Ayres and Donohue argue that when right-to-carry laws are adopted, there is an initial increase in crime and then a gradual decrease. But since none of the year-by-year estimates for violent crime show this initial jump in crime when the law starts, how do Ayres and Donohue reach this conclusion? The answer: It is really just an artifact of how they tried to fit a straight line to a curve.

Take a look at figure 10.6. Ayres and Donohue claim that crime rates are

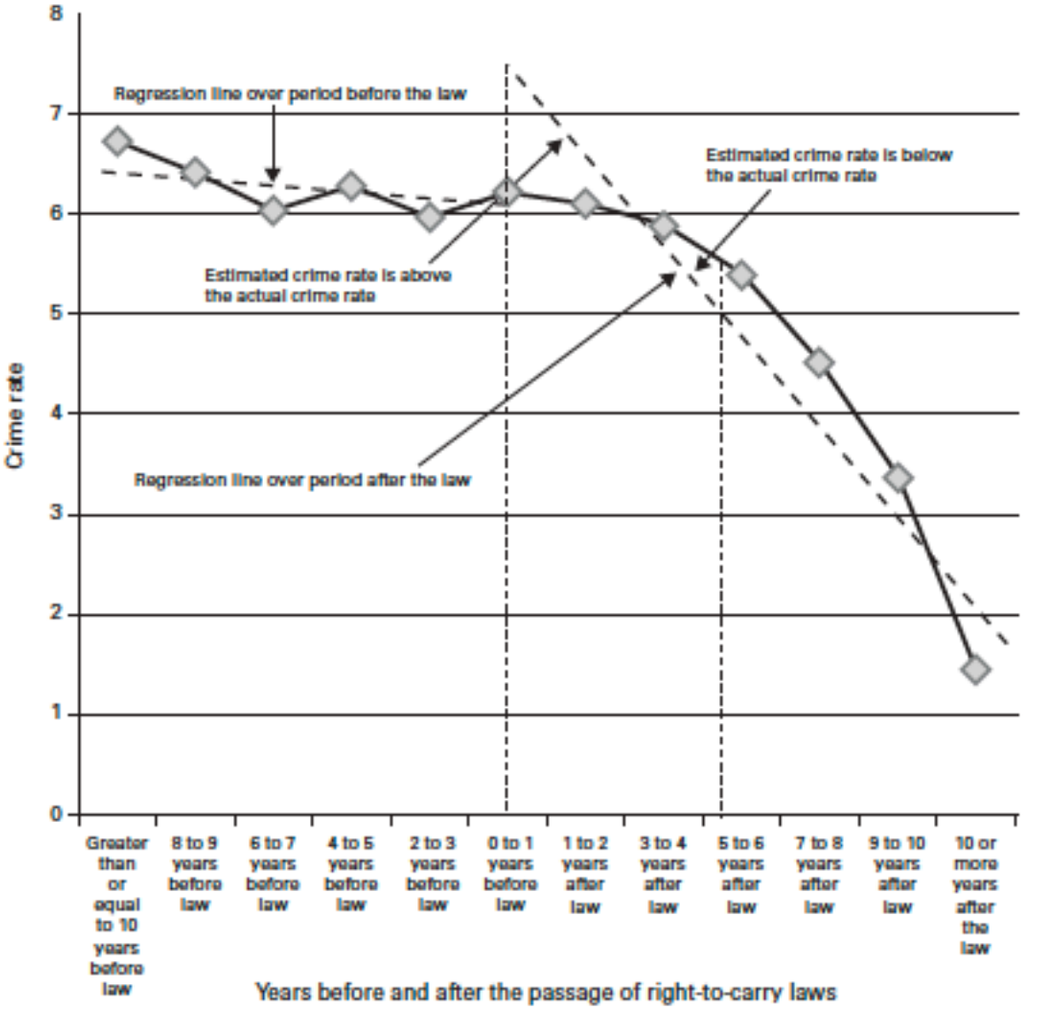

Figure 10.6. Fitting a line to crime rates that are nonlinear

very slightly declining up until the right-to-carry law is passed and then they start to fall much more dramatically. Suppose that you wanted to fit two lines to the figure (say, the two dashed regression lines in the diagram). One straight line shows how the crime rate changes in the years before the law, and one straight line shows how it changes after the law. The first line is very easy to fit. The second one requires some arbitrary choices. The way Ayres and Donohue choose to position this line is so that it goes right through the middle of the curve for the after-law crime rates. An alternative would have been to have this second line start where the first one had finished (the approach that I had taken in the first and second editions in looking at before-and-after trends). This "predicted" crime rate line for the after-law period thus lies above the true crime rate immediately after the law, falls below the actual crime rate when you get out to year 4 after the law, and then again lies above the actual crime rate when you get out past year 9.