



The Death-Penalty Debate Represents a Market Failure

By Betsey Stevenson and Justin Wolfers - Jun 11, 2012

The debate over the death penalty offers a vivid illustration of a tragic flaw in the market of ideas: Strong beliefs attract a lot more attention, and can have a lot more influence, than the truth.

In recent years, five U.S. states have eliminated capital punishment, and several others are currently reconsidering their policies. Advocates of the death penalty insist the moves will lead to more murders. They point to a number of studies conducted over the past couple of decades that purport to find clear evidence supporting their view. Experts happily serve up unequivocal congressional testimony, and feed their analyses to lobby groups.

The reality, unsatisfying and inconvenient as it may be, is that we simply don't know how capital punishment affects the homicide rate. That's [the conclusion of the National Academy of Sciences](#), which typically plays the role of impartial arbiter in these social-science debates. Their expert panel recently concluded that existing research "is not informative about whether capital punishment decreases, increases, or has no effect on homicide rates," and that such studies "should not influence policy judgments about capital punishment."

Profound Uncertainty

The panel's conclusions largely echo those from [research conducted by one of us \(Justin Wolfers\)](#) jointly with Stanford University law professor John Donohue. That research replicated and probed the leading studies, finding that even minor changes in how the analyses were conducted dramatically altered the conclusions. As a result, there's "not just 'reasonable doubt' about whether there is any deterrent effect of the death penalty, but profound uncertainty," the authors [wrote](#). Indeed, "we remain unsure even of whether" the effects "are positive or negative."

How could the confident claims of those earlier researchers end up being so wrong? Let's start by exploring why it's so difficult to give a precise answer to those interested in the effects of the death penalty.

As big a deal as capital punishment may seem, [it's actually quite rare](#). Since the death penalty was reinstated in the U.S. in 1976, there have been about 670,000 homicides and only 1,296 executions, a rate of about one execution per 500 murders. This makes the task of discerning its specific impact

very difficult.

To complicate things further, the homicide rate fluctuates enormously for reasons unrelated to capital punishment. So the correlation between capital punishment and homicide rates can be positive or negative, depending on the specific sample of states or countries analyzed, the sample period chosen, and which other determinants are accounted for.

Even if the correlation between capital punishment and murder rates could be reliably estimated, that wouldn't be enough to prove causation. For instance, more vigorous capital punishment probably occurs at the same time as other reforms to sentencing, prisons and policing. Unless these variables are measured accurately -- and our existing criminal-justice statistics do not provide adequate measures -- it is impossible to disentangle which reforms are driving the homicide rate.

It's not even clear how to determine whether a state has an active death penalty. Is [Connecticut's](#) recent decision to eliminate its death penalty consequential, given that the state [executed only one person in the past 50 years](#)? California has issued 951 death sentences since 1976, but executed only 13 prisoners, suggesting that the courts have slowed down the system enough to effectively transform a nominal death sentence into life without parole.

Model Uncertainty

Finally, we have no evidence at all on how would-be murderers perceive the risk of execution if they are caught, which is what really matters for deterrence.

Taken together, the various problems of measuring the relationship between crime and punishment yield what the National Academy panel calls "model uncertainty." In English, that means there are many seemingly plausible ways of looking at the evidence that yield dramatically different answers. The true effect could be big or small, positive or negative. We just can't estimate it with any certainty.

What the panel didn't say -- but we think they should have -- is that model uncertainty facilitates abuse in the midst of a politically charged debate. With so many plausible approaches, there's nothing to stop researchers fishing for a flashy result that may further their careers or ideological objectives. Indeed, the study by Donohue and Wolfers yielded some evidence suggesting researchers suppressed those results that failed to significantly support their hypotheses.

Even if one accepts the possibility that the threat of death deters some would-be murderers, that doesn't mean it's the best way to do so. Capital punishment diverts hundreds of millions of dollars from other criminal-justice interventions that may have done more to reduce homicide rates. This important point -- there's an opportunity cost to spending on capital punishment -- often gets overlooked.

Amid all the uncertainty, the data do allow one conclusion that the National Academy should have emphasized more strongly: The death penalty isn't the dominant factor driving the fluctuations in the U.S. homicide rate. If it were, the homicide rate in the U.S. wouldn't have moved in lockstep with that of [Canada](#), even as the two countries experimented with different death-penalty regimes (see chart). Likewise, homicide rates tend to rise and fall roughly in unison across states, even as some - - such as [Texas](#) -- ramp up executions, and others have chosen not to adopt the practice (see chart).

Overall, the panel's conclusions are a welcome corrective to a debate in which politically expedient, yet imperfect, findings have attracted greater attention than those rare moments of humility when we social scientists admit what we don't know. Now that a widely respected authority has established the uncertainty about the deterrent effects of the death penalty, it's time for advocates on both sides to recognize that their beliefs are the product of faith, not data.

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