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# Gun Control after Heller: Litigating against Regulation

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A well regulated Militia, being necessary to the security of a free State, the right of the people to keep and bear Arms, shall not be infringed. (Second Amendment to the U.S. Constitution)

And whatever else [the Amendment] leaves to future evaluation, it surely elevates above all other interests the right of law-abiding, responsible citizens to use arms in defense of hearth and home" (District of Columbia v. Heller, 2008).

#### 1. Introduction

The economic justification for regulating firearms design, ownership or use is the existence of negative externalities. For many individuals, the freedom to "keep and bear arms" brings private benefit in the form of the enjoyment of the sporting uses of guns, as well as a heightened sense of security against intruders and other assailants; there may also be a public benefit if criminals are deterred by the risk that a victim will defend himself with lethal force. However, the widespread private ownership of guns comes at the price of increased availability of guns for criminal use, with a resulting intensification of criminal violence. The balance between benefit and cost differs widely across states, and in fact federal firearm regulations explicitly allow for and support such heterogeneity: The Gun Control Act of 1968 establishes a minimum standard for firearm regulation, and attempts to insulate the states from each other, so that it is feasible for some to choose a higher standard than the federal minimum. It is also true that much of the differentiation in the cost-benefit balance occurs within states, where residents of large cities tend to suffer relatively high rates of violent crime and have little interest in gun sports, while the reverse is true in rural areas and small towns. As a result, some of the most extreme regulations have been adopted by cities rather than states, and 40 states, out of concern for just that outcome of the local political process, have adopted preemption laws that reserve gun policy for the state legislature.

In the 1990s this regulatory system was challenged in court by a number of cities where gun crime was imposing great costs. Frustrated by their inability to change gun regulations through the legislative process, they initiated mass tort actions that were intended to impose higher standards through the "end around" of expanded liability. The theories in these suits asserted unsafe and hence defective design, or that the industry was creating a public nuisance through failure to police the supply chain by which guns were marketed (and often found their way into dangerous hands). As it turned out, this effort never got much traction in the courts and has been almost entirely unsuccessful. To top it off, Congress enacted legislation in 2005 that provides immunity to the firearms industry in both state and federal courts for criminal misuse of guns (The Protection of Lawful Commerce in Arms Act).

The American system of firearm regulation is again threatened by legal challenge, but now the situation is reversed. In June 2008 the U.S. Supreme Court struck down the District of Columbia's handgun ban (*DC vs. Heller*, 118 S.Ct. 2783), recognizing for the first time an individual right to own a gun. While the immediate effect of this opinion is only to invalidate an unusually stringent regulation in a city that is unique in being under

direct jurisdiction of the federal courts, the ultimate domain of this new right has not yet been defined and will be subject to numerous tests in the years to come. *Heller*, in short, is a litigation magnet. Existing regulations governing firearms commerce and possession will be challenged by plaintiffs claiming they violate the new right that the majority of the Supreme Court has discovered in the Second Amendment. Litigation will seek to curtail, rather than extend, restrictions on the gun industry, but this new scenario is once again an end around the political process.

Our goal here is to explore the potential social welfare implications from the wave of litigation that has been unleashed by *Heller*. Whether that litigation fares any better than the previous wave of tort litigation is hard to predict, given the vagueness in the opinion of the *Heller* majority. But if the new freedom to keep and bear arms comes to be construed broadly by the federal courts, real harm could result, increasing rates of armed violence and degrading the quality of life in the cities. We review different areas of regulation that will be contested in the courts, with the goal of defining the stakes in this litigation, and providing guidance in the event that the courts adopt a balancing test in evaluating the Constitutionality of some gun regulations.

We believe it unlikely that the current federal regulatory framework will be successfully challenged. And even if *Heller* is read to apply to state and local firearm regulations (which does seem likely), the majority opinion makes clear that the Second Amendment right is "not unlimited" (p. 2816). Justice Scalia offered a list of "presumptively lawful regulatory measures" (p. 2817 & n. 26) that includes regulations aimed at atypical weapons, abnormal people, sensitive locations, certain sales conditions, and, perhaps, concealed gun carrying. The standard to be applied in judging the constitutionality of all other gun regulations is unclear under *Heller*, and even in the case of these named regulations there is no telling that Scalia's "presumption" will be honored. The result of this new litigation against regulation is likely to include at a minimum the elimination of the most stringent regulations and a chilling effect on policy innovation.

The remainder of the paper is organized as follows. In the next section we review the existing system of firearm regulations in the U.S. Section 3 discusses the initial wave of tort litigation against the gun industry that arose during the 1990s, while Section 4 discusses the recent *Heller* decision and what it may, or may not, imply for existing firearm regulations at the federal, state, and local levels. Section 5 discusses the potential types of gun regulations that might be rolled back as a result of new litigation and the social welfare consequences that would result. Section 6 concludes.

# 2. Guns, gun violence, and gun regulation in America<sup>1</sup>

Litigation in this area is motivated by concerns that existing regulations either go too far or do not go far enough. Assessing these claims requires some understanding of the existing regulatory system. In what follows we first review what is known about guns and gun violence in America as a backdrop to discussing existing gun regulations.

<sup>&</sup>lt;sup>1</sup> This section draws in part on material from Cook and Ludwig (2006).

# A. Gun ownership

America has 200–250 million firearms in private circulation.<sup>2</sup> While there are enough guns for every adult to have one, in fact, three-quarters of all adults do not. Recent survey data suggests that about 40% of males, 10% of females, and one-third of all households have at least one gun. The household prevalence of gun ownership has been in long term decline, in part because household composition is changing—becoming smaller, and less likely to include an adult male. The upshot is that gun ownership is very concentrated. Most people who own one gun own many. In 1994, three-quarters of all guns were owned by those who owned four or more, amounting to just 10 percent of adults (Cook & Ludwig, 1996; Smith 2007).

Around one-third of America's privately held firearms are handguns, which are more likely than long guns to be kept for defense against crime (Cook & Ludwig, 1996). In the 1970s, one-third of new guns were handguns (pistols or revolvers), a figure which grew to nearly half by the early 1990s and then fell back to around 40 percent (ATF, 2000a). Despite the long-term increase in the relative importance of handgun sales, a mere 20 percent of gun-owning individuals have only handguns; 44 percent have both handguns and long guns, reflecting the fact that most people who have acquired guns for self-protection are also hunters and target shooters. Less than half of gun owners say that their primary motivation for having a gun is self-protection against crime.

The prevalence of gun ownership differs widely across regions, states, and localities, and across different demographic groups. For example, while 10% of Boston households own a gun, 50% of Phoenix households own one. Residents of rural areas and small towns are far more likely to own a gun than residents of large cities, in part because of the importance of hunting and sport shooting. For the same reason gun ownership also tends to be concentrated among middle-aged, middle-income households (Cook & Ludwig, 1996). These attributes are associated with relatively low involvement in criminal violence, and it is reasonable to suppose that most guns are in the hands of people who are unlikely to misuse them. On the other hand, gun owners are more likely than other adults to have a criminal record (Cook & Ludwig, 1996).

<sup>&</sup>lt;sup>2</sup> This number can be estimated through two sources of data, from federal tax records on sales and from a survey. First, the number of new guns added each year is known from data kept by the federal government on manufactures, imports, and exports. The annual count of net additions can be cumulated over, say, the last century, with some assumption about the rate of removal through such mechanisms as off-the-books exports, breakage, and police confiscation (Cook, 1991; Kleck, 1997). The alternative basis for estimating the stock is the one-time National Survey of the Personal Ownership of Firearms (NSPOF), conducted in 1994; this is the only survey that attempted to determine the number of guns in private hands. (A number of surveys, including the General Social Survey, provide an estimate of the prevalence of gun ownership among individuals and households without attempting to determine the average number of guns per gun owner.) The NSPOF estimate for the number of guns in 1994 was 192 million, a number that is compatible with the "sales accumulation" method, assuming that just 15 percent of the new guns sold since 1899 had been thrown out or destroyed (Cook & Ludwig, 1996). Since the survey, the annual rate of net additions to the gun stock has been about 4–5 million per year (ATF 2001, 2002), or 50–60 million by 2006. Given a continued removal rate of just one percent, the stock as of 2006 would be around 220 million.

The majority of guns in circulation were obtained by their owners directly from a federally licensed firearm dealer (FFL). However, the 30 to 40 percent of all gun transfers that do not involve licensed dealers, the so-called "secondary market" (Cook, Molliconi, & Cole, 1995), accounts for most guns used in crime (see Wright & Rossi, 1994; Sheley & Wright, 1995; Cook & Braga, 2001). Despite the prominence of gun shows in current policy debates, the best available evidence suggests that such shows account for only a small share of all secondary market sales (Cook & Ludwig, 1996). Another important source of crime guns is theft — over 500,000 guns are stolen each year (Cook & Ludwig, 1996; Kleck 1997).

## B. Gun Violence

Including homicide, suicide, and accidents, 30,694 Americans died by gunfire in 2005, a mortality rate of 10.4 deaths per 100,000 people.<sup>3</sup> This figure is down substantially from 1990 (14.9 per 100,000), but is still much higher than what was observed in the U.S. in, say, 1950 (Cook & Ludwig, 2000). Intentional violence is the major exception to the secular decline in injury deaths during the last 50 years (Cook & Ludwig, 2000). More Americans die each year by gun suicide than gun homicide. However, more people suffer nonfatal gun injuries from crime than from suicide attempts; the difference is in the case fatality rate, which is much higher for attempted suicide than for gunshot wounds from criminal assaults. Eight hundred people a year die from unintentional gunshot injuries, a figure that is heavily influenced by coroners' standards concerning what constitutes an accident as opposed to a homicide or suicide.

Although everyone shares in the costs of gun violence, the shooters and victims themselves are not a representative slice of the population. The gun-homicide-victimization rate in 2005 for Hispanic men ages 18 to 29 was six times the rate for non-Hispanic white men of the same age; the gun homicide rate for black men 18 to 29 was 99 per 100,000, 24 times the rate for white males in that age group. There appears to be considerable overlap between the populations of potential offenders and victims: the large majority of both groups have prior criminal records.

The demographics of gun suicide look somewhat different: While suicides and homicides both occur disproportionately to those with low incomes or educational attainment, gun suicides are more common among whites than blacks, and more common among the old than among young or middle-aged adults (Cook & Ludwig, 2000). Men are vastly overrepresented in all categories.

The costs of gun violence to society are more evenly distributed across the population than victimization statistics would suggest. The threat of being shot causes private citizens and public institutions to undertake a variety of costly measures to reduce

<sup>&</sup>lt;sup>3</sup> http://webappa.cdc.gov/sasweb/ncipc/mortrate.html, accessed September 8, 2008

<sup>&</sup>lt;sup>4</sup> http://webappa.cdc.gov/sasweb/ncipc/mortrate.html, accessed September 8, 2008

<sup>&</sup>lt;sup>5</sup> See Kennedy, Piehl, and Braga (1996); McGonigal et al., (1993); Kates and Polsby (2000); Cook, Ludwig and Braga (2005).

this risk, and all of us must live with the anxiety caused by the lingering chance that we or a loved one could be shot. As one local district attorney notes: "Gun violence is what makes people afraid to go to the corner store at night" (Kalil, 2002). As a result, the threat of gun violence is in some neighborhoods an important disamenity that depresses property values and puts a drag on economic development. Gun violence, then, is a multifaceted problem that has notable effects on public health, crime, and living standards.

While quantifying the magnitude of these social costs is difficult, one contingent-valuation (CV) survey estimate found that the costs of gun violence were on the order of \$100 billion in 1995 (Cook & Ludwig, 2000). Most (\$80 billion) of these costs come from crime-related gun violence. Dividing by the annual number of crime-related gunshot wounds, including homicides, implies a social cost per crime-related gun injury of around \$1 million (Ludwig & Cook, 2001).

## C. Gun regulations

To see what may be at risk with the new interpretation of the Second Amendment, it is useful to review current regulations. While far less stringent that those in other wealthy nations (Hemenway 2004), most aspects of firearms commerce and possession are subject to federal and state regulations.

The primary objective of federal law in regulating guns is to insulate the states from one another, so that the stringent regulations on firearms commerce adopted in some states are not undercut by the relatively lax regulation in other states (Zimring, 1975). The citizens of rural Montana understandably favor a more permissive system than those living in Chicago, and both can be accommodated if transfers between them are effectively limited. The Gun Control Act of 1968 established the framework for the current system of controls on gun transfers. All shipments of firearms (including mailorder sales) are limited to federally licensed dealers who are required to obey applicable state and local ordinances, and to observe certain restrictions on sales of guns to out-of-state residents.<sup>7</sup>

Federal law also seeks to establish a minimum set of restrictions on acquisition and possession of guns. The Gun Control Act specifies several categories of people who

<sup>&</sup>lt;sup>6</sup> Note that this estimate is intended to capture the costs of gun misuse and so ignores the benefits to society from widespread gun ownership, in the same way that studies of the social costs of automobile accidents ignore the benefits from driving. The figure comes, in part, from CV responses about what people say they would pay to reduce crime-related gun violence by 30%. One potential concern is that these estimates assume that societal willingness to pay to reduce gun violence is linear with the proportion of gun violence eliminated, which may not be the case. And in practice there remains some uncertainty about the reliability of the CV measurement technology. In any case, most of the estimated costs of gun violence to the U.S. appear to come from crime, since suicide seems more like a private concern, and the estimated costs of gun crime by Cook and Ludwig (2000) fits comfortably next to more recent CV estimates for the social costs of crime more generally (Cohen, Rust, Steen, & Tidd, 2004).

<sup>&</sup>lt;sup>7</sup> The McClure-Volkmer Amendment of 1986 eased the restriction on out-of-state purchases of rifles and shotguns. Such purchases are now legal as long as they comply with the regulations of both the buyer's state of residence and the state in which the sale occurs.

are denied the right to receive or possess a gun, including illegal aliens, convicted felons and those under indictment, people ever convicted of an act of domestic violence, users of illicit drugs, and those who have at some time been involuntarily committed to a mental institution. Federally licensed dealers may not sell handguns to people younger than twenty-one, or long guns to those younger than eighteen. And dealers are required to ask for identification from all would-be buyers, have them sign a form indicating that they do not have any of the characteristics (such as a felony conviction) that would place them in the "proscribed" category, and initiate a criminal-history check. Finally, dealers are required to keep a record of each completed sale and cooperate with authorities when they need to access those records for gun-tracing purposes (Vernick and Teret, 2000; LCAV 2008). On the other hand, sales of guns by people not in the business are not subject to federal regulation; the seller, whether at a gun show or elsewhere, may transfer a gun without keeping a record of sale or doing any sort of background check on the buyer. This "private sale" loophole is more like a gaping barn door for the used-gun market.

In addition to these federal requirements, states have adopted significant restrictions on commerce, possession, and use of firearms. Eleven states require that handgun buyers obtain a permit or license before taking possession of a handgun, a process that typically entails payment of a fee and some waiting period (LCAV 2008). All but a few such transfer-control systems are "permissive," in the sense that most people are legally entitled to obtain a gun. In those few jurisdictions, including Massachusetts and New York City, it is very difficult to obtain a handgun legally, while Chicago (since 1982) and Washington, D.C. (since 1976) have prohibited handgun ownership – although Washington's ban is now nullified. A variety of more modest restrictions on commerce have been enacted as well: for example, Virginia, Maryland, and California have limited dealers to selling no more than one handgun a month to any one buyer.

## Gun design

Federal law also imposes some restrictions on gun design, and in fact some types of firearms are effectively prohibited. The National Firearms Act of 1934 (NFA) was intended to eliminate gangster-era firearms, including sawed-off shotguns, hand grenades, and automatic weapons that are capable of continuous rapid fire with a single pull of the trigger. The legal device for accomplishing that purpose was a requirement that all such weapons be registered with the federal government and that transfers be subject to a tax of \$200, which at the time of enactment was confiscatory. While some of these weapons have remained in legal circulation, the NFA (now amended to ban the introduction of new weapons of this sort into circulation) appears to have been quite effective at reducing the use of automatic weapons in crime (Kleck, 1991).

The Gun Control Act of 1968 included a ban on the import of small, cheap handguns, sometimes known as "Saturday Night Specials." This ban was made operational through the development of the factoring criteria that assigned points to a gun model depending on its size and other qualities (Zimring, 1975, Karlson and Hargarten, 1997). Handguns that fail to achieve a minimum score on the factoring criteria, or do not meet size and safety criteria, cannot be imported. However, it is legal for domestic manufacturers to assemble guns, often from imported parts, that fail the factoring criteria, and that market "niche" has been well supplied. One study found that one-third of new domestically manufactured handgun models did not meet the size or quality requirements that are applied to imports through the factoring criteria (Hargarten, 2001; see also Wintemute, 1994).

In 1994 Congress banned the importation and manufacture of certain "assault" weapons, which is to say military-style semi-automatic firearms. The Crime Control Act banned 19 such weapons by name, and others were outlawed if they possess some combination of design features such as a detachable magazine, barrel shroud, or bayonet mount (Vernick and Teret, 2000, p. 1197). The Act also banned manufacture and import of magazines that hold more than 10 rounds. Existing assault weapons and large-capacity magazines were "grandfathered" (Roth and Koper, 1999). In 2004, this assault weapons ban was allowed to expire.

Federal law leaves unregulated those types of firearms that are not specifically banned. Firearms and ammunition are excluded from the purview of the Consumer Product Safety Commission (Vernick and Teret, 2000). There is no federal agency that has responsibility for reviewing the design of firearms, and no mechanism in place for identifying unsafe models that could lead to a recall and correction (Bonnie, Fulco and Liverman, 1999). Some states have acted independently on this matter. For example in 2000 the attorney general of Massachusetts announced that firearms would henceforth be regulated by the same authority available to his department for other consumer products, and those deemed unacceptable would be taken off the market.

Massachusetts is unique in asserting broad state authority to regulate gun design and gun safety. There are a handful of states in which the legislatures have acted to restrict the permissible design of new guns in a more limited way. The first important instance of this sort occurred in Maryland, with its ban on Saturday Night Specials. The Maryland legislature acted in response to a successful law suit against a manufacturer. In exchange for relieving manufacturers of small, cheap handguns from liability, the legislature created a process for reviewing handgun designs and specifying which models would be ruled out due to size and safety concerns. As of 2008 a total of eight states have some version of a Saturday Night Special ban in place (LCAV 2008). California

<sup>&</sup>lt;sup>8</sup> An important loophole allowed the import of parts of handguns that could not meet the "sporting purposes" test of the Gun Control Act. This loophole was closed by the McClure-Volkmer Amendment of 1986.

The new rules effectively ban "Saturday night specials" and require that handguns sold in Massachusetts include childproof locks, tamper-proof serial numbers and safety warnings. The new gun-safety regulations affect manufacturers as well as retailers.

has also been active in recent years, instituting among other measures its own ban on assault weapons and a number of safety requirements for handguns.

## Gun possession and use

States and some localities also specify the rules under which guns may be carried in public. Every state except Vermont and Alaska places some restriction on carrying a concealed firearm. The trend over the past several decades has been to ease restrictions on concealed carry, replacing prohibition with a permit system, and easing the requirements to obtain a permit. Currently, adults who are entitled to possess a handgun can obtain a permit to carry after paying a fee in most states (LCAV 2008; Lott, 2000).

There has also been some effort to regulate storage. Federal law beginning in 2005 requires that all handguns sold by licensed dealers come equipped with a secure storage device. Eleven states and DC have laws concerning firearm locking devices. The Maryland legislature recently adopted a pioneering requirement, namely that all handguns manufactured after 2003 and sold in that state be "personalized" in the sense of having a built-in locking device that requires a key or combination to release. Massachusetts and the District of Columbia require that all firearms be stored with a lock in place.

## Record keeping

The primary purpose of some gun regulations is to assist law enforcement in solving crimes. In particular, federal law requires that all licensees in the chain of commerce (manufacturers, distributors, retail dealers) keep records of transfers and make them available to law enforcement for tracing purposes. For example, if a police department has confiscated a firearm that may have been used in a crime, they can submit a trace request through the National Tracing Center of the Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF), which will attempt to trace the chain of commerce using the serial number and other characteristics of the gun. If all goes well, the retail dealer that first sold the gun will be identified, and will supply information from the form that the buyer filled out. This system is inefficient and error prone, and even if successful usually leaves the investigators far short of the information they really want, which is the identity of the most recent owner of the firearm (Cook and Braga 2001). A more direct system of national registration has been politically impossible to implement except in the case of weapons of mass destruction (National Firearms Act).

A few states have registration requirements. Notably, California requires registration of handgun transactions, even if they occur between private parties. That requirement complements a new regulation that all semiautomatic pistols sold in the state after 2010 be designed with a microstamp capability that will print the serial number, make and model of the gun on the shell casing when the gun is fired. Shell casings are ejected from pistols and often left at the scene by the shooter, where they can be collected by investigators and, under the new law, used to initiate a trace even when the gun itself is not in custody.

## Rulemaking vs. legislation

It should be noted that the regulations on gun commerce and possession are almost entirely the result of legislation rather than a regulatory rulemaking process. The latter places greater requirements on the decision makers to solicit alternative viewpoints and consider costs and benefits. Whether the federal courts will consider social costs and benefits in reviewing Second Amendment cases remains to be seen.

## 3. Tort litigation against the gun industry

The wave of mass tort litigation against the gun industry that occurred in the 1990s is now largely of historical interest, since it has accomplished very little except to demonstrate once again the political power of pro-gun groups. However, the academic debate over these lawsuits may usefully inform standards to be applied to the new wave of litigation inspired by the *Heller* decision.

The suits against the firearms industry were inspired by and had strong parallels with the lawsuits so successfully brought by the state attorneys general against the tobacco industry. The cigarette manufacturers ultimately settled those suits with the attorneys general, agreeing to some restrictions on their marketing practices and to pay the states over \$240 billion in damages over the course of 25 years. One difference is that most of the plaintiffs in the case of the gun industry were cities rather than states. Another difference is that the firearms industry is much smaller and more diffuse than the tobacco industry, so that the financial stakes were much smaller. Indeed, the primary motivation for the plaintiffs was not to recover financial damages, but rather to force the industry to take greater responsibility for reducing the amount of damage done by its products.

The first of the local-government lawsuits against the gun industry was filed by the city of New Orleans on October 30, 1998 (*Morial v. Smith and Wesson Corp.*), which asserted, among other things, that the manufacturers have neglected their duty to incorporate available safety features into the design of their products. The second lawsuit was filed by Chicago on November 12, 1998 (*City of Chicago and Cook County v. Beretta U.S.A., Corp*). Chicago's case focused on marketing practices, asserting that the industry had created a "public nuisance" by neglecting to take feasible measures that would help prevent the illegal sale of its products to Chicago residents or to traffickers who supply residents (Siebel, 1999, p. 248-9, Vernick and Teret, 1999). Following these actions by New Orleans and Chicago, thirty other cities and counties filed against the gun industry, claiming negligence in either its marketing practices or in the design of its products or both. <sup>10</sup>

Various theories of negligence were tried (Lytton, 2005a). Some plaintiffs argued that the gun industry was responsible for negligent marketing practices, which did not do enough to keep guns out of the hands of prohibited users, or more failures to adequately

<sup>&</sup>lt;sup>10</sup> See www.vpc.org/litigate.htm

supervise retail gun dealers. The gun industry was also charged with "oversupplying" gun dealers in states with relatively lax gun laws, with the claim that the industry knew the "extra" guns would wind up in jurisdictions with more restrictive regulations, or "overpromoting" weapons that only had legitimate military or law enforcement use. Chicago's case claimed that the unregulated secondary gun market is a "public nuisance" for which the gun industry has responsibility, while Cincinnati argued that the gun industry engaged in deceptive advertising – keeping a gun in the home was argued to increase the risk of injury to residents, rather than improve safety as the industry claimed.

Most of these arguments did not fare well in court. The New Orleans case was dismissed by the Louisiana Supreme Court after the state enacted a law barring such suits. Chicago's case was dismissed and then appealed. As Lytton (2005a, p. 5) notes, of the city lawsuits the "great majority have been dismissed or abandoned prior to trial, and of the few favorable jury verdicts obtained by the plaintiffs, all but one have been overturned on appeal. A handful of claims have been settled prior to trial."

Then on October 26, 2005, President Bush signed the Protection of Lawful Commerce in Arms Act (PLCAA), which to a remarkable degree provided immunity to the firearms industry. This law did preserve the possibility of traditional tort actions against the industry – for example, injuries that result from defects in design or manufacture – but the industry is explicitly exempted from liability for injuries resulting from criminal misuse of its product. While Lytton (2005b) notes that the PLCAA might itself be subject to a variety of constitutional challenges, efforts to enhance gun regulation through litigation have failed for the most part. The *Heller* decision may add an additional legal barrier to this type of suit (Denning 2006; Kopel and Gardiner 1995).

## 4. Heller and the new litigation frontier

For most of our country's history, the Second Amendment was absent from the Supreme Court's agenda. When the Amendment came up, it was ineffectual. In the late 1800s, the Court confirmed that the Amendment could not be used against state regulation. And in 1937, *United States v. Miller* concluded that the federal government was free to restrict possession of sawed off shotguns. This opinion at least arguably connected Second Amendment rights to state-organized militias, rather than to individual preferences about gun ownership. Lower federal courts followed this notion and the Amendment was essentially a dead letter in litigation. Results involving state constitutions were not dramatically different. State supreme courts invoked state gun rights to invalidate only a few state regulations after World War II.

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<sup>14</sup> Winkler (2007), pp. 716-26.

<sup>&</sup>lt;sup>11</sup> See www.vpc.org/litigate.htm

<sup>&</sup>lt;sup>12</sup> Presser v. Illinois, 116 U.S. 252, 264-66 (1886) (examining Second and Fourteenth Amendment claims); United States v. Cruikshank, 92 U.S. 542, 553 (1876).

<sup>&</sup>lt;sup>13</sup> United States v. Miller, 307 U.S. 174, 178 (1939) (seeking evidence that a short-barreled shotgun "has some reasonable relationship to the preservation or efficiency of a well regulated militia").

The Second Amendment gained force in other locations, however. The gun rights movement made the Amendment a central rhetorical element in its organizing efforts. Many lawmakers were sympathetic. And by the late twentieth century, scholarship on the Amendment was booming. Some legal academics supported an understanding of federal gun rights beyond anachronistic state militias. There were also judicial rumblings. In 1997, Justice Thomas suggested that the Amendment might have provided another basis for invalidating the Brady Act's mandate that local officials conduct background checks on handgun purchasers. In 2001, a federal appeals court declared that the Second Amendment included a personal right to keep and bear arms unrelated to militia service, although the court upheld the regulation at issue. The Department of Justice then amended its litigation position and endorsed the court's logic.

#### A. The Heller case

In 2008, the Supreme Court changed its message, too. *District of Columbia v. Heller*<sup>19</sup> became the first successful Second Amendment challenge in the Court's history. The case involved a police officer who wanted to keep an operable handgun in his home and to "carry it about his home in that condition only when necessary for self-defense" (p. 2788 & n.2). But the District was an urban jurisdiction where the gun rights movement fared poorly. One local law prohibited possession of handguns by private citizens with only narrow exceptions. A second regulation required firearms to be either unloaded and disassembled or trigger-locked at all times. Exceptions were made for law enforcement officers, places of business, and otherwise lawful recreational activities, but the regulation reached people's homes. A third regulation involved firearms licensing by the chief of police. The *Heller* majority left unaddressed the issue of firearms licensing (p. 2819), but it concluded that the first two regulations infringed this plaintiff's right to have a handgun in his home for self-defense.<sup>20</sup>

It is quite possible to read the majority opinion for very little. The justices did not commit themselves to restraining state or local firearms laws under the Fourteenth Amendment (pp. 2812-13 & n.23). That is where much of the regulatory action takes

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<sup>19</sup> 118 S.Ct. 2783 (2008).

 <sup>&</sup>lt;sup>15</sup> E.g., Levinson (1989); Cottrol & Diamond (1991); Barnett & Kates (1996); Volokh (1998). For contrary views from historians, see Cornell (2006); Rakove (2000). On competing theories, see Tushnet (2007).
<sup>16</sup> Printz v. United States, 521 U.S. 898, 938-39 (1997) (Thomas, J., concurring) (joining the majority opinion, which relied on federalism principles, but pointing to a Second Amendment argument).
<sup>17</sup> United States v. Emerson, 270 F.3d 203, 260-61 (5th Cir. 2001) (upholding a conviction for gun possession while subject to a domestic violence restraining order), cert. denied, 536 U.S. 907 (2002).
<sup>18</sup> Memorandum from the Attorney General (2001). When Emerson sought review by the Supreme Court, the Solicitor General abandoned the militia-related view of the Amendment. Brief for the United States (2002), n.3 (accepting, however, "reasonable restrictions designed to prevent possession by unfit persons or to restrict the possession of types of firearms that are particularly suited to criminal misuse").

<sup>&</sup>lt;sup>20</sup> Justice Scalia wrote the majority opinion, which was joined by Chief Justice Roberts and Justices Kennedy, Thomas, and Alito. The four dissenters joined two opinions: Justice Stevens' dissent focused on *Miller* and the history surrounding the Second Amendment's adoption (pp. 2823-46), while Justice Breyer's dissent rejected the plaintiff's claims even on the assumption that the Amendment includes a self-defense purpose (pp. 2847-48). Added together, the three opinions total approximately 50,000 words. Our discussion simplifies many nuances of the legal arguments.

place. Furthermore, the plaintiff's position in *Heller* was relatively strong. The regulations under attack were fairly broad, the argument came down to a qualified right to handgun possession in the home, and the dissenting justices thought the Amendment not even implicated without a militia connection (pp. 2823, 2847). Even under these circumstances, the gun rights position narrowly prevailed on a 5-4 vote. Perhaps a slightly different case would fracture the majority coalition. After all, it does not take special courage to oppose handgun bans. Opinion polls show large national majorities opposing such bans. Equally telling, a majority of Senators and House members signed an amicus brief arguing that the District's regulations were unconstitutional.<sup>21</sup> One can imagine the 5-4 vote going the other way had the District permitted a law-abiding citizen to store one handgun in the home, but required handgun training, registration, and a trigger lock at all times—except when and if self-defense became necessary.

Nevertheless, more significant lessons might be drawn from the decision. Its first notable feature is the virtual irrelevance of organized militias to the majority's view of gun rights. The text of the Second Amendment begins with the preface, "A well regulated Militia, being necessary to the security of a free State, . . . . " Whether or not this assertion is factually accurate, it could be made important to understanding the words that follow: "the right of the people to keep and bear Arms, shall not be infringed." But for the majority, the Amendment's preface cannot be used to limit or expand the meaning of the subsequent words (pp. 2792-97 & nn. 3-4). Instead, the militia reference is taken to indicate the purpose for codifying a pre-existing right of "the people" to keep and bear arms (pp. 2800-02). Although the Amendment followed a debate over standing armies and state militias checking centralized tyranny, the majority contended that the codified right also was valued for self-defense. This self-defense function, not the prerequisites of a robust citizen militia, defines the scope of the right recognized in *Heller*.

Fencing off the Amendment's enforceable right from its militia-oriented preface is revealing. Some of the implications point toward judicial intervention. Private parties are now allowed to raise Second Amendment arguments in court without any relationship to a militia, state-run or otherwise. The content of the right is personal and nonmilitary. As well, incorporation into the Fourteenth Amendment might seem easier once the right is separated from any arguable connection to state militias. If the right is not about federal-state relations, it fits better with the individual rights the Court has been willing to enforce against state and local governments.<sup>22</sup> But another implication involves restraint. The Court's majority is not about to enforce a citizen's right to frighten the United States Armed Forces with overwhelming firepower. The majority's portrayal of the Second Amendment right seems, at most, tangentially related to people protecting themselves from the risks of centralized tyranny (p. 2817). Instead the majority's conception of the right is demilitarized and mainstreamed.

<sup>&</sup>lt;sup>21</sup> Saad (2007) (reporting on Gallup polls); Brief for Amici Curiae (2008). There is a large literature on judicial behavior. Friedman (2005). Some scholars emphasize the role of formal law and institutional norms, but empirical studies often suggest other factors. For the argument that justices vote their ideology, see Segal & Spaeth (2002). For an inquiry into strategic behavior, see Epstein & Knight (1998). The classic view of the Court as sticking close to national governing coalitions is Dahl (1957). <sup>22</sup> On the Court's selective incorporation of the Bill of Rights, see Chemerinsky (2006), pp. 499-507.

What, then, is the right recognized in *Heller*? Countless observers are struggling with this question. To make progress here, however, we can describe *Heller*'s minimum plausible content—the core right to which a majority of justices seem committed.

Whenever else it might include, this core right involves self-defense with a typical handgun in one's own home. At one point the majority summarized the Second Amendment as assuring an individual right "to possess and carry weapons in case of confrontation" (p. 2797), but the remainder of the opinion is narrower. The majority was not interested in a right to carry arms "for any sort of confrontation" (p. 2799), and declared that "self-defense . . . was the *central component* of the right" codified in the Amendment (p. 2801). In attempting to explain why the District's handgun ban was defective, the majority asserted that an inherent right of self-defense has been central to the understanding of the Second Amendment in American history, that handguns are now commonly chosen by Americans to provide lawful self-defense, and that "the need for defense of self, family, and property is most acute" in the home (p. 2817). For similar reasons, the majority immunized the plaintiff's handgun from the District's requirement that firearms in the home be kept inoperable at all times. If the plaintiff's handgun could never be made operable in his home, he would not be able to use it there for "the core lawful purpose" of self-defense (p. 2818). Hence the majority's core conception of the right is a law-abiding citizen with a functioning handgun in his own home for the purpose of defending it—perhaps only at the time of attack (pp. 2788, 2822). This conception matches the situation of the actual plaintiff in Heller.

In fact, limits were an important theme. The justices in the majority went out of their way to insulate certain forms of gun control not at issue in the case. They conceded that the Second Amendment right is "not unlimited" (p. 2816), and offered a list of "presumptively lawful regulatory measures" (p. 2817 & n. 26). To put it crudely, this non-exhaustive list includes regulation aimed at (1) atypical weapons, (2) abnormal people, (3) sensitive locations, (4) sales conditions, (5) safe storage, and, perhaps, (6) concealed carry. Thus the majority sought to protect weapons "typically possessed by law-abiding citizens" for self-defense in the home (pp. 2815-18), asserting that a limitation to weapons in common use is consistent with a tradition of restricting "dangerous and unusual weapons" (p. 2817). Handguns are thereby covered in view of their current popularity in the market (p. 2818), while the majority strongly suggested that machine guns, M-16s, and sawed off shotguns are not (pp. 2815, 2817). We do not know the extent to which regulation may validly influence which weapons become common. But this kind of limit fits with the majority's demilitarized vision of the Amendment. The discussion of other regulation was even more brief: "nothing in our opinion should be taken to cast doubt on longstanding prohibitions on the possession of firearms by felons and the mentally ill, or laws forbidding the carrying of firearms in sensitive places such as schools and government buildings, or laws imposing conditions and qualifications on the commercial sale of arms" (pp. 2816-17). Later, in distinguishing founding era regulation of gun powder storage, the majority said that its logic does not suggest problems with "laws regulating the storage of firearms to prevent

accidents" (p. 2820). Finally, the majority observed that most nineteenth-century cases had upheld prohibitions on concealed weapons (p. 2816).<sup>23</sup>

Heller is, nevertheless, a litigation magnet. Chicago is already defending its handgun ban against the argument that the Heller right should be enforced against state and local action. New York City is defending its handgun permit system, which critics argue is too demanding or grants excessive discretion to the police department. San Francisco is defending its ban on handguns in city-owned public housing. Some defendants are making long-shot objections to the federal machine gun ban and felon in possession convictions. And some jurisdictions are avoiding the costs and risks of litigation by repealing their handgun bans without a fight over incorporation. The question is how the legal uncertainty will shake out.

The question of incorporation has become quite important in the post-*Heller* world. If Second Amendment norms restrain only the federal government and not state or local regulation, the policy space will be far less influenced by judicial review. The federal government has not been the principal source of gun control, and state courts have not been especially aggressive in state constitutional challenges to such regulation. On the other hand, if the Supreme Court interprets the Fourteenth Amendment to include a Second Amendment right, the litigation threat becomes more important.

A fair guess is that the *Heller* majority is poised to incorporate, but we need not make a firm prediction. The majority reserved the issue while noting that its nineteenth century precedents had not employed the Court's more recent approach to incorporation (p. 2813 n.23). In addition, the majority's understanding of the right is emphatically personal. This makes it difficult to resist application against the states with an argument that the Second Amendment was written to protect the militias of those same states. Moreover, the majority's discussion of Reconstruction Era sources indicates concern during that time for gun rights of freed slaves (pp. 2809-11). And if the question is whether the right is sufficiently "fundamental" to warrant enforcement against all levels of government, <sup>27</sup> the *Heller* opinion intimates an affirmative answer (p. 2798). Finally, the Court would not have to totally repudiate a key precedent here, *Presser v. Illinois*. That case involved state restrictions on unauthorized military organizations parading as such, which is far from the demilitarized vision of gun rights endorsed in *Heller*. Still, it has been years since the Supreme Court seriously confronted an incorporation issue. The

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<sup>&</sup>lt;sup>23</sup> Elsewhere, however, the *Heller* majority noted some nineteenth century judicial support for *un*concealed pistols (pp. 2809, 2818). See State v. Chandler, 5 La. Ann. 489, 490 (1850) (lauding "a manly and noble defence" with unconcealed weapons and disparaging "secret advantages and unmanly assassinations").

<sup>&</sup>lt;sup>24</sup> For reporting on municipal litigation after *Heller*, see Wise (2008); Egelko & Vega (2008).

<sup>&</sup>lt;sup>25</sup> E.g., United States v. Gilbert, No. 07-30153, 2008 WL 2740453, at \*2 (9th Cir. July 15, 2008) (denying these objections after *Heller*).

<sup>&</sup>lt;sup>26</sup> Horan (2008) (reporting on the Chicago suburbs). Prevailing plaintiffs may recover their attorneys fees from state and local defendants in federal constitutional litigation, but prevailing defendants normally cannot. Lewis & Norman (2001), pp. 442-64 (discussing judicial interpretation of 42 U.S.C. § 1988).

<sup>&</sup>lt;sup>27</sup> Duncan v. Louisiana, 391 U.S. 145, 148-49 (1968) (including the Sixth Amendment's right to jury trial within the meaning of the Fourteenth Amendment's due process clause).

question involves high stakes and deep jurisprudential controversies, it is being litigated now, and the Court is likely to address it within the next few years.

#### B. What next?

What state and local regulations might be in peril if the Supreme Court does incorporate, and how will courts make these decisions? Even with the majority's laundry list of presumptively valid regulations in hand, there is no clear theory by which to better specify the listed items or to add new items. Remember that the list is neither conclusive nor exhaustive. Is the list governed by historical analogies and traditional police powers? Can it be built into a general principle allowing reasonable regulation? This is unsettled. Nor did the majority identify a generic test that one should apply to determine whether the Second Amendment is violated. Providing such guidance is not a requirement for case law and it can be difficult to do well in a single decision. But its absence leaves regulators guessing until the Court speaks again.

A leading possibility is that the Court will fashion additional rules based on history. This is consistent with what the majority did in *Heller* itself. They fixated on the Constitution's text and its meaning to populations long gone. The majority opinion investigated the original public meaning of the Amendment—the ordinary meaning of those words to ordinary citizens in 1791 (pp. 2788, 2810). In addition, the majority rejected case-by-case balancing of competing interests, at least for the "core protection" of the Second Amendment (p. 2821). This is not the only way to adjudicate constitutional issues. Justice Breyer's dissent, for example, considered much more than founding era firearms regulation. It recommended deference to democratic judgments in light of: a compelling regulatory interest in handgun safety for a crime-ridden urban enclave; a reasonable empirical disagreement about whether the District's approach was effective; and a burden on gun owners' interests that the dissenters considered tolerable (pp. 2847-68). To this the majority responded, "Constitutional rights are enshrined with the scope they were understood to have when the people adopted them . . . . And whatever else [the Amendment] leaves to future evaluation, it surely elevates above all other interests the right of law-abiding, responsible citizens to use arms in defense of hearth and home" (p. 2821). There is no hint here of judges asking whether a challenged regulation is cost/benefit justified or supported by reliable empirical data.

Still, the majority has not fully locked itself into a strong form of originalism or rule-like doctrine in all Second Amendment cases. The repudiation of interest balancing was done with reference to the "core protection" recognized in *Heller*. Perhaps the majority's inflexibility begins, and ends, with this core right and flat handgun bans. It is not as if the majority relied solely on originalist history. This is true even if we set aside the reliance on nineteenth century sources, some of which postdated the Amendment's ratification by nearly 100 years, and on the contemporary popularity of handguns. The majority went on to reconcile their historical conclusions with Court precedent, which would be unnecessary if only originalist history mattered. And they did not support their list of presumptively valid regulation with serious originalist investigation. The majority did say that the District's ban was more burdensome than others in the country's history

(p. 2818), and that it would flunk "any of the standards of scrutiny that we have applied to enumerated constitutional rights" (p. 2817). But these standards are not dictated by originalism. They are tests that courts developed to implement constitutional norms.<sup>2</sup> More than eighteenth century history could matter in Second Amendment litigation surely in the long run, possibly for cases outside of the core right now recognized, and perhaps to help define limits on that right.

We have reached the deep question of how judges ought to make decisions in constitutional adjudication, and there is no consensus or shortage of models. Judicial review is not binary. It involves choices along several dimensions. The first is whether any judicial oversight will take place. Some clauses of the written Constitution are never litigated or are not enforced by courts (e.g., certain issues of impeachment); some provisions were enforced against ordinary politics in one era only to be largely ignored in another (e.g., the contracts clause). Among those constitutional norms that courts are comfortable enforcing, judges have developed a variety of practices. Some domains are filled with founding era history and analogical reasoning (e.g., federal jury trial rights). Other domains might turn to longstanding tradition for guidance (e.g., strands of substantive due process). Many others are dominated by judicial precedent and analogical reasoning (e.g., speech and abortion rights). Some combine precedent, originalist history, and contemporary interest balancing (e.g., search and seizure).

Even when common-law development of constitutional doctrine predominates, diversity reappears. Some justices value specific doctrinal rules over the flexibility of more open-ended standards, while others exhibit the opposite preference.<sup>30</sup> The intensity of judicial review also varies. Sometimes the Court organizes its thinking around several levels or tiers of scrutiny (e.g., equal protection). These tiers vary in how important the asserted regulatory interest must be and how tightly connected that interest must be to the regulation under attack—non-deferential strict scrutiny for presumptively invalid regulatory classifications including race, intermediate scrutiny for a few others including sex, and mere rational basis with extreme deference to policymakers for the rest. Much free speech precedent is similar. The Court identifies types of regulation that it presumes invalid (e.g., discriminating against certain speech content), while other types are subject to deferential balancing (e.g., regulating time, place, and manner of speech). But in other fields, this analytical structure is not apparent. In Eighth Amendment cases, the Court looks to policy trends across the country and then exercises its own judgment on whether the punishment in question is cruel under contemporary standards of decency.<sup>31</sup>

<sup>&</sup>lt;sup>28</sup> For a catalog of doctrinal tests developed by courts in constitutional cases, see Fallon (2001).

<sup>&</sup>lt;sup>29</sup> Davis v. FEC, 128 S.Ct. 2759 (2008) (invalidating a campaign finance regulation, relying on free speech case law and not originalist history). Davis was issued on the same day as Heller and was decided by the same 5-4 coalitions. The leading expositor of common-law constitutionalism is Strauss (1996). As support for the importance of case law, consider the attention being paid to *Heller*.

<sup>&</sup>lt;sup>30</sup> Sullivan (1992). Compare the Court's general balancing test for due process violations, which is a form of cost/benefit analysis, and its "undue burden" test in abortion cases with its rulings in some federalism cases, which promote more specific rules such as a prohibition on "commandeering" state officers. <sup>31</sup> Justice Kennedy did so for the Court last Term. Kennedy v. Louisiana, 128 S.Ct. 2641 (2008).

Wherever Second Amendment doctrine ends up in this expanse of options, the country's experience with judicial review suggests boundaries on its influence. First, judicial review cannot be fully detached from politics. If nothing else, the appointments process connects judicial personnel to organized interests and elected officials. The course of Second Amendment litigation depends, in part, on who will judge these cases in the future. Second and related, the federal judiciary does not have an impressive track record in making major policy change. Judges might resist the intense policy preferences of others for a time, but courts are not insulated in the long run. Thus the Supreme Court could not effectively desegregate public schools alone, and it did not resist New Deal innovations forever. It bears repeating that the gun rights movement began outside the courtroom, and that flat handgun bans are unpopular at the national level.

We might then predict that Second Amendment litigation will probably dampen regulatory diversity to some degree, without necessarily eliminating any existing gun control within the political mainstream.<sup>32</sup> Certainly the short-term impact of *Heller* is a reduction in policy variation by eroding the most assertive end of the regulatory spectrum. If the case is extended to state and local law, this effect will be more serious. Local outliers will not be able to sustain every local preference for strict gun control based on local conditions.

But less salient effects should be recognized as well. Plausible litigation threats can prevent policy experiments before they begin. However welcoming the political situation might become for novel forms of gun control, innovators now must consider the possibility of judicial pushback in the name of federal constitutional law. *Heller* might thereby freeze some existing political victories on the gun rights side—victories that kept gun control mild and that make *Heller* look unimportant at the moment. This sort of impact could help explain the extraordinary oddity of 305 members of Congress supporting constitutional litigation against the District of Columbia, rather than working to override the District's regulation with their own votes. Constitutional litigation and its costs add something, even if the judicial position cannot holdout indefinitely.

#### 5. What's at stake

The immediate effect of *Heller* is to ensure that residents of the District of Columbia will have the legal right to keep a handgun in their home and have it ready to defend against intruders – a right that they have not had since 1976. Assuming that the courts extend the new "core" Second Amendment right to other jurisdictions, then handgun bans in Chicago and elsewhere will be swept away, quite possibly along with other highly restrictive policies that stop just short of a ban (such as in Massachusetts and New York City). By eliminating legal barriers, one result may be to increase the prevalence of handgun ownership. Furthermore, it is possible that regulations that have the effect of making handguns more expensive to acquire and possess (even if that is not their primary intent) will be subject to challenge; included here would be taxes, design requirements intended to improve safety or other purposes, licensing and registration fees, and a

<sup>&</sup>lt;sup>32</sup> A similar view is defended in Sunstein (2008).

requirement that the owner carry liability insurance. A Constitutional limit on such regulations would reduce the effective price of guns in affected jurisdictions and thus provide a further impetus to handgun ownership. There has been considerable research on the effects of gun prevalence on crime and public health. To understand the potential social costs of the *Heller* decision, we begin with a review of that evidence.

## A. Effect of gun prevalence on crime and public health

Firearms are the most lethal of the widely available weapons that are deployed in assaults, robberies, and self-defense. They are the great equalizer – with a gun, most anyone can threaten or actually inflict grave injury on another, even someone with greater skill, strength and determination. With a gun, unlike a knife or club, one individual can kill another quickly, at a distance, on impulse. The logical and well documented result is that when a gun is present in an assault or robbery, it is more likely that the victim will die. In other words, it is not just the intent of the assailant that determines the outcome, but also the means of attack. That conclusion about "instrumentality" has been demonstrated in a variety of ways, and is no longer controversial (Zimring 1972, 1968; Cook 1991; Wells and Horney 2002). Thus widespread gun use in violent crime *intensifies* violence, increasing the case-fatality rate. American "exceptionalism" in violent crime is not that we have so much of it, but that it is, because of widespread gun availability and use, so much more deadly than in other Western nations (Zimring and Hawkins 1997).

The likelihood that a gun will be used in crime is closely linked to the general availability of guns, and especially handguns. In jurisdictions where handgun ownership is common, the various types of transactions by which youths and criminals become armed are facilitated. The list of transactions includes thefts from homes and vehicles, loans to family members and friends, and off-the-books sales. In a high-prevalence area, then, transactions in the secondary market are subject to less friction and may well be cheaper than in markets where gun ownership is rare (Cook et al. 2007). While there is no evidence that gun prevalence affects the rate of violent crime, it does have a direct effect on the likelihood that the assailants in robbery and assault will be armed with guns, and that the result will be a higher case-fatality rate than would otherwise occur.

Research on the effects of gun prevalence have been facilitated by the discovery of a valid proxy. That proxy is the percentage of suicides committed with guns (Azrael, Cook and Miller 1994; Kleck 1994). This proxy allows for analysis of how gun use relates to the prevalence of gun ownership across states or even counties. This proxy has been used to document a strong positive relationship between county gun prevalence and each of the following outcomes: the fraction of robberies involving guns, the fraction of homicides with guns, the likelihood that young men carry a gun, and, most important, the overall homicide rate (Cook and Ludwig 2007, 2006; 2004). We took considerable care in these studies to establish that the relationship was causal, although in the absence of experimental evidence there necessarily remains some doubt. The bulk of the evidence at this point suggests more prevalent handgun ownership engenders more widespread use of guns in crime and higher social costs of crime.

From a public health perspective, a concern for the effects of gun prevalence on suicide is as important as the effect on homicide. In fact gun suicide is more common than gun homicide, although the threat of suicide does not have the same broad effects on the quality of life as does violent crime. The assertion that gun availability influences the suicide rate may be questioned on the grounds that (unlike in the case of assault) someone who wishes to commit suicide has a choice of mechanisms, some of which are as lethal as gunshot. Nonetheless, in the United States a majority of successful suicides are with guns (though guns are involved in only a small fraction of attempts). Those who are determined to kill themselves can find a way, but for the large number for whom the suicide attempt is made on impulse, the lethality of readily available and psychologically acceptable weapons appears to matter. A recent review of the evidence by Matthew Miller and David Hemenway reaches a persuasive conclusion in this regard, citing numerous case control studies (comparing gun-owning households with observably similar households without), as well as ecological research (Miller and Hemenway 2008; Miller et al. 2007; Duggan 2003) pointing to the same conclusion. While this empirical research helps make the case, it is the logic and descriptive information on suicide that is most compelling.

If an ultimate consequence of *Heller* is to increase handgun ownership in some jurisdictions, these likely effects on violent crime and suicide may be viewed as indirect and less directly germane than the intended effect, which is to safeguard the right of householders to defend their home against intruders. In that light, perhaps the most directly relevant consequences of increased gun prevalence are the effect on residential burglary rates and home-invasion rates. Unfortunately we have no reliable data on the frequency with which householders actually do use a gun to defend against home invasion, or with what success – certainly it happens occasionally, but how frequently remains a mystery. Survey data do not provide a reliable basis for finding the answer, since self-reports in this instance are unreliable and the estimated frequency differ by an order of magnitude depending on how the questions are asked (Hemenway 2004). However, it is possible to assess the influence of gun prevalence on burglary rates and patterns. We conducted such a study using a variety of data sets and methods, all of which pointed to the same result – that the prevalence of gun ownership in a county is positively related to the burglary rate (Cook and Ludwig 2003). This association does not appear spurious, but rather most likely results from an inducement effect – other things equal, residential burglary tends to be more profitable in communities where guns are likely to be part of the available loot, than otherwise. The rate of "hot" burglaries (break-ins of occupied homes) is also positively related to gun prevalence, although the effect is small.

Let us review the chain of logic. To the extent that the *Heller* and subsequent Court decisions make handguns cheaper and more readily available in some jurisdictions, then those jurisdictions will likely experience an increase in demand for handguns and ultimately an increase in the prevalence of ownership. An increase in ownership prevalence will in turn make guns more readily available to criminals, thereby increasing

gun use in violent crime and suicide, resulting in an increased death rate from intentional violence. Burglary rates are also likely to increase as burglary becomes more lucrative.

As it turns out, the first link of that chain is the weakest empirically, and requires some discussion.

## B. Will handgun prevalence increase in the District of Columbia?

DC's ban on handgun acquisitions was enacted in 1976. By the late 1980s the notion that Washington's handgun ban had achieved anything useful seemed unlikely, given common references to the city as the "Homicide Capital of the World." Of course we do not know how high the homicide rate spike would have been in the absence of the ban. And there is good evidence that the ban was ineffective in preventing the public from arming themselves during the fraught 1980s.

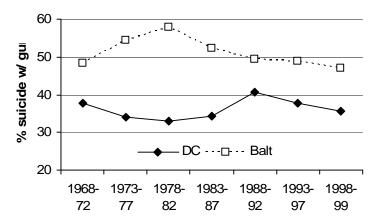
In fact, homicides and suicides declined by around 25 percent around the time of the ban, led by reductions in homicides and suicides with guns (Loftin et al., 1991)—before the violent tsunami caused by the introduction of crack cocaine in the mid-1980s. Still controversial is the question of how much of this decline can be attributed to the handgun ban rather than other factors. In an influential article published in the *New England Journal of Medicine*, criminologist Colin Loftin and his colleagues showed that homicides and suicides declined in Washington, and by more than in the city's Maryland and Virginia suburbs (Loftin et al., 1991). A challenge to the use of affluent suburbs as a control group for the city (Britt, Kleck, & Bordua, 1996) led to additional research using Baltimore data. Like D.C., Baltimore also experienced a decline in firearm homicides around 1976. But unlike Washington, Baltimore experienced a reduction in non-gun as well as gun homicides, suggesting some general change in Baltimore around this time that was not specific to guns. Further, Baltimore did not experience a decline in gun suicides (McDowall, Loftin, & Wiersema, 1996).

It is interesting, then, to analyze gun-ownership rates in DC and Baltimore during this period. Figure 1 tracks the proxy for gun ownership from the period before the ban, to the end of the 1990s. What we see is that the rate jumps up in the late 1980s, just as the crack epidemic was pushing up criminal violence – and that Baltimore, for one, had quite a different trajectory during that time. Gun ownership has declined in the District since the early 1990s, and in recent years has dropped lower than when the ban was initiated in 1976 (and far lower than the national average). Perhaps the lesson from the early years is that a ban in a small jurisdiction with porous borders is difficult to enforce, especially in the face of broad concern caused by a major crime epidemic. Ironically that may be good news for DC – it suggests that the removal of the ban may have little effect in itself on the prevalence of ownership.

The data hint at a similar pattern in Chicago, home to the other notable handgun ban susceptible to legal challenge following *Heller*. In 1982 Chicago essentially banned private ownership of guns, with a grandfather exception enabling those already in possession of handguns to register them with the city. Figure 2 shows that FSS declined

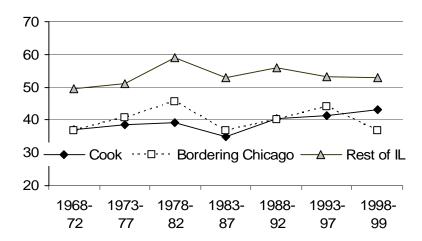
somewhat in Cook County (which includes Chicago) briefly after the 1982 ban was enacted, but then reverted to pre-ban levels (see also Cook & Ludwig, 2003c). Whether the FSS in Chicago proper followed the same pattern is unknown – the city has only about half of the county's suicides.

Figure 1: Percent Suicides with Guns, Washington, DC and Baltimore, MD



Notes: Chart presents 5-year averages for percent suicides with guns, a proxy for household gun ownership rates (see text).

Figure 2: Percent Suicides with Guns, Cook County and Rest of Illinois



Notes: Figure presents 5 year averages of percent suicides with guns, a proxy for household gun ownership rates (see text). Counties Bordering Chicago are DuPage, Lake, McHenry and Will. Missing Data in VS for IL Counties for 1992

Data taken from CDC Wonder for Residents Only, rates are possibly slightly higher.

In sum, the effect of the local handgun bans on the prevalence of gun ownership is uncertain although there is some indication that it has not been large. That does not mean that these and other interventions have no effect on the prices and availability of guns. Indeed, the underground gun market in Chicago does not work at all well (fortunately), and youths and criminals tend to have a difficult time in obtaining a gun if they are not part of a gang (Cook et al. 2007). The handgun ban and the ban on licensed dealers in that city may contribute to these frictions.

## C. Raising the price

Since 1918 the federal government has collected an excise tax on firearms amounting to 10 percent of the manufacturer's price for handguns, and 11 percent for long guns. This tax is no doubt passed along to consumers. What would happen if future court decisions struck down the tax on guns, on the grounds that it infringed on the individual's right to keep a gun in the home? The result would be a clear loss in social welfare, at least in our view. There are large negative externalities associated with keeping a handgun in the home – by our estimate, at least \$600 per year (Cook and Ludwig 2006). By the usual logic of corrective taxation it would pay to raise the current tax rate so that owners faced the full social costs of their actions. A court that was balancing the public interest against constitutional considerations would leave the door open to gun taxes.

The effect of taxes and permit requirements on the price of guns is not just an incidental detail, but rather may have an important effect on gun sales, use, and misuse. It seems apparent (at least to economists) that the most important health-relevant outcome of the tobacco litigation has been the large increase in the price of cigarettes resulting from the financial settlement with the states. The tax on new guns, though much more modest proportionally, should also have some effect on demand, reducing the number of guns and the prevalence of gun ownership by some amount. The economic logic here rests on the strong presumption that a tax on new guns will be passed on to the secondary market by restricting the quantity available from the primary market (Cook and Leitzel 1996). The same price effect can be and has been achieved by imposing permit fees or by establishing minimum quality standards (as with the ban on imports of low-quality handguns), or by requiring special features on new guns (such as locking devices or micro stamp capability). Each of these may be subject to the same challenge, that they infringe on the core right of keeping a gun for self-defense.

Incidentally, an alternative mechanism to force households to internalize the externalities associated with gun ownership is liability insurance. A standard homeowners insurance policy ordinarily covers liability for accidents involving guns, but often with an exemption for intentional harms, or even for harms resulting from criminal acts (Baker and Farrish 2006; Baker forthcoming). It is not clear how far liability or liability coverage extends for cases in which the gun is transferred by the owner to someone else, or stolen, and then misused. To the best of our knowledge, no states or localities have currently required gun owners to obtain such insurance. The threat of litigation following *Heller* could stifle local experiments with such policies, which would in turn harm social welfare for the reasons discussed above.

## D. Licensing and registration

It is possible that licensing and registration systems could also be struck down on the grounds that these systems infringe on the individual's ability to keep a gun in the home without the government's knowledge, and hence resist confiscation at some future date. While the majority opinion in *Heller* focused on self-defense rather than on resistance to governmental tyranny, we may not have heard the end of that debate. The public safety consequence of repealing licensing and registration systems is a bit unclear based on available empirical evidence, but the logic compels us to believe that this could be an important handicap to law enforcement practice under some circumstances.

Licensing and registration systems provide information to the government about who owns what guns, information that could prove useful to law-enforcement investigations. The most vivid example is in the future: the California law that requires pistols sold after 2010 to have a micro stamp capability will be more useful if the state is allowed to continue its handgun registration requirement, since that makes it more likely that investigators will be able to make the connection between shell casings found at the scene of the crime, and the current or recent owner of the gun.

Unfortunately the available evaluation evidence of existing state-level licensing and registration systems is forced to rely on weak research designs, yielding evidence for regulatory impacts on immediate output measures, but not on outcomes that are of more direct policy interest. For example Webster, Vernick and Hepburn (2001) find some effect of licensing and registration requirements on the fraction of confiscated crime guns that were first purchased out of state. How informative this is about the ease with which criminals can obtain guns, or ultimately the overall rate of gun crime within a community, is unclear. A study of the federal Brady Act suggests the ability of the secondary gun market to shift and at least partially offset changes to the supply side of the market: After Brady was enacted, Chicago experienced a large drop in the share of crime guns first sold out of state, yet the fraction of all crimes committed with a gun did not seem to change at all in the city (Cook and Braga, 2001, Cook and Ludwig, 2003).

## E. Restrictions on gun carrying

Almost all states require that legal gun owners obtain a permit to carry a concealed firearm in public, although over time a growing number of states have relaxed their requirements for issuing such permits (Dvorak, 2002). Since the majority in *Heller* focused on having guns for self defense, with particular reference to the home. What would happen if the right were expanded outside of the home, just as the legal right to self-defense with a gun has been in some states? The most extreme scenario would be if courts struck down requirements for gun carrying permits altogether? As unlikely as this may seem at the moment, it is worth exploring.

Those who wish to encourage more private gun carrying in public places argue that the increased likelihood of encountering an armed victim will deter criminals, a possibility that receives some support from prisoner surveys: 80 percent in one survey agreed with the statement that "a smart criminal always tries to find out if his potential victim is armed" (Wright & Rossi, 1994). But the same data also raise the possibility that an increase in gun carrying could prompt an arms race: Two-thirds of prisoners incarcerated for gun offenses reported that the chance of running into an armed victim was very or somewhat important in their own choice to use a gun. Currently, criminals use guns in only around one-quarter of robberies and one of every 20 assaults (Rennison, 2001). If increased gun carrying among potential victims causes criminals to carry guns more often themselves, or become quicker to use guns to avert armed self-defense, the end result could be that street crime becomes more lethal.

In a provocative series of research papers and books, economist John Lott has argued that the deterrent effects of moving from restrictive to permissive gun-carrying laws dominate (Lott and Mustard, 1997, Lott, 2000). Economist John Donohue (2003) argues that, while Lott's analysis improves upon previous research on this topic, in the end Lott's findings cannot support the conclusion that ending restrictive concealed-carry laws reduces crime. Most importantly, Donohue's re-analysis of the Lott data shows that states that eventually ended restrictive concealed-carry laws had systematically different crime trends from the other states even before these law changes went into effect. The tendency to adopt the law following an unusual spike in crime – which would ordinarily

be followed by a reduction regardless of whether a new law were passed – makes the analysis problematic. Indeed, Donohue finds much evidence in support of the view that these laws *increased* crime rates in the 1990s, when crime was generally declining. Hence the estimated treatment effect may in fact be due to whatever unmeasured factors caused crime trends to diverge before the laws are enacted.

Whether the net effect of relaxing gun-carry laws is to increase or reduce the burden of crime, there is good reason to believe that it is not large. One study found that in 12 of the 16 permissive concealed-carry states studied, fewer than two percent of adults had obtained permits to carry concealed handguns (Hill, 1997). And the actual change in gun-carrying prevalence will be smaller than the number of permits issued would suggest, because many of those who obtain permits were already carrying guns in public (Robuck-Mangum, 1997). Moreover, the change in gun carrying appears to be concentrated in rural and suburban areas where crime rates are already relatively low, among people who are at relatively low risk of victimization—white, middle-aged, middle-class males (Hill, 1997). The available data about permit holders also imply that they are at fairly low risk of misusing guns, consistent with the relatively low arrest rates observed to date for permit holders (Lott, 2000).

In sum, we expect relatively little public safety impact from striking down laws restricting gun carrying because the result would most likely be just a modest change in gun carrying rates among a subset of the population that is itself at relatively low risk of either gun offending or victimization. Our concern is that an elimination of regulations on concealed carrying really puts us in unexplored territory. It appears that it would undermine what has become a very important tactic in policing high-violence neighborhoods, namely aggressive patrol aimed at getting guns off the street by searching vehicles and pedestrians. If there are no restrictions on carrying, this tactic would no longer be defensible.

## 6. Conclusions

Freedom isn't free. But is the price relevant?

#### REFERENCES

- (ATF) Bureau of Alcohol, Tobacco, and Firearms. (2000a). Commerce in firearms in the United States. Washington, DC: U.S. Department of the Treasury.
- (ATF) Bureau of Alcohol, Tobacco, and Firearms. (2000b). ATF regulatory actions: Report to the secretary on firearms initiatives. Washington, DC: U.S. Department of the Treasury.
- (ATF) Bureau of Alcohol, Tobacco, and Firearms (2001, 2002). Firearms commerce in the United States. Washington, DC: U.S. Department of the Treasury.
- Azrael, D., Cook, P. J., & Miller, M. (2004). State and local prevalence of firearms ownership: Measurement, structure, and trends" Journal of Quantitative Criminology 20(1), 43-62.
- Baker, T. (forthcoming). Liability Insurance at the Tort-Crime Boundary, in D.M. Engle and M. McCann, eds. Fault Lines: Tort Law and Cultural Practice. Stanford University Press.
- Barnett, Randy E., and Don B. Kates. 1996. "Under Fire: The New Consensus on the Second Amendment." *Emory Law Journal* 45: 1139.
- Bassi, L. J. (1984). Estimating the effects of training programs with non-random selection. Review of Economics and Statistics, 66(1), 36-43.
- Berrien, J., McRoberts, O., & Winship, C. (2000). Religion and the Boston miracle: The effect of black ministry on youth violence. In M.J. Bane, B. Coffin, & R. Thiemann (Eds.), Who will provide? (pp. 266–248). Boulder, CO: Westview Press.
- Berrien, J., & Winship, C. (2003) Should we have faith in the churches? The Ten-Point Coalition's effect on Boston's youth violence. In B. Harcourt (Ed.), Guns, crime and punishment in America (pp. 222–248). New York: NYU Press.
- Black, D., & Nagin, D. (1998). Do "right to carry" laws reduce violent crime? Journal of Legal Studies, 27(1), 209–219.
- Block, R. (1998). Firearms in Canada and eight other western countries: Selected findings of the 1996 International Crime (Victim) Survey. Retrieved January 30, 2006, from http://canada.justice.gc.ca/en/ps/rs/rep.wd97-3a-e.pdf.
- Blumstein, A. (2000). Disaggregating the violence trend. In A. Blumstin & J. Wallman (Eds.), The crime drop in America (pp. 13–44). New York: Cambridge University Press.
- Blumstein, A., & Wallman, J. (2000). The crime drop in America. New York: Cambridge University Press.
- Boruch, R., de Moya, D., & Snyder, B. (2002). The importance of randomized field trials in education and related areas. In F. Mosteller & R. Boruch (Eds.), Evidence matters: randomized trials in education research (pp. 50–79). Washington, DC: Brookings Institution Press.
- Braga, A. A. (2002). Problem-oriented policing and crime prevention. Monsey, NY: Criminal Justice Press.
- Braga, A. A., Cook, P. J., Hargarten, S., & Ludwig, J. (2006). Reducing gun violence: Is the enforcement of existing firearms laws enough? Harvard University, unpublished.
- Braga, A. A., Kennedy, D. M., Waring, E. J., & Piehl, A. M. (2001). Problem-Oriented Policing, Deterrence, and Youth Violence: An Evaluation of Boston's Operation Ceasefire. Journal of Research in Crime and Delinquency, 38(3), 195-225.
- Brief for Amici Curiae 55 Members of United States Senate, the President of the United States Senate, and 250 Members of United States House of Representatives in Support of

- Respondent, in District of Columbia v. Heller, 128 S.Ct. 2783 (2008). supreme.lp.findlaw.com/supreme\_court/briefs/07-290/07-290.mer.ami.resp.cong.pdf.
- Britt, C. L., Kleck, G., & Bordua, G. (1996). A reassessment of the D.C. gun law: Some cautionary notes on the use of interrupted time series designs for policy impact assessment. Law and Society Review, 30(2), 361–379.
- Burtless, G. (2002). Randomized field trials for policy evaluation: Why not in education? In F. Mosteller & R. Boruch (Eds.), Evidence matters: Randomized field trials in education Research (pp.179–197). Washington, DC: Brookings Institution Press.
- Butterfield, F. (1996). All God's children: The Bosket family and the American tradition of violence. New York: Avon Books.
- Butterfield, F. (2001). The federal gun laws: The first obstacle to enforcement. Paper presented at the Conference on Crime and Punishment in America, Tuscon, AZ: University of Arizona College of Law.
- Callahan, C. M., Rivara, F. P., & Koepsell, T. D. (1994). Money for guns: Evaluation of the Seattle Gun Buy-Back Program. Public Health Reports, 109(4), 472–477.
- Caselli, F., & Coleman, W. J. (2001). The U.S. structural transformation and regional convergence: A reinterpretation. Journal of Political Economy, 109(3), 584–616.
- Chemerinsky, Erwin. 2006. *Constitutional Law: Principles and Premises, 3d ed.* New York: Aspen Publishers.
- Cohen, J., & Ludwig, J. (2003). Policing gun crimes. In J. Ludwig & P. J. Cook (Eds.), Evaluating gun policy (pp. 217–239). Washington, DC: Brookings Institution Press.
- Cohen, M. A., Rust, R. T., Steen, S., & Tidd, S. T. (2004). Willingness-to-pay for crime control programs. Criminology, 42(1), 89–109.
- Cook, P. J. (1976). A strategic choice analysis of robbery. In W. Skogan (Ed.), Sample surveys of the victims of crimes (pp. 173-187). Ballinger.
- Cook, P. J. (1980). Reducing injury and death rates in robbery. Policy Analysis 6(1), pp. 21–45.
- Cook, P. J. (1987). Robbery violence. Journal of Criminal Law & Criminology, 70(2), 357-376.
- Cook, P. J. (1991). The technology of personal violence. In M. Tonry (Ed.), Crime and justice: An annual review of research (pp. 1–71). Chicago: University of Chicago Press.
- Cook, P. J., & Braga, A. A. (2001). Comprehensive firearms tracing: Strategic and investigative uses of new data on firearms markets. Arizona Law Review, 43(2), 277–309.
- Cook, P. J., & Laub, J. (1998). The unprecedented epidemic of youth violence. In M. Moore & M. Tonry (Eds.), Crime and justice: An annual review of research (pp. 26–64). Chicago: University of Chicago Press.
- Cook, P. J., & Laub, J. (2002). After the epidemic: Recent trends in youth violence in the United States. In M. Tonry (Ed.), Crime and justice: A review of research (pp. 117–153). Chicago: University of Chicago Press.
- Cook, P. J., & Leitzel, J. A. (1996). Perversity, futility, jeopardy: An economic analysis of the attack on gun control. Law and Contemporary Problems, 59(1), 91–118.
- Cook, P. J., & Leitzel, J. A. (2002). "Smart" guns: A technological fix for regulating the secondary gun market. Contemporary Economic Problems, 20(1), 38–49.
- Cook, P. J., & Ludwig, J. (1996). Guns in America: Results of a comprehensive survey of gun ownership and use. Washington, DC: Police Foundation.
- Cook, P. J., & Ludwig, J. (2000). Gun violence: The real costs. New York: Oxford University Press.

- Cook, P. J., & Ludwig, J. (2002). Litigation as regulation: The case of firearms. In W. K. Viscusi (Ed.), Regulation through litigation. Washington, DC: Brookings Institution.
- Cook, P. J., & Ludwig, J. (2003a). Pragmatic gun policy. In J. Ludwig & P. J. Cook (Eds.), Evaluating Gun Policy. Washington, DC: Brookings Institution Press.
- Cook, P. J., & Ludwig, J. (2003b). Guns and burglary. In J. Ludwig & P. J. Cook (Eds.), Evaluating gun policy (pp. 74–120). Washington, DC: Brookings Institution Press.
- Cook, P. J., & Ludwig, J. (2003c). The effects of the Brady Act on gun violence. In B.E. Harcourt (Ed.) Guns, crime, and punishment in America (pp. 283–298). New York: New York University Press.
- Cook, P. J., & Ludwig, J. (2004). Does gun prevalence affect teen gun carrying after all? Criminology, 42(1), 27–54.
- Cook, P. J., & Ludwig, J. (2006). The social costs of gun ownership. Journal of Public Economics, 90(1–2), 379–391.
- Cook, P. J., Ludwig, J., & Braga, A. A. (2005). Criminal records of homicide offenders. Journal of the American Medical Association, 294(5), 598–601.
- Cook, P. J., Ludwig, J., & Hemenway, D. (1997). The Gun debate's new mythical number: How many defensive gun uses per year? Journal of Policy Analysis and Management, 16, 463–469.
- Cook, P. J., Ludwig, J., Venkatesh, S. A., & Braga, A. A. (2005). Underground gun markets. (National Bureau of Economic Research, Cambridge MA, Working Paper 11737).
- Cook, P. J., Molliconi, S., & Cole, T. (1995). Regulating gun markets. Journal of Criminal Law & Criminology, 86, 59–92.
- Cook, P. J., Moore, M. H., & Braga, A. (2002). Gun control. In J. Q. Wilson & J. Petersilia (Eds.), Crime: Public policies for crime control (pp. 291–329). Oakland, CA: ICS Press.
- Cook, T. D., & Payne, M. R. (2002). Objecting to the objections to using random assignment in educational research. In F. Mosteller & R. Boruch (Eds.), Evidence matters: Randomized trials in education research (pp. 150–178). Washington, D.C.: Brookings Institution Press.
- Cornell, Saul. 2006. A Well-Regulated Militia: The Founding Fathers and the Origins of Gun Control in America. New York: Oxford University Press.
- Cottrol, Robert J., and Raymond T. Diamond. 1991. "The Second Amendment: Toward an Afro-Americanist Reconsideration." *Georgetown Law Journal* 80:309.
- Cullen, J. B., & Levitt, S. D. (1999). Crime, urban flight and the consequences for cities. Review of Economics and Statistics, 81(2), 159–169.
- Cunha, F., Heckman, J. J., Lochner, L., & Masterov, D. (2005). Interpreting the Evidence on life cycle skill formation. Working paper 11331. Cambridge, MA.:National Bureau of Economic Research.
- Dahl, Robert A. 1957. "Decision-Making in a Democracy: The Supreme Court as a National Policy-Maker." *Journal of Public Law* 6:279.
- Decker, S. H. (2003). Policing gangs and youth violence. Belmont, CA: Wadsworth-Thomson.
- Denning, B.P. (2006) Gun litigation and the Constitution. In T.D Lytton (ed.) Suing the Gun Industry: A Battle at the Crossroads of Gun Control and Mass Torts. Ann Arbor: University of Michigan Press, 315-338.
- Department of Justice, C. (1998). Firearms ownership in the International Crime Victim Survey 1996: A comparison of Canada and eight other Western nations (R. Block, Trans.). Ottawa, Canada: Author.

- Donohue, J. J. (2003). The impact of concealed-carry laws. In J. Ludwig & P. J. Cook (Eds.), Evaluating gun policy (pp. 287-324). Washington, DC: Brookings Institution Press.
- Duggan, M. (2001). More guns, more crime. Journal of Political Economy, 109(5), 1086–1114.
- Duggan, M. (2003). Guns and suicide. In J. Ludwig & P. J. Cook (Eds.), Evaluating gun policy (pp. 41–73). Washington, DC: Brookings Institution Press.
- Dvorak, J. A. (2002, March 1). Concealed weapons laws taking hold. Knight-Ridder Newspapers.
- Eck, J., & Maguire, E. (2000). Have changes in policing reduced violent crime? An assessment of the evidence. In A. Blumstein & J. Wallman (Eds.) The crime drop in America (pp. 207–265), New York: Cambridge University Press.
- Egelko, Bob, and Cecilia M. Vega. June 28, 2008. "NRA sues S.F. over guns in public housing." *San Francisco Chronicle*. http://www.sfgate.com/cgibin/article.cgi?f=/c/a/2008/06/27/MN5B11GMML.DTL&tsp=1.
- Epstein, Lee & Jack Knight. 1998. *The Choices Justices Make*. Washington, D.C.: Congressional Quarterly, Inc.
- Fallon, Richard H. Jr. 2001. *Implementing the Constitution*. Cambridge, Mass.: Harvard University Press.
- Friedman, Barry. 2005. "The Politics of Judicial Review." Texas Law Review 84: 257.
- Glaeser, E. L., Sacerdote, B., & Scheinkman, J. A. (1996). Crime and social interactions. Quarterly Journal of Economics, 111(2), 507–548.
- Golden, M., & Almo, C. (2004). Reducing gun violence: An overview of New York City's strategies. New York: Vera Institute of Justice.
- Greenwood, P. (2003). Comment. In J. Ludwig & P. J. Cook (Eds.), Evaluating gun policy (pp. 280–286). Washington, DC: Brookings Institution Press.
- Gueron, J. M. (2002). The politics of random assignment: Implementing studies and affecting policy. In F. Mosteller & R. Boruch (Eds.), Evidence matters: Randomized trials in education research (pp. 15–49). Washington, DC: Brookings Institution Press.
- Gueron, J. M. (2003). Presidential address—Fostering research excellence and impacting policy and practice: The welfare reform story. Journal of Policy Analysis and Management, 22(2), 163–174.
- Heckman, J. J., & Hotz, J. V. (1989). Choosing among alternative nonexperimental methods for estimating the impact of social programs: The case of Manpower training. Journal of the American Statistical Association, 84, 862–880.
- Hemenway, D. (1997a). The myth of millions of self-defense gun uses: An explanation of extreme overestimates. Chance, 10, 6–10.
- Hemenway, D. (1997b). Survey research and self-defense gun use: An explanation of extreme overestimates. Journal of Criminal Law and Criminology, 87, 1430–1445.
- Hemenway, D. (2004). Private guns, public health. Ann Arbor, MI: University of Michigan Press.
- Hill, J. M. (1997). The impact of liberalized concealed weapon statutes on rates of violent crime. Unpublished senior thesis, Duke University, Public Policy.
- Horan, Deborah. Aug. 12, 2008. "Evanston latest suburb to repeal handgun ban in wake of high court ruling." *Chicago Tribune*. www.chicagotribune.com/news/local/chi-gunban\_13aug13,0,1421061.story.
- Kalil, J. (2002, 9 March). A New Approach: Prosecutors Take Aim at Gun Crimes. Las Vegas Review-Journal, p. 1B.

- Kates, D. B., Jr., & Polsby, D. D. (2000, November). The myth of the "virgin killer": Lawabiding persons who kill in fit of rage. Paper presented at the American Society of Criminology Annual Meeting, San Francisco: American Society of Criminology.
- Kellermann, A. L., Rivara, F. P., Rushforth, N. B., Banton, J. G., Reay, D. T., Francisco, J. T., et al. (1993). Gun ownership as a risk factor for homicide in the home. New England Journal of Medicine, 329, 1084–1091.
- Kennedy, D. M., Piehl, A. M., & Braga, A. A. (1996). Youth violence in Boston: Gun markets, serious youth offenders, and a use-reduction strategy. Law and Contemporary Problems, 59(1), 147–198.
- Kleck, G. (1991). Point blank: Guns and violence in America. New York: Aldine de Gruyter.
- Kleck, G. (1997). Targeting guns: Firearms and their control. New York: Aldine de Gruyter.
- Kleck, G. (2004). Measures of gun ownership levels for macrolevel crime and violence research. Journal of Research in Crime and Delinquency 41(1), 3–36.
- Kleck, G., & Gertz, M. (1995). Armed resistance to crime: The prevalence and nature of self-defense with a gun. Journal of Criminal Law & Criminology, 86, 150–187.
- Kleck, G., & Patterson, E. B. (1993). The impact of gun control and gun ownership levels on violence rates. Journal of Quantitative Criminology, 9(3), 249–287.
- Klein, M. W. (1995). The American street gang: Its nature, prevalence and control. New York: Oxford University Press.
- Kopel, D. B. (2001). Lawyers, guns and burglars. Arizona Law Review, 43(2), 345–368.
- Kopel, D.B. and R.E. Gardiner (1995) The Sullivan Principles: Protecting the Second Amendment from civil abuse. Seton Hall Legislative Journal 19: 737.
- Koper, C. S. (2004). Updated assessment of the federal assault weapons ban: Impacts on gun markets and gun violence, 1994–2003. Washington, DC: National Institute of Justice, U.S. Department of Justice.
- Legal Community Against Violence (2008
- Levinson, Sanford. 1989. "The Embarrassing Second Amendment." Yale Law Journal 99: 637.
- Levitt, S. D. (2001). Deterrence. In J. Q. Wilson & J. Pertersilia (Eds.), Crime: Public policies for crime control (pp. 435–450). Oakland: Institute for Contemporary Studies.
- Levitt, S. D. (2003). Comment. In J. Ludwig & P. J. Cook (Eds.), Evaluating gun policy (pp. 277–280). Washington, DC: Brookings Institution Press.
- Levitt, S.D. (2004). Understanding why crime fell in the 1990s: Four factors that explain the decline and six that do not. Journal of Economic Perspectives 18(1), 163-190.
- Levitt, S. D., & Venkatesh, S. A. (2000). An economic analysis of a drug-selling gang's finances. Quarterly Journal of Economics, CXV(3), 755–790.
- Lewis, Harold S. Jr., and Elizabeth Norman. 2001. *Civil Rights Law and Practice*. St. Paul, Minn.: West Group.
- Lizotte C., & Zatz, M. (1986) The use and abuse of sentence enhancement for firearms offenses in California. Law and Contemporary Problems 49(1), 199–221.
- Loftin, C., Heumann, M.& McDowall, D. (1983). Mandatory sentencing and firearms violence. Law and Society Review 17(2), 287–318.
- Loftin, C. & McDowall, D. (1981) "One with a gun gets you two:" Mandatory sentencing and firearms violence in Detroit. Annals of the American Academy of Political and Social Science, 455, 150–167.

- Loftin, C., & McDowall, D. (1984). The deterrent effects of the Florida felony firearm law. Journal of Criminal Law and Criminoloy, 75(1), 250–259.
- Loftin, C., McDowall, D., Wiersema, B., & Cottey, T. (1991). Effects of restrictive licensing of handguns on homicide and suicide in the District of Columbia. New England Journal of Medicine, 325, 1625–1630.
- Lott, J. (2000). More guns, less crime (2nd Ed.). Chicago: University of Chicago Press.
- Lott, J. R., & Mustard, D. B. (1997). Crime, deterrence and right-to-carry concealed handguns. Journal of Legal Studies, 16(1), 1–68.
- Ludwig, J. (1998). Concealed-gun-carrying laws and violent crime: Evidence from state panel data. International Review of Law and Economics, 18, 239–254.
- Ludwig, J. (2000). Gun self-defense and deterrence. In Michael Tonry (Ed.), Crime and justice: An annual review of research (pp. 363–417). Chicago: University of Chicago Press.
- Ludwig, J. (2005). Better gun enforcement, less crime. Criminology & Public Policy 4(4), 677–716.
- Ludwig, J., & Cook, P. J. (2000). Homicide and suicide rates associated with implementation of the Brady Handgun Violence Prevention Act. Journal of the American Medical Association, 284(5), 585–591.
- Ludwig, J., & Cook, P. J. (2001). The benefits of reducing gun violence: Evidence from Contingent-Valuation Survey data. Journal of Risk and Uncertainty, 22(3), 207–226.
- Ludwig, J., Cook, P.J., & Smith, T. (1998). The gender gap in reporting household gun ownership. American Journal of Public Health, 88(11), 1715-1718.
- Lytton, Timothy D. (2005a) "Introduction: An overview of lawsuits against the gun industry." In T.D. Lytton, Ed. Suing the Gun Industry. Ann Arbor, MI: University of Michigan Press. pp. 1-35.
- Lytton, Timothy D. (2005b) "Afterward: Federal gun industry immunity legislation." In T.D. Lytton, Ed. Suing the Gun Industry. Ann Arbor, MI: University of Michigan Press. pp. 339-354.
- Manning, W. (2003). Comment. In J. Ludwig & P. J. Cook (Eds.), Evaluating gun policy (pp. 331–341). Washington, DC: Brookings Institution Press.
- Manson, D.A., & Gilliard, D.K. (1997). Presale handgun checks, 1996: A national estimate. NCJ 165704. Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics.
- Marvell, T.B. & Moody, C.E. (1995). The impact of enhanced prison terms for felonies committed with guns. Criminology, 33(2), 247–281.
- McDowall, D., Loftin, C., & Presser, S. (2000). Measuring civilian defensive firearm use: A methodological experiment. Journal of Quantiative Criminology 16(2), 1–19.
- McDowall, D., Loftin, C. & Wiersema, B. (1992). A comparative study of the preventive effects of mandatory sentencing laws for gun crimes, Journal of Criminal Law and Criminology. 83(2): 378–394.
- McDowall, D., Loftin, C., & Wiersema, B. (1996). Using Quasi-Experiments to Evaluate Firearms Laws: Comment on Britt et al's Reassessment of the D.C. Gun Law. Law and Society Review, 30(2), 381–391.
- McGonigal, M. D., Cole, J., Schwab, C. W., Kauder, D. R., Rotondo, M. F., & Angood, P. B. (1993). Urban firearm deaths: A five-year perspective. Journal of Trauma, 35(4), 532–536.

- McPheters, L., Mann, R. & Schlagenhauf, D. (1984). Economic response to a crime deterrence program: Mandatory sentencing for robbery with a firearm. Economic Inquiry 22(2), 550–570.
- Memorandum from the Attorney General to All United States Attorneys Regarding United States v. Emerson. Nov. 9, 2001. www.usdoj.gov/ag/readingroom/emerson.htm.
- Miller, M., Azrael, D., & Hemenway, D. (2002). Household firearm ownership levels and homicide rates across U.S. regions and states, 1988-1997. American Journal of Public Health, 92, 1988–1993.
- Miller, M., & Hemenway, D. (1999). The relationship between firearms and suicide: A review of the literature. Aggression and Violent Behavior, 4(1), 59–75.
- Miller, M., & Hemenway, D. (2008). Guns and Suicide in the United States. The New England Journal of Medicine 359(10): Sept 10: 989-991.
- Miron, J. A. (2001). Violence, guns, and drugs: A cross-country analysis. Journal of Law and Economics, 44(2), 615–633.
- Mullin, W. P. (2001). Will gun buyback programs increase the quantity of guns? International Review of Law & Economics. 21(1), 87-102.
- Murnane, R. J., & Nelson, R. R. (2005). Improving the performance of the education sector: The valuable, challenging, and limited role of random assignment evaluations. Working paper 11846. Cambridge, MA.: National Bureau of Economic Research.
- Mustard, D. B. (2003). Comment. In J. Ludwig & P. J. Cook (Eds.), Evaluating gun policy (pp. 325–331). Washington, DC: Brookings Institution Press.
- Nagin, D. S. (1998). Criminal deterrence research at the outset of the twenty-first century. In M. Tonry (Ed.), Crime and justice: A review of research, Volume 23 (pp. 1–42). Chicago: University of Chicago Press.
- Piehl, A. M., Cooper, S. J., Braga, A. A., & Kennedy, D. M. (2003) Testing for structural breaks in the evaluation of programs." The Review of Economics and Statistics, 85(3), 550–558.
- Pierce, G. L., & Bowers, W. J. (1981). The Bartley-Fox Gun Law's short-term impact on crime in Boston. Annals of the American Academy of Political and Social Science, 455, 120–137.
- Polsby, D. D., & Kates, D. B. (1998). American homicide exceptionalism. University of Colorado Law Review, 69(4), 969-1007.
- Rakove, Jack N. 2000. "The Second Amendment: The Highest Stage of Originalism." In *The Second Amendment in Law and History*. Carl T. Bogus ed. New York: The New Press.
- Raphael, S., & Ludwig, J. (2003). Prison sentence enhancements: The case of Project Exile. In J. Ludwig & P. J. Cook (Eds.), Evaluating gun policy (pp. 251–276). Washington, DC: Brookings Institution Press.
- Rennison, C. M. (2001). Criminal victimization 2000: Changes 1999–2000 with trends 1993–2000. (NCJ 187007). Washington, DC: Bureau of Justice Statistics.
- Reuter, P., & Mouzos, J. (2003). Australia: A massive buyback of low-risk guns. In J. Ludwig & P. J. Cook (Eds.), Evaluating gun policy (pp. 121–141). Washington, DC: Brookings Institution Press.
- Robuck-Mangum, G. (1997). Concealed weapon permit holders in North Carolina: A descriptive study of handgun-carrying behavior. Unpublished master's thesis, University of North Carolina, School of Public Health.
- Romero, M. P., Wintemute, G. J., & Vernick, J. S. (1998). Characteristics of a gun exchange program, and an assessment of potential benefits. Injury Prevention, 4, 206–210.

- Rosenfeld, R. (1996). Crime prevention or community mobilization? The dilemma of the Gun Buy-Back Program. In M. Plotkin (Ed.), Under fire: Gun buy-backs, exchanges and amnesty programs (pp. 1–28). Washington, DC: Police Executive Research Forum.
- Rosenfeld, R., Fornango, R., & Baumer, E. (2005). Did Ceasefire, Compstat and Exile reduce homicide? Criminology and Public Policy, 4(3), 419–450.
- Saad, Lydia. October 11, 2007. "Shrunken Majority Now Favors Stricter Gun Laws." *Gallup News Service*. http://www.gallup.com/poll/101731/Shrunken-Majority-Now-Favors-Stricter-Gun-Laws.aspx.
- Segal, Jeffrey A., and Harold J. Spaeth. 2002. *The Supreme Court and the Attitudinal Model Revisited*. Cambridge University Press.
- Sheley, J.F., & Wright, J.D.(1995). In the line of fire: Youth, guns, and violence in urban America. New York: Aldine de Gruyter.
- Sherman, L. (2000, March 1). Gun carrying and homicide prevention. Journal of the American Medical Association, 283(9), 1193–1195.
- Sherman, L. W., & Rogan, J. P. (1995). Effects of gun seizures on gun violence: "Hot Spots" Patrol in Kansas City. Justice Quarterly, 12(4), 673–693.
- Sherman, L. W., Shaw, J. W., & Rogan, D. P. (1995). The Kansas City Gun Experiment. Washington, DC: National Institute of Justice.
- Smith, G. C., & Pell, J. P. (2003). Parachute use to prevent death and major trauma related to gravitational challenge: Systematic review of randomised controlled trials. British Medical Journal, 327, 1459–1461.
- Smith, J., & Todd, P. (2005). Does matching overcome Lalonde's Critique of Nonexperimental Estimators? Journal of Econometrics, 125(1-2), 305–353.
- Smith, T.W. (2007) Public Attitudes towards the Regulation of Firearms. NORC/University of Chicago, March.
- Strauss, David A. 1996. "Common Law Constitutional Interpretation." *University of Chicago Law Review* 63:877.
- Sullivan, Kathleen M. 1992. "The Supreme Court, 1991 Term—Foreword: The Justices of Rules and Standards." *Harvard Law Review* 106:22.
- Sunstein, Cass R. 2008. "Second Amendment Minimalism: *Heller* as *Griswold*." *Harvard Law Review* (forthcoming). http://ssrn.com/abstract=1204942.
- Tita, G. K., Riley, J., Ridgeway, G., Grammich, C., Abrahamse, A. F. & Greenwood, P. W. (2003) Reducing gun violence: Results from an intervention in East Los Angeles. Santa Monica, CA: RAND Corporation.
- Tushnet, Mark V. 2007. *Out of Range: Why the Constitution Can't End the Battle Over Guns.* New York: Oxford University Press.
- Vernick, J. S., Meisel, Z., Teret, S. P., Milne, J.S. & Hargarten, S. (1999). "I didn't know the gun was loaded": An examination of two safety devices that can reduce the risk of unintentional firearm injuries. Journal of Public Health Policy, 20(4), 427–440.
- Vernick, J. S., & Teret, S. P. (2000). A public health approach to regulating firearms as consumer products. University of Pennsylvania Law Review, 148(4), 1193–2111.
- Vernick, J. S., Webster, D. W., & Hepburn, L. M. (2001). Relationship between licensing, registration, and other gun sales laws and the source state of crime guns. Injury Prevention, 7, 184–189.

- Vigdor, E. R., & Mercy, J. A. (2003). Disarming batterers: The impact of domestic violence firearm laws. In J. Ludwig & P. J. Cook (Eds.), Evaluating Gun Policy (pp. 157–200). Washington, DC: Brookings Institution Press.
- Volokh, Eugene. 1998. "The Commonplace Second Amendment." *New York University Law Review* 73:793.
- Wachtel, J. (1998). Sources of crime guns in Los Angeles, California. Policing: An International Journal of Police Strategies and Management, 21(2), 220–239.
- Wagenaar, A. C., & Toomey, T. L. (2002). Effects of minimum drinking age laws: Review and analyses of the literature from 1960 to 2000. Journal of Studies on Alcohol. Supp. 14, 206–225.
- Webster, D. W., Vernick, J. S., & Hepburn, L. M. (2001). Relationship between licensing, registration and other gun sales laws and the source state of crime guns. Injury Prevention 7(3), 184–189.
- Webster, D. W., Vernick, J. S., & Hepburn, L. M. (2002). Effects of Maryland's law banning "Saturday Night Special" handguns on homicides. American Journal of Epidemiology 155(5), 406–412.
- Weil, D. S., & Knox, R. C. (1996). Effects of Limiting Handgun Purchases on Interstate Transfer of Firearms. Journal of the American Medical Association, 275(22), 1759-1761.
- Wellford, C. F. (2005). Editorial introduction. Criminology & Public Policy, 4(4), 673–676.
- Wellford, C. F., Pepper, J. V., & Petrie, C. V. (2005). Firearms and violence: A critical review. Washington, D.C.: National Academies Press.
- Wilson, J. Q. (1994, 20 March). Just take their guns away: Forget about gun control. New York Times Magazine (Section 6), 46–47.
- Winkler, Adam. 2007. "Scrutinizing the Second Amendment." *Michigan Law Review* 105: 683.
- Winship, C. (2002) End of a miracle? Crime, faith and partnership in Boston in the 1990's, (Working Paper, Harvard University Department of Sociology).
- Wintemute, G. J., Cook, P. J., & Wright, M. (2005). Risk factors among handgun retailers for frequent and disproportionate sales of guns used in violent and firearm-related crimes. Injury Prevention, 11, 357–363.
- Wintemute, G.J., Wright, M., Drake, C.M., & Beaumont, J.J. (2001) Subsequent criminal activity among violent misdemeanants who seek to purchase handguns. Journal of the American Medical Association 265(8), 1019-1026.
- Wise, Daniel. July 16, 2008. "Defense Lawyers Fire First Shot in Challenge to State Gun Law." *New York Law Journal* 240:1.
- Wolfgang, M. E. (1958). Patterns of criminal homicide. Philadelphia: University of Pennsylvania Press.
- Wolfgang, M. E. (1995). A tribute to a view i have opposed. Journal of Criminal Law and Criminology, 86(1), 188–192.
- Wright, J. D., & Rossi, P. H. (1994). Armed and considered dangerous: A survey of felons and their firearms (Expanded Edition). New York: Aldine de Gruyter.
- Zimring, F. E. (1968). Is gun control likely to reduce violent killings? University of Chicago Law Review, 35, 21–37.
- Zimring, F. E. (1972). The medium is the message: Firearm calibre as a determinant of death from assault. Journal of Legal Studies, 1, 97–124.

Zimring, F. E., & Hawkins, G. (1997). Crime is not the Problem: Lethal violence in America. New York: Oxford University Press.