An update on firearms research provided by the Harvard Injury Control Research Center

Carrying Concealed Weapons (CCW) Laws: From "May Issue" to "Shall Issue"

I. Introduction

Over the past 20 years, many states have loosened their concealed gun-carrying laws. What has been the effect on crime? The scientific literature suggests that the changes have neither been highly beneficial nor highly detrimental.

Four generic types of state gun-carrying laws currently exist: (a) concealed carry prohibited; (b) "may issue" (police have some discretion over who receives a permit); "shall issue" (police must provide a permit to anyone who is not expressly prohibited by statue); and (d) no carry restrictions.

Between 1985-1991, thirteen states moved from "may issue" to "shall issue"; between 1994-1996 another fifteen states moved from may issue to shall issue, and between 2000 and 2003, another five states became shall issue. As of 2008, there are two "carry prohibited" states, 12 "may issue", 34 "shall issue", and two states with no carry restrictions. The Legal Community Against Violence has summarized state CCW laws. 1

A 1997 study by Lott and Mustard² has been frequently cited in the national debate on the efficacy of concealed carry laws. The authors found "that allowing citizens to carry concealed weapons deters violent crime." The study led to a massive amount of literature on the effects of CCW laws. This *Bullet-in* briefly summarizes the literature from academic journals appearing on this issue (excluding responses and counterresponses).

II. Support for the Lott-Mustard conclusions

Some academic research found that the Lott-Mustard findings were fairly robust to some changes in the model. Most of these articles were published in a special issue of the Journal of Law and Economics, from those invited to present papers at a conference at the American Enterprise Institute in 1999:

Plassman & Tideman (2001) found that "such laws appear to have statistically significant deterrent effects on the numbers of reported murders, rapes and robberies." Olson & Maltz (2001) found that by disaggregating the homicide data, "some [results] are consistent with those found by Lott and Mustard and other are not." A study by Benson & Mast (2001) found "little evidence that the Lott and Mustard results are biased because of a lack of controls for the private security measures employed in this study." Moody (2001) found that "right-to-carry weapons laws tend to reduce violent crime (and burglary)." An earlier study by Bartley & Cohen (1998) had also determined that the Lott-Mustard deterrence results "are robust enough to make them difficult to dismiss as unfounded."

Some found additional effects of the law. Mustard (2001) focused on police and found that "allowing law-abiding citizens to carry concealed weapons does not endanger the lives of officers and may help reduce their risk of being killed." Bronars & Lott (1998) found that shall-issue laws led criminals to commit crimes in neighboring areas, but "the negative effects of a neighbor's law are mitigated by having one's own state

adopting the law" leading to the conclusion that "the largest reductions in violent crime will be obtained when all the states adopt these laws." 9

III. Criticisms of the conclusions

Some studies found serious problems with the data used by Lott-Mustard:

A. Data Problems

Some studies found that the data used were so flawed that any findings were largely irrelevant. For county data, Maltz & Targonski (2002) concluded: "County-level crime data have major gaps...until improved methods of imputing county-level crime data are developed, tested, and implemented, they should not be used, especially in policy studies." Similarly, Pridemore (2005) concluded that "research examining county-level data...reveals serious reporting errors...Despite these limitations, homicide studies using these small counties continue to be carried out without heeding these previous warnings." 11

Martin & Legault (2005) found large errors in the state data used by Lott & Mustard in their analyses. They concluded that the majority of the state-level findings "are mere artifacts of reporting error and data anomalies" and concluded "that any inferences regarding the effects of concealed carry weapons laws on crime rates drawn from analyses of the (Lott)....data are seriously flawed." ¹²

B. Problems with the Analysis

Many scholars believed the models and analyses of Lott-Mustard were fatally flawed. Alschuler (1997) concluded: "There is essentially no reason for an intelligent consumer of social science research to credit the Lott and Mustard findings." Similarly Webster, Vernick & Ludwig (1997) concluded: "Several serious flaws in the study render the authors' conclusions insupportable." Zimring & Hawkins (1997) agreed with these assessments: "what we know from this study about the effects of 'shall carry' laws is, therefore, nothing at all." 15

IV. Different Results

Many researchers not only believed the Lott-Mustard analyses were deficient, but they did their own empirical research and obtained quite different results.

Black & Nagin (1998) concluded that "their results are highly sensitive to small changes in their model and sample... inference based on the Lott and Mustard model is inappropriate, and their results cannot be used responsibly to formulate public policy." Black & Nagin's own study found "no evidence of significant impact for any type of violent crime." ¹⁶

Ludwig (1998) found that "shall-issue laws have resulted, if anything, in an increase in adult homicide rates." ¹⁷

Dezhbakhsh & Rubin (1998) also did their own analysis. ¹⁸ In a 1999 interview at Emory University concerning their study, Dezhbakhsh stated: "we show not only that Lott's strong crime-reducing effect does not materialize, but also that concealed handguns lead to a higher robbery rate." ¹⁹

From their analyses, Ayres & Donahue (2003) concluded: "The best evidence suggests overall small increases in crime associated with adoption of concealed carry laws...No longer can any plausible case be made on statistical grounds that shall-issue laws are likely to reduce crime for all or even most states." ²⁰

A study by Kovandzic & Marvell (2003) found "little evidence that increases in the number of citizens with concealed-handgun permits reduce or increase rates of violent crime."²¹

The analyses of Hepburn et al. (2004) found that "concealed weapon laws are not associated with significant increases or decreases in homicide."²²

Donohue (2004) concluded: "there is no evidence of reduction in violent crime when right-to-carry laws are passed" (while there is evidence of increases in property crime).²³

Rosengart et al. (2005) concluded: "a 'shall issue' law that eliminated most restrictions on carrying a concealed weapon may be associated with increased firearm homicide rates." ²⁴

Kovandic, Marvell and Vieraitis in 2005 concluded: "The results provide no evidence that the laws reduce or increase rates of violent crime." 25

Grambsch (2008) concluded that her results "give no support to the hypothesis that shall-issue laws have beneficial effects in reducing murder rates." ²⁶

V. Summary

In 2004 the National Research Council reviewed the scientific literature and did their own analyses and found "no credible evidence that the passage of right-to-carry laws decreases or increases violent crime." This is not the same as saying the laws don't affect crime, just that we still don't know whether they do or not with any degree of certainty.

While one might expect CCW laws to lead to significant changes in overall crime levels, there are at least two compelling reasons why any effect of CCW laws on any measure of crime is likely to be negligible. First, only a tiny percentage of the population obtains carry permits. And second, these permit holders are typically from groups who are at relatively low risk for either crime perpetration OR victimization—permit holders are usually non-young, non-poor, non-urban, and non-minority. Empirical studies typically examine the effect of the laws on the overall population. Future research on CCW laws might a) focus on the effect of CCW laws on the group that actually obtains permits (e.g., Do they actually carry their guns? How often? Are there more or fewer deaths or injuries to their loved ones? Are they more likely to intervene if they witness a crime? Does brandishing the gun halt a crime-in-progress?), b) survey criminals to look for evidence that a change in these laws impacted their behavior (e.g. Were they more likely to carry guns themselves? Did the notion that civilians may be armed deter them from committing a crime?), and c) survey non-carriers to study effects these laws may have on them (e.g., Do they feel safer or more afraid? Has someone brandished a gun on their behalf, or to intimidate them?). Answers to these questions would do much to enhance what is known about the utility of CCW laws.

VI Post Script

In 2008-2009 there was a four article exchange between Moody/Marvell and Ayres/Donohue in the Econ Journal Watch. Moody & Marvell (2008) state that their new statistical analysis "finds that shall issue laws are generally beneficial." Ayres and Donohue (2009a) respond that the Moody and Marvell results actually show that right to carry laws "on net increase the costs of crime (albeit statistically insignificantly) in aggregate for 23 of the 24 jurisdictions they examine, but cause massive benefits in the single state of Florida," and when their model is modified in only one respect, there is "no support for the more guns, less crime hypothesis. Indeed...we see statistically significant evidence that right to carry laws increase aggravated assault." Moody and Marvell (2009) respond that "we are not advocates of the shall-issue laws," that our 2008 paper "criticizes Ayres and Donohue (2003) on only one point," "that it is not enough to argue that Florida has data problems" and that the claim in their article that shall issue laws increase crime "depended on their truncating

the trends at five years."³⁰ Ayres and Donohue (2009b) respond that "one would want to be very cautious in extending trends beyond five years when 14 of the 24 states have no post-passage data beyond three years," that when the original Lott and Mustard model (1997) is extended through 2006, it "supports a broad conclusion that more guns generate more crime," and for various models extended through 2006, "the one consistent findings...is that right-to-carry laws increase aggravated assault."³¹

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