raglin shot the man.

Criminals are motivated by self-preservation, and handguns can therefore be a deterrent. The potential defensive nature of guns is further evidenced by the different rates of so-called "hot burglaries," where a resident is at home when a criminal strikes.<sup>16</sup> In Canada and Britain, both with tough gun-control laws, almost half of all burglaries are "hot burglaries." In contrast, the United States, with fewer restrictions, has a "hot burglary" rate of only 13 percent. Criminals are not just behaving differently by accident. Convicted American felons reveal in surveys that they are much more worried about armed victims than about running into the police.<sup>17</sup> The fear of potentially armed victims causes American burglars to spend more time than their foreign counterparts "casing" a house to ensure that nobody is home. Felons frequently comment in these interviews that they avoid late-night burglaries because "that's the way to get shot."<sup>18</sup>

To an economist such as myself, the notion of deterrence—which causes criminals to avoid cab drivers, "dope boys," or homes where the residents are in—is not too surprising. We see the same basic relationships in all other areas of life: when the price of apples rises relative to that of oranges, people buy fewer apples and more oranges. To the non-economist, it may appear cold to make this comparison, but just as grocery shoppers switch to cheaper types of produce, criminals switch to attacking more vulnerable prey. Economists call this, appropriately enough, "the substitution effect."

Deterrence matters not only to those who actively take defensive actions. People who defend themselves may indirectly benefit other citizens. In the Cincinnati murder case just described, cab drivers and drug dealers who carry guns produce a benefit for cab drivers and drug dealers without guns. In the example involving "hot burglaries," homeowners who defend themselves make burglars generally wary of breaking into homes. These spillover effects are frequently referred to as "third

party effects” or “external benefits.” In both cases criminals cannot know in advance who is armed.

The case for allowing concealed handguns—as opposed to openly carried handguns—relies on the same argument. When guns are concealed, criminals are unable to tell whether the victim is armed before striking, which raises the risk to criminals of committing many types of crimes. On the other hand, with “open-carry” handgun laws, a potential victim’s defensive ability is readily identified, which makes it easier for criminals to choose the more vulnerable prey. In interviews with felony prisoners in ten state correctional systems, 56 percent claimed that they would not attack a potential victim who was known to be armed. Indeed, the criminals in states with high civilian gun ownership were the most worried about encountering armed victims.<sup>19</sup>

Other examples suggest that more than just common crimes may be prevented by law-abiding citizens carrying concealed handguns. Referring to the July, 1984, massacre at a San Ysidro, California, McDonald’s restaurant, Israeli criminologist Abraham Tennenbaum described

what occurred at a [crowded venue in] Jerusalem some weeks before the California McDonald’s massacre: three terrorists who attempted to machine-gun the throng managed to kill only one victim before being shot down by handgun-carrying Israelis. Presented to the press the next day, the surviving terrorist complained that his group had not realized that Israeli civilians were armed. The terrorists had planned to machine-gun a succession of crowd spots, thinking that they would be able to escape before the police or army could arrive to deal with them.<sup>20</sup>

On March 13, 1997, seven young seventh- and eighth-grade Israeli girls were shot to death by a Jordanian soldier while visiting Jordan’s so-called Island of Peace. Reportedly, the Israelis had “complied with Jordanian requests to leave their weapons behind when they entered the border enclave. Otherwise, they might have been able to stop the shooting, several parents said.”<sup>21</sup>

Obviously, arming citizens has not stopped terrorism in Israel; however, terrorists have responded to the relatively greater cost of shooting in public places by resorting to more bombings. This is exactly what the substitution effect discussed above would predict. Is Israel better off with bombings instead of mass public shootings? That is not completely clear, although one might point out that if the terrorists previously chose shooting attacks rather than bombings but now can only be effective by using bombs, their actions are limited in a way that should make terrorist attacks less effective (even if only slightly).<sup>22</sup>

Substitutability means that the most obvious explanations may not always be correct. For example, when the February 23, 1997, shooting at the Empire State Building left one person dead and six injured, it was not New York’s gun laws but Florida’s—where the gun was sold—that came under attack. New York City Mayor Rudolph W. Giuliani immediately called for national gun-licensing laws.<sup>23</sup> While it is possible that even stricter gun-sale regulations in Florida might have prevented this and other shootings, we might ask, Why did the gunman travel to New York rather than remain in Florida to do the shooting? And could someone intent on committing the crime and willing to travel to Florida still have gotten a gun illegally some other way? It is important to study whether states that adopt concealed-handgun laws similar to those in Israel experience the same virtual elimination of mass public shootings. Such states may also run the risk that would-be attackers will substitute bombings for shootings, though there is the same potential downside to successfully banning guns. The question still boils down to an empirical one: Which policy will save the largest number of lives?

## The Numbers Debate and Crime

Unfortunately, the debate over crime involves many commonly accepted “facts” that simply are not true. For example, take the claim that individuals are frequently killed by people they know.<sup>24</sup> As shown in [table 1.1](#), according to the FBI’s *Uniform Crime Reports*, 58 percent of the country’s murders were committed either by family members (18 percent) or by those who “knew” the victim.



(40 percent). Although the victims' relationship to their attackers could not be determined in 3 percent of the cases, 13 percent of all murders were committed by complete strangers.<sup>25</sup>

Table 1.1 Murderers and victims: relationship and characteristics

	Percent of cases involving the relationship	Percent of victims	Percent of offenders
<b>Relationship</b>			
Family	18%		
Acquaintance (non-friend and friend)	40		
Stranger	13		
Unknown	30		
Total	101		
<b>Race</b>			
Black		38%	33%
White		54	42
Hispanic		2	2
Other		5	4
Unknown		1	19
Total		100	100
<b>Sex</b>			
Female		29	9
Male		71	72
Unknown		0	19
Total		100	100

Source: U.S. Dept. of Justice, FBI staff, *Uniform Crime Reports*, (Washington, DC: U.S. Govt. Printing Office, 1992)

Note: Nonfriend acquaintances include drug pushers and buyers, gang members, prostitutes and their clients, bar customers, gamblers, cab drivers killed by their customers, neighbors, other nonfriend acquaintances, and friends. The total equals more than 100 percent because of rounding. The average age of victims was 33; that of offenders was 30.

Surely the impression created by these numbers has been that most victims are murdered by close acquaintances. Yet this is far from the truth. In interpreting the numbers, one must understand how these classifications are made. In this case, "murderers who know their victims" is a very broad category. A huge but not clearly determined portion of this category includes rival gang members who know each other.<sup>26</sup> In larger urban areas, where most murders occur, the majority of murders are due to gang-related turf wars over drugs.

The Chicago Police Department, which keeps unusually detailed numbers on these crimes, finds that just 5 percent of all murders in the city from 1990 to 1995 were committed by nonfamily friends, neighbors, or roommates.<sup>27</sup> This is clearly important in understanding crime. The list of nonfriend acquaintance murderers is filled with cases in which the relationships would not be regarded by most people as particularly close: for example, relationships between drug pushers and buyers, gang members, prostitutes and their clients, bar customers, gamblers, and cabdrivers killed by their customers.

While I do not wish to downplay domestic violence, most people do not envision gang members or drug buyers and pushers killing each other when they hear that 58 percent of murder victims were either relatives or acquaintances of their murderers.<sup>28</sup> If family members are included, no more than 17 percent of all murders in Chicago for 1990–95 involved family members, friends, neighbors, or roommates.<sup>29</sup> While the total number of murders in Chicago grew from 395 in 1965 to 814 in 1995, the number involving family members, friends, neighbors, or roommates remained virtually unchanged. What has grown is the number of murders by nonfriend acquaintances, strangers,

identified gangs, and persons unknown.<sup>30</sup>

Few murderers could be classified as previously law-abiding citizens. In the largest seventy-five counties in the United States in 1988, over 89 percent of adult murderers had criminal records of adults.<sup>31</sup> Evidence for Boston, the one city where reliable data have been collected, shows that, from 1990 to 1994, 76 percent of juvenile murder victims and 77 percent of juveniles who murdered other juveniles had prior criminal arraignments.<sup>32</sup>

Claims of the large number of murders committed against acquaintances also create a misleading fear of those we know. To put it bluntly, criminals are not typical citizens. As is well known, young males from their mid-teens to mid-thirties commit a disproportionate share of crime,<sup>33</sup> but even this categorization can be substantially narrowed. We know that criminals tend to have low IQs as well as atypical personalities.

For example, delinquents generally tend to be more “assertive, unafraid, aggressive, unconventional, extroverted, and poorly socialized,” while nondelinquents are “self-controlled, concerned about their relations with others, willing to be guided by social standards, and rich in internal feelings like insecurity, helplessness, love (or lack of love), and anxiety.”<sup>34</sup> Other evidence indicates that criminals tend to be more impulsive and put relatively little weight on future events. Finally, we cannot ignore the unfortunate fact that crime (particularly violent crime, and especially murder) is disproportionately committed against blacks by blacks.<sup>36</sup>

The news media also play an important role in shaping what we perceive as the greatest threats to our safety. Because we live in such a national news market, we learn very quickly about tragedies from other parts of the country.<sup>37</sup> As a result, some events appear to be much more common than they actually are. For instance, children are much less likely to be accidentally killed by guns (particularly handguns) than most people think. Consider the following numbers: In 2006 there were a total of 64 accidental firearm deaths in the entire country. A relatively small portion of these involved children under age ten: 13 deaths involved children up to four years of age and 18 more deaths involved five to nine-year-olds.<sup>38</sup> In comparison, 1,305 children died in motor-vehicle crashes and another 392 died when they were struck by motor vehicles, 651 died from drowning, and 348 were killed by fire and burns. Almost three times as many children drown in bathtubs each year than die from all types of firearm accidents.

Of course, any child’s death is tragic, and it offers little consolation to point out that common fixtures in life from pools to heaters result in even more deaths. Yet the very rules that seek to save lives can result in more deaths. For example, banning swimming pools would help prevent drowning and banning bicycles would eliminate bicycling accidents, but if fewer people exercise, life spans would be shortened. Heaters may start fires, but they also keep people from getting sick and from freezing to death. So whether we want to allow pools or space heaters depends not only on whether some people may end up being harmed, but also on whether more people are helped than hurt.

Similar trade-offs exist for gun-control issues, such as gun locks. As former president Clinton argued many times, “We protect aspirin bottles in this country better than we protect guns from accidents by children.”<sup>39</sup> Yet gun locks require that guns be unloaded, and a locked, unloaded gun does not offer ready protection from intruders.<sup>40</sup> The debate is not simply over whether one wants to save lives or not. Rather, it involves the question of how many of these two hundred accidental gun deaths would have been avoided under different rules versus the extent to which such rules would have reduced the ability to defend against criminals. Without looking at data, one can only guess the net effects.<sup>41</sup> Unfortunately, despite the best intentions, evidence indicates that child-resistant bottle caps actually have resulted in “3,500 additional poisonings of children under age 5 annually from [aspirin]

related drugs] . . . [as] consumers have been lulled into a less-safety-conscious mode of behavior by the existence of safety caps.”<sup>42</sup> If President Clinton had been aware of such research, he surely wouldn’t have referred to aspirin bottles when telling us how to deal with guns.<sup>43</sup>

Another common argument made in favor of banning guns involves the number of people who die from guns each year: there were 17,034 homicides and 18,169 suicides in 1992 alone.<sup>44</sup> Yet, just because a law is passed to ban guns, it does not automatically follow that the total number of deaths will decline. Given the large stock of guns in the country and given the difficulties the government faces in preventing other illegal items, such as drugs, from entering the country, it is quite doubtful that the government would be able to eliminate most guns. This raises the important question: Would the law primarily reduce the number of guns held by law-abiding citizens? How would such a law alter the relative balance of power between criminals and law-abiding citizens?

Suppose it were indeed possible to remove all guns. Other problems are still likely to arise. Perhaps successfully removing guns would discourage murders and other crimes because criminals would find knives and clubs poor alternatives. But on the other hand it would be easier for criminals to prey on the weakest citizens, who would find it more difficult to defend themselves. Suicide raises other questions. It is simply not sufficient to point to the number of people who kill themselves with guns. The debate must be over what substitute methods are available and whether they appear sufficient or less attractive. Even evidence about the “success rate” of different methods of suicide is not enough because we need to ask why people choose the method that they do. If people who were more interested than others on successfully killing themselves previously chose guns, forcing them to use other methods might raise the reported “success rate” for these other methods. Broader concerns for the general public also arise. For example, even if we banned many of the obvious ways of committing suicide, many methods exist that we could never really control. And these substitute methods might endanger others in ways that shootings do not. For example, deliberately crashing one’s car, throwing oneself in front of a train, or jumping off a building.

This book attempts to measure this trade-off for guns. Our primary questions are the following: Will allowing citizens to carry concealed handguns mean that otherwise law-abiding people will harm each other? Will the threat of self-defense by citizens armed with guns primarily deter criminals? Without a doubt, both “bad” and “good” uses of guns occur. The question isn’t really whether both occur; it is, rather: Which is more important? In general, do concealed handguns save or cost lives? Even a devoted believer in deterrence cannot answer this question without examining the data, because these two different effects clearly exist, and they work in opposite directions.

To some, however, the logic is fairly straightforward. Philip Cook argues that “if you introduce a gun into a violent encounter, it increases the chance that someone will die.”<sup>45</sup> A large number of murders may arise from unintentional fits of rage that are quickly regretted, and simply keeping guns out of people’s reach would prevent deaths.<sup>46</sup> Others point to the horrible public shootings that occur not just in the United States but in recent years around the world, from the two worst high school shootings in Germany to Mumbai, India, where 163 people were killed.

The survey evidence of defensive gun use weighs importantly in this debate. At the lowest end of these estimates, the U.S. Department of Justice’s National Crime Victimization Survey reports that each year there are “only” 110,000 defensive uses of guns during assaults, robberies, and household burglaries.<sup>47</sup> Other national polls weight regions by population and thus have the advantage, unlike the National Crime Victimization Survey, of not relying too heavily on data from urban areas.<sup>48</sup> The national polls should also produce more honest answers, since a law-enforcement agency is not asking the questions.<sup>49</sup> They imply much higher defensive use rates. Fifteen national polls, including those by organizations such as the *Los Angeles Times*, Gallup, and Peter Hart Research Associates, imply that



there are 760,000 defensive handgun uses to 3.6 million defensive uses of any type of gun per year. Yet even if these estimates are wrong by a very large factor, they still suggest that defensive gun use is extremely common.

Some evidence on whether concealed-handgun laws will lead to increased crimes is readily available. Between October 1, 1987, when Florida's "concealed-carry" law took effect, and the end of 1996, over 380,000 licenses had been issued, and only 72 had been revoked because of crimes committed by license holders (most of which did not involve the permitted gun).<sup>51</sup> A statewide breakdown on the nature of those crimes is not available, but Dade County records indicate that for crimes involving a permitted handgun took place there between September 1987 and August 1992, and none of those cases resulted in injury.<sup>52</sup> Similarly, Multnomah County, Oregon, issued 11,140 permits over the period from January 1990 to October 1994; only five permit holders were involved in shootings, three of which were considered justified by grand juries. Of the other two cases, one involved a shooting in a domestic dispute, and the other involved an accident that occurred while the gun was being unloaded; neither resulted in a fatality.<sup>53</sup>

In Virginia, "Not a single Virginia permit-holder has been involved in violent crime."<sup>54</sup> In the first year following the enactment of concealed-carry legislation in Texas, more than 114,000 licenses were issued, and only 17 have so far been revoked by the Department of Public Safety (reasons not specified).<sup>55</sup> After Nevada's first year, "Law enforcement officials throughout the state could not document one case of a fatality that resulted from irresponsible gun use by someone who obtained a permit under the new law."<sup>56</sup> Speaking for the Kentucky Chiefs of Police Association, Lt. Col. Bill Dorsey, Covington assistant police chief, concluded that after the law had been in effect for nine months, "We haven't seen any cases where a [concealed-carry] permit holder has committed a crime or offense with a firearm."<sup>57</sup> In North Carolina, "Permit-holding gun owners have not had a single permit revoked as a result of use of a gun in a crime."<sup>58</sup> Similarly, for South Carolina, "Only one person who has received a pistol permit since 1989 has been indicted on a felony charge, a comparison of permit and circuit court records shows. That charge, . . . for allegedly transferring stolen property last year was dropped by prosecutors after evidence failed to support the charge."<sup>59</sup>

During state legislative hearings on concealed-handgun laws, the most commonly raised concerns involved fears that armed citizens would attack each other in the heat of the moment following car accidents or accidentally shoot a police officer. The evidence shows that such fears are unfounded. Although thirty-one states had so-called nondiscretionary concealed-handgun laws when this book was first written, some of them decades old, there existed only one recorded incident of a permitted concealed handgun being used in a shooting following a traffic accident, and that involved self-defense.<sup>60</sup> No permit holder has ever shot a police officer, and there have been cases where permit holders have used their guns to save officers' lives.

Let us return to the fundamental issue of self-protection. For many people, the ultimate concern boils down to protection from violence. Unfortunately, our legal system cannot provide people with all the protection that they desire, and yet individuals are often prevented from defending themselves. A particularly tragic event occurred in 1996 in Baltimore:

Less than a year ago, James Edward Scott shot and wounded an intruder in the back yard of his West Baltimore home, and according to neighbors, authorities took away his gun.

Tuesday night, someone apparently broke into his three-story row house again. But this time the 83-year-old Scott didn't have his .22-caliber rifle, and police said he was strangled when he confronted the burglar.

"If he would have had the gun, he would be OK," said one neighbor who declined to give his name, fearing retribution from the attacker, who had not been arrested as of yesterday. . . .

Neighbors said burglars repeatedly broke into Scott's home. Ruses [a neighbor] said Scott often talked about "the people who would harass him because he worked out back by himself."<sup>61</sup>

Others find themselves in a position in which either they no longer report attacks to the police which they have used a gun to defend themselves, or they no longer carry guns for self-defense. Josie Cas learned this lesson the hard way, though charges against her were ultimately dropped. “The Rockford [Illinois] woman used her gun to scare off muggers who tried to take her pizza delivery money. But when she reported the incident to police, they filed felony charges against her for carrying a concealed weapon.”<sup>62</sup>

A well-known story involved Alan Berg, a liberal Denver talk-show host who took great delight in provoking and insulting those he disagreed with. Berg attempted to obtain a permit after receiving death threats from white supremacists, but the police first attempted to talk him out of applying and then ultimately rejected his request. Shortly after his request was denied, Berg was murdered by members of the Aryan Nations.<sup>63</sup>

As a Chicago cabdriver told me, “What good is a police officer going to do me if you pulled a knife or a gun on me right now?”<sup>64</sup> Nor are rural, low-crime areas immune from these concerns. Illinois State Representative Terry Deering (Democrat) noted that “we live in areas where if we have a state trooper on duty at any given time in a whole county, we feel very fortunate. Some counties in downstate rural Illinois don’t even have 24-hour police protection.”<sup>65</sup> The police cannot feasibly protect everybody all the time, and perhaps because of this, police officers are typically sympathetic to law-abiding citizens who own guns.<sup>66</sup>

Mail-in surveys are seldom accurate, because only those who feel intensely about an issue are likely to respond, but they provide the best information that we have on police officers’ views. A 2005 mail survey of twenty-two thousand chiefs of police and sheriffs conducted by the National Association of Chiefs of Police found that 92 percent believed that law-abiding citizens should continue to be able to purchase guns for self-defense.<sup>67</sup> Sixty percent thought that a national concealed-handgun permit law will “reduce rates of violent crime.” The Southern States Police Benevolent Association surveyed its eleven thousand members during June of 1993 (36 percent responded) and reported similar findings: 96 percent of those who responded agreed with the statement, “People should have the right to own a gun for self-protection,” and 71 percent did not believe that stricter handgun laws would reduce the number of violent crimes.<sup>68</sup> A national reader survey conducted in 1991 by *Law Enforcement Technology* magazine found that 76 percent of street officers and 59 percent of managerial officers agreed that all trained, responsible adults should be able to obtain handgun-carry permits.<sup>69</sup> Even with similarly overwhelming percentages, these officers and police chiefs rejected claims that the Brady law would lower the crime rate.

The passage of concealed-handgun laws has also caused former opponents in law enforcement to change their positions. Recently in Texas, “vocal opponent” Harris County District Attorney John Holmes admitted, “I’m eating a lot of crow on this issue. It’s not something I necessarily like to do, but I’m doing it on this.”<sup>70</sup> Soon after the implementation of the Florida law, the president and the executive director of the Florida Chiefs of Police and the head of the Florida Sheriff’s Association also admitted that they had changed their views on the subject. They also admitted that despite their best efforts to document problems arising from the law, they have been unable to do so.<sup>71</sup> The experience in Kentucky has been similar; as Campbell County Sheriff John Dunn says, “I have changed my opinion of this [program]. Frankly, I anticipated a certain type of people applying to carry firearms—people I would be uncomfortable with being able to carry a concealed weapon. That has not been the case. These are all just everyday citizens who feel they need some protection.”<sup>72</sup>

Support among rank-and-file police officers and the general population for the right of individuals to carry guns for self-protection is even higher than it is among police chiefs. A national poll by the

Lawrence Research group (September 21—28, 1996) found that by a margin of 69 to 28 percent registered voters favor “a law allowing law-abiding citizens to be issued a permit to carry a firearm for personal protection outside their home.”<sup>73</sup> A recent national polling by the Zogby International (July 2009) appears even more supportive of at least allowing some law-abiding citizens to carry concealed handguns. They found that 83 percent supported “laws that allow residents to carry firearms to protect themselves,” while only 11 opposed them.<sup>74</sup> Perhaps just as telling, a 2008 Gallup poll found that the percent of people who favor a ban on handguns had fallen to a fifty-year low.<sup>75</sup>

A National Opinion Research Center poll also provides some insights into who supports tight restrictions on gun ownership; it claims that “the less educated and those who haven’t been threatened with a gun are most supportive of gun control.”<sup>76</sup> If this is true, it appears that those most supportive of restrictions also tend to be those least directly threatened by crime.<sup>77</sup>

State legislators also acknowledge the inability of the police to be always available, even in the most public places, by voting to allow themselves unusually broad rights to carry concealed handguns. During the 1996 legislative session, for example, Georgia “state legislators quietly gave themselves and a few top officials the right to carry concealed guns to places most residents can’t: schools, churches, political rallies, and even the Capitol.”<sup>78</sup> Even local prosecutors in California strenuously objected to restrictions on their rights to carry concealed handguns.<sup>79</sup>

Although people with concealed handgun permits must generally view the police as offering insufficient protection, it is difficult to discern any pattern of political orientation among celebrities who have concealed-handgun permits: Bill Cosby, Cybill Shepherd, Howard Stern, Donald Trump, Arthur O. Sulzberger (chairman of the *New York Times*), union bosses, Laurence Rockefeller, Tom Selleck, and Robert De Niro. The reasons these people gave on their applications for permits were similar. Laurence Rockefeller’s reason was that he carries “large sums of money”; Arthur Sulzberger wrote that he carries “large sums of money, securities, etc.”; and William Buckley listed “protection of personal property when traveling in and about the city” as his reason.<sup>80</sup> Some made their decision to carry a gun after being victims of crime.<sup>81</sup>

And when the *Denver Post* asked Sen. Ben Nighthorse Campbell (R-Colo.) “how it looks for a senator to be packing heat,” he responded, “You’d be surprised how many senators have guns.” Campbell said that “he needed the gun back in the days when he exhibited his Native American jewelry and traveled long distances between craft shows.”<sup>82</sup>

## **Emotion, Rationality, and Deterrence**

In 1995 two children, ten and eleven years old, dropped a five-year-old boy from the fourteenth floor of a vacant Chicago Housing Authority apartment.<sup>83</sup> The reason? The five-year-old refused to share candy for them. Or consider the case of Vincent Drost, a promising musician in the process of composing a symphony, who was stabbed to death immediately after making a call from a pay telephone to his girlfriend. The reason? According to the newspapers, “His five teenage attackers told the police they wanted to have some fun and simply wanted ‘to do’ somebody.”<sup>84</sup> It is not difficult to find crimes such as “the fatal beating of a school teacher” described as “extremely wicked, shocking evil.” The defense attorney in this crime described the act as one of “insane jealousy.”<sup>85</sup>

The notion of “irrational” crime is enshrined by forty-seven states that recognize insanity defenses.<sup>86</sup> Criminal law recognizes that emotions can overwhelm our normal judgments in other ways.<sup>87</sup> For example, under the Model Penal Code, intentional homicide results in the penalty for manslaughter when it “is committed under the influence of extreme mental or emotional disturbance

for which there is reasonable explanation or excuse.”<sup>88</sup> These mitigating factors are often discussed in terms of the “heat of passion” or “cooling time,” the latter phrase referring to “the interval in which ‘blood’ can be expected ‘to cool’” or the time required for “reason to reassert itself.”<sup>89</sup> Another related distinction is drawn between first- and second-degree murder: “The deliberate killer is guilty of first-degree murder; the impulsive killer is not.”<sup>90</sup> In practice, the distinction between these two grades appears to rely less on premeditation than on whether the act was done without emotion or “cold blood,” “as is the case [when] someone who kills for money . . . displays calculation and greed.”<sup>91</sup>

Some academics go beyond these cases or laws to make more general claims about the motives behind crime. Thomas Carroll, an associate professor of sociology at the University of Missouri in Kansas City, states that “murder is an irrational act, [and] we don’t have explanations for irrational behavior.”<sup>92</sup> From this he draws the conclusion that “there’s really no statistical explanation” for why murder rates fluctuate. Do criminals respond to disincentives? Or are emotions and attitudes the determining factors in crime? If violent acts occur merely because of random emotions, stronger penalties would only reduce crime to the extent that the people least able to control such violent feelings can be imprisoned.

There are obvious difficulties with taking this argument against deterrence to its extreme. For example, as long as “even a handful” of criminals respond to deterrence, increasing penalties will reduce crime. Higher probabilities of arrest or conviction as well as longer prison terms might then possibly “pay” for themselves. As the cases in the previous section have illustrated, criminal decisions—from when to break into a residence, whom to attack, or whether to attack people by using guns or bombs—appear difficult to explain without reference to deterrence. Some researchers try to draw a distinction between crimes that they view as “more rational,” like robbery and burglary, and others such as murder. If such a distinction is valid, one might argue that deterrence would then at least be effective for the more “rational” crimes.

Yet even if we assume that most criminals are largely irrational, deterrence issues raise some tough questions about human nature, questions that are at the heart of very different views of crime and how to combat it. Still it is important to draw a distinction between “irrational” behavior and the notion that deterrence doesn’t matter. One doesn’t necessarily imply the other. For instance, some people may hold strange, unfathomable objectives, but this does not mean that they cannot be discouraged from doing things that bring increasingly undesirable consequences. While we may not solve the deeper mysteries of how the human mind works, I hope that the following uncontroversial example can help show how deterrence works.

Suppose that a hypothetical Mr. Smith is passed over for promotion. He kept a stiff upper lip at work, but after he gets home, he kicks his dog. Now this might appear entirely irrational: the dog did not misbehave. Obviously, Mr. Smith got angry at his boss, but he took it out on his poor dog instead. Could we conclude that he is an emotional, irrational individual not responding to incentives? Hardly. The reason that he did not respond forcefully to his boss is probably that he feared the consequences. Expressing his anger at the boss might have resulted in being fired or passed up for future promotion. An alternative way to vent his frustration would have been to kick his co-workers or throw things around the office. But again, Mr. Smith chose not to engage in such behavior because of the likely consequences for his job and possible assault charges. In economic terms, the costs are too high. He managed to bottle up his anger until he gets home and kicks his dog. The dog is a “low-cost” victim.

Here lies the perplexity: the whole act may be viewed as highly irrational—after all, Mr. Smith doesn’t truly accomplish anything. But still he tries to minimize the bad consequences of venting his anger. Perhaps we could label Mr. Smith’s behavior as “semirational,” a mixture of seeming



senseless emotion and rational behavior at the same time.

What about changing the set of punishments in the example above? What if Mr. Smith had a “kill dog,” that bit anyone who abused it (equivalent to arming potential victims)? Or what if Mr. Smith were likely to be arrested and convicted for animal abuse? Several scenarios are plausible. First, Mr. Smith might have found another victim, perhaps a family member, to hit or kick. Or he might have modified his outwardly aggressive acts by merely yelling at family and neighbors or demolishing something. Or he might have repressed his anger—either by bottling up his frustration or finding some nonviolent substitute, such as watching a video, to help him forget the day’s events.

Responding to disincentives is by no means limited to “rational” humans. Economists have produced a large number of studies that investigate whether animals take the costs of doing things into account.<sup>93</sup> Animal subjects have included both rats and pigeons, and the typical experiment measures the amount of some desired treat or standard laboratory food or fluid that is consumed in relation to the number of times the animal must push a lever to get the item. Other experiments alter the amount of the item received for a given number of lever pushes. These experiments have been tried in many different contexts. For example, does an animal’s willingness to work for special treats, such as root beer or cherry cola, depend upon the existence of unlimited supplies of water or standard laboratory food? These experiments consistently show that as the “cost” of obtaining the food increases, the animal obtains less food. In economic terms, “Demand curves are downward sloping.”

As for human beings, a large economics literature exists that overwhelmingly demonstrates that people commit fewer crimes if criminal penalties are more severe or more certain. Whether we consider the number of airliners hijacked in the 1970s,<sup>94</sup> evasion of the military draft,<sup>95</sup> international data on violent and property crimes,<sup>96</sup> stiffer penalties or higher probabilities of conviction result in fewer violations of the law. Sociologists are more cautious, but the National Research Council of the U.S. National Academy of Sciences established the Panel on Research on Deterrent and Incapacitative Effects in 1978 to evaluate the many academic studies of deterrence. The panel concluded as follows: “Taken as a whole, the evidence consistently finds a negative association between crime rates and the risks of apprehension, conviction or imprisonment. . . . the evidence certainly favors a proposition supporting deterrence more than it favors one asserting that deterrence is absent.”<sup>97</sup>

This debate on incentives and how people respond to them arises repeatedly in many different contexts. Take gun-buyback programs. Surely the intention of such programs is good, but why should we believe that they will greatly influence the number of guns on the street? True, the guns purchased are removed from circulation, and these programs may help to stigmatize gun ownership. Yet if they continue, one effect of such programs will be to increase the return to buying a gun. The price that a person is willing to pay for a gun today increases as the price for which it can be sold rises. In the extreme case, if the price offered in these gun-buyback programs ever became sufficiently high, people would simply buy guns in order to sell them through these programs. This would hardly distress gun manufacturers. Empirical work on this question reveals no impact on crime from the programs.<sup>98</sup>

Introspection can go only so far. Ultimately, the issue of whether sanctions or other costs deter criminals can be decided only empirically. To what extent will concealed-handgun laws or gun-control laws raise these costs? To what extent will criminals be deterred by these costs? In [chapter 2](#) we will consider how to test these questions.

## **An Overview**

This book offers a critical review of the existing evidence on gun control and crime. The primary

focus will be on whether gun laws save or cost lives.

To answer these questions I use a wide array of data. For instance, I have employed polls that allow us to track how gun ownership has changed over time in different states, as well as the massive FBI yearly crime rate data for all 3,054 U.S. counties from 1977 to 1992. I use additional, more recent available data for 1993 and 1994 later to check my results. Over the last decade, gun ownership has been growing for virtually all demographic groups, though the fastest growing group of gun owners are Republican women, thirty to forty-four years of age, who live in rural areas. National crime rates have been falling at the same time as gun ownership has been rising. Likewise, states experiencing the greatest reductions in crime are also the ones with the fastest growing percentages of gun ownership.

Overall, my conclusion is that criminals as a group tend to behave rationally—when crime becomes more difficult, less crime is committed. Higher arrest and conviction rates dramatically reduce crime. Criminals also move out of jurisdictions in which criminal deterrence increases. Yet criminals respond to more than just the actions taken by the police and the courts. Citizens can take private actions that also deter crime. Allowing citizens to carry concealed handguns reduces violent crime, and the reductions coincide very closely with the number of concealed-handgun permits issued. Mass shootings in public places are reduced when law-abiding citizens are allowed to carry concealed handguns.

Not all crime categories showed reductions, however. Allowing concealed handguns might cause small increases in larceny and auto theft. When potential victims are able to arm themselves, some criminals turn away from crimes like robbery that require direct attacks and turn instead to such crimes as auto theft, where the probability of direct contact with victims is small.

There were other surprises as well. While the support for the strictest gun-control laws is usually strongest in large cities, the largest drops in violent crime from legalized concealed handguns occurred in the most urban counties with the greatest populations and the highest crime rates. Given the limited resources available to law enforcement and our desire to spend those resources wisely to reduce crime, the results of my studies have implications for where police should concentrate their efforts. For example, I found that increasing arrest rates in the most crime-prone areas led to the greatest reductions in crime. Comparisons can also be made across different methods of fighting crime. Of all the methods studied so far by economists, the carrying of concealed handguns appears to be the most cost-effective method for reducing crime. Accident and suicide rates were unaltered by the presence of concealed handguns.

Guns also appear to be the great equalizer among the sexes. Murder rates decline when either more women or more men carry concealed handguns, but the effect is especially pronounced for women. One additional woman carrying a concealed handgun reduces the murder rate for women by about 30 times more than one additional man carrying a concealed handgun reduces the murder rate for men. This occurs because allowing a woman to defend herself changes her ability to defend herself much more than it would for a man. After all, men are usually bigger and stronger.

While some evidence indicates that increased penalties for using a gun in the commission of a crime reduce crime, the effect is small. Furthermore, I find no crime-reduction benefits from state-mandated waiting periods and background checks before allowing people to purchase guns. At the federal level, the Brady law has proven to be no more effective. Surprisingly, there is also little benefit from training requirements or age restrictions for concealed-handgun permits.

# How to Test the Effects of Gun Control

## The Existing Literature

Despite intense feelings on both sides of the gun debate, I believe everyone is at heart motivated by the same concerns: Will gun control increase or decrease the number of lives lost? Will these laws improve or degrade the quality of life when it comes to violent crime? The common fears we all share with regard to murders, rapes, robberies, and aggravated assaults motivate this discussion. Even those who debate the meaning of the Constitution's Second Amendment cannot help but be influenced by the answers to these questions.<sup>1</sup>

Anecdotal evidence is undoubtedly useful in understanding the issues at hand, but it has definite limits in developing public policy. Good arguments exist on both sides, and neither side has a monopoly on stories of tragedies that might have been avoided if the law had only been different. One side presents the details of a loved one senselessly murdered in a massacre like the April 2007 Virginia Tech shooting, where thirty-two people were killed. The other side points to an attack during a service at the New Life Church in Colorado with seven thousand people attending—an attack that was stopped by a concealed-carry permit holder.

Surveys have filled many important gaps in our knowledge; nevertheless, they suffer from many inherent problems. For example, how accurately can a person judge whether the presence of a gun actually saved her life or whether it really prevented a criminal from attacking? Might people's policy preferences influence how they answer the pollster's questions? Other serious concerns arise with survey data. Does a criminal who is thwarted from committing one particular crime merely substitute another victim or another type of crime? Or might this general deterrence raise the costs of the undesirable activities enough so that some criminals stop committing crimes? Survey data just has not been able to answer such questions.

To study these issues more effectively, academics have turned to statistics on crime. Depending on what one counts as academic research, there are at least two hundred studies on gun control. The existing work falls into two categories, using either "time-series" or "cross-sectional" data. Time-series data deal with one particular area (a city, county, or state) over many years; cross-sectional data look across many different geographic areas within the same year. The vast majority of gun-control studies that examine time-series data present a comparison of the average murder rates before and after the change in laws; those that examine cross-sectional data compare murder rates across places with and without certain laws. Unfortunately, these studies make no attempt to relate fluctuations in crime rates to changing law-enforcement factors like arrest or conviction rates, prison-sentence lengths, or other obvious variables.

Both time-series and cross-sectional analyses have their limitations. Let us first examine the cross-sectional studies. Suppose, as happens to be true, that areas with the highest crime rates are the ones that most frequently adopt the most stringent gun-control laws. Even if restrictions on guns were to lower the crime rates, it might appear otherwise. Suppose crime rates were lowered, but not by enough to reach the level of rates in low-crime areas that did not adopt the laws. In that case, looking across areas would make it appear that stricter gun control produced higher crime. Would this be proof that stricter gun control caused higher crime? Hardly. Ideally, one should examine how the high-crime areas that adopted the controls changed over time—not only relative to their past levels but also relative to areas without the controls. Economists refer to this as an "endogeneity" problem. The

adoption of the policy is a reaction (that is, “endogenous”) to other events, in this case crime.<sup>2</sup> To correctly estimate the impact of a law on crime, one must be able to distinguish and isolate the influence of crime on the adoption of the law.

For time-series data, other problems arise. For example, while the ideal study accounts for other factors that may help explain changing crime rates, a pure time-series study complicates such a task. Many potential causes of crime might fluctuate in any one jurisdiction over time, and it is very difficult to know which one of those changes might be responsible for the shifting crime rate. If two or more events occur at the same time in a particular jurisdiction, examining only that jurisdiction will not help us distinguish which event was responsible for the change in crime. Evidence is usually much stronger if a law changes in many different places at different times, and one can see whether similar crime patterns exist before and after such changes.

The solution to these problems is to combine both time-series and cross-sectional evidence and then to allow separate variables, so that each year the national or regional changes in crime rates can be separated out and distinguished from any local deviations.<sup>3</sup> For example, crime may have fallen nationally between 1991 and 1992, but this study is able to identify whether there exists an additional decline over and above that national drop for states that have adopted concealed-handgun laws. I also use a set of measures that control for the average differences in crime rates across places even after demographic, income, and other factors have been accounted for. No previous gun-control studies have taken this approach when the first edition of this book was written.

The largest cross-sectional gun-control study examined 170 cities in 1980.<sup>4</sup> While this study controlled for many differences across cities, no variables were used to deal with issues of deterrence (such as arrest or conviction rates or prison-sentence lengths). It also suffered from the bias discussed above that these cross-sectional studies face in showing a positive relationship between gun control and crime.

The time-series work on gun control that has been most heavily cited by the media was done by three criminologists at the University of Maryland who looked at five different counties (one at a time) from three different states (three counties from Florida, one county from Mississippi, and one from Oregon) from 1973 to 1992 (though a different time period was used for Miami).<sup>5</sup> While this study has received a great deal of media attention, it suffers from serious problems. Even though the concealed-handgun laws were state laws, the authors say that they were primarily interested in studying the effect in urban areas. Yet they do not explain how they chose the particular counties used in their study. For example, why examine Tampa but not Fort Lauderdale, or Jacksonville but not Orlando? Like most previous studies, their research does not account for any other variables that might also help explain the crime rates.

Some cross-sectional studies have taken a different approach and used the types of statistical techniques found in medical case studies. Possibly the best known paper was done by Arthur Kellermann and his many coauthors,<sup>6</sup> who purport to show that “keeping a gun in the home was strongly and independently associated with an increased risk of homicide.”<sup>7</sup> The claim is that the gun will be more likely to kill someone the gun owner knows than the criminal. The data for this test consists of a “case sample” (444 homicides that occurred in the victim’s homes in three counties) and a “control” group (388 “matched” individuals who lived near the deceased and were the same sex and race as well as the same age range). After information was obtained from relatives of the homicide victim or the control subjects regarding such things as whether they owned a gun or had a drug or alcohol problem, these authors attempted to see if the probability of a homicide was correlated with the ownership of a gun.

There are many problems with Kellermann et al.’s paper that undercut the misleading impression



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