

simple before-and-after averages can be quite misleading, and Black and Nagin, Duggan, Ludwig, and Ayres and Donohue (1999) limit their studies to those averages.

Finally, in a series of papers, none of them peer refereed, Ian Ayres and John Donohue claim that crime rates may possibly rise with the passage of right-to-carry laws. (The book chapter discussed here by Donohue [2003] duplicates the same data and the same regressions.) They provide results for a variety of specifications using data from 1977 to 1997. Their most general results report the relative crime rates by year before and after the adoption of the law and show significant declines in all violent crime categories with patterns that are very similar to those just shown for Plassmann and Tideman.

Nevertheless, Donohue argues that these results provide no evidence that right-to-carry laws reduce violent crime, as the coefficients for crimes like robbery are positive for up to 6 to 7 years after the enactment of the law.¹¹⁶ But he completely misinterprets his own results. A positive coefficient implies that the crime rates in right-to-carry states are higher than in non-right-to-carry states. But if the coefficient becomes smaller after the passage of the law, as is true here, that means the crime rates in right-to-carry states are falling relative to the crime rates in non-right-to-carry states. The crime rate in right-to-carry states is still higher than in other states, but not by as much as before. Thus, contrary to his own statements, Donohue's study showed that concealed-carry laws actually reduced crime. Figure 10.5 provides fairly dramatic evidence that even Ayres and Donohue's own results show that violent crime rates fall after right-to-carry laws are adopted, and that the drops over the entire period are larger for county- than state-level data. Their results generate similar graphs for the other violent crime categories.

Donohue explains his results this way (pp. 312–13, emphasis added):

A supporter of the Lott thesis might note that the dummies for the periods more than three years after passage tend to become negative and statistically significant, but in my opinion the coefficient estimates for the dummies lagged beyond three years tend to weaken Lott's case rather than buttress it. . . . The ostensibly growing effect on crime—see the increasingly larger negative numbers after passage in table 8–5—are taken by Lott as evidence that shall-issue laws become more beneficial over time, but something very different is at work. The observed pattern again shows that numerous states *experiencing increases in crime* after passage drop out of the analysis be-

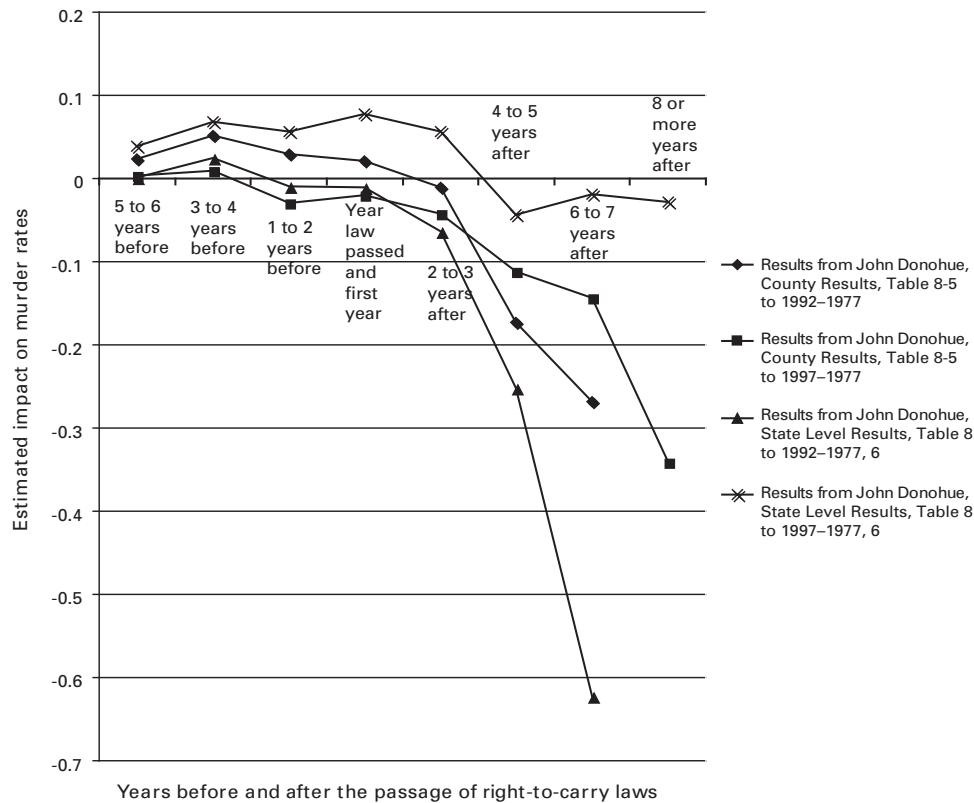


Figure 10.5. Donohue's (2003) estimated impact of right-to-carry laws on murder. From John Donohue, "The Impact of Concealed-Carry Laws," in *Evaluating Gun Policy*, ed. Jens Ludwig (Washington, DC: Brookings Institution Press, 2003), 287-323.

cause these states' laws were adopted too close to 1997 to be included in the estimate for beyond three years. (Indeed, none of the fourteen shall-issue laws that were adopted after the period for inclusion in Lott's original work affect the estimates of these "after three years" dummies).

As mentioned, Donohue makes a significant mistake here when interpreting his own results. True, the coefficients were positive for some of these estimates in the years immediately after passage of right-to-carry laws. As I explained, however, this simply means that the states that passed right-to-carry laws tended to be states with high crime rates. The crucial point here is that the number of crimes still fell—that immediately after the law was passed, crime rates in right-to-carry states were still higher than in other states but by a smaller amount. As the crime rates in right-to-carry states continued to fall, they eventually fell below the crime rates in non-right-to-carry states, and that is when the coefficients become negative. Thus, Donohue's own results clearly show that right-to-carry laws reduce crime.