



Worries about Safety: The Real Price of Gun Violence

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At midnight on July 20, 2012, a movie theater in Aurora, Colorado, was packed with people eager to see the newly released "Dark Knight." Young adults, families with children, older men and women – all anticipated fantasy and fun in a place they assumed was safe. Minutes into the movie, a man armed to the teeth with several guns, including a semi-automatic, opened fire, wounding seventy, killing 12 people including a six year-old girl, and sending hundreds scrambling to hide and escape. For weeks after, the community and the nation grieved – and Americans tried to come to terms with the cost of incidents like this, now all too frequent.

Estimating the costs of gun violence may imply a dry accounting exercise, toting up medical expenditures and earnings lost due to injury. Some research has been done this way, equating the cost with the burden on the health care system or losses to the labor force. But this misses the main point. For most people safety is the issue – and that is especially true for families with children. Gun violence in our vicinity – or just splayed all over our screens – undermines our sense of security and wellbeing at a visceral level. For neighborhoods where gun violence happens all the time, the threat is a reality of everyday life and has a profound effect on how people live and feel. Avoidance and prevention take many forms, from costly security in schools and public buildings, to private decisions to commute many miles for the sake of living in a safe neighborhood, or (for those who do not have that choice) to keep the kids inside on summer evenings.

How to Place a Monetary Value on Subjective Costs?

In recent years the United States has reaped benefits from an overall decline in gun violence. The homicide rate (most of which involves guns) has declined by half since 1991. The economic benefits include savings in criminal justice costs, lower medical costs, and, most important, a more comfortable life for urbanites. A renaissance of many central-city neighborhoods is partially attributable to reduced gun violence. Cities have become more livable and attractive because they are safer, and that translates into higher property values and tax collections.

If gun violence affects people's subjective feelings about security, how do we measure the effects? Arriving at specific dollar estimates is not easy, yet it can be done. Economists have used several methods to place a value on public safety. One method is to correlate property values to the objective risk of victimization. But my colleague Jens Ludwig and I used a more straightforward "contingent valuation" method, which had often been used in other domains, and especially to place a value on wilderness, clean air, and other aspects of environmental quality. This approach recognizes that the monetary value of surrounding conditions can be estimated by asking people how much they would pay to get improvements.

In 1998 we asked a representative national sample of U.S. adults a simple question: "Suppose that you were asked to vote for or against a new program in your state to reduce gun thefts and illegal gun dealers. This

program would make it more difficult for criminals and delinquents to obtain guns. It would reduce gun injuries by about 30 percent, but taxes would have to be increased to pay for it. If it would cost you an extra [\$50 / \$100 / \$200] in annual taxes, would you vote for or against this new program?" The amount of the tax increase specified for each respondent was randomly determined by the survey software, so that answers for each of the three dollar amounts were available from about one-third of the sample. Respondents were then asked a follow-up question, where the dollar amount in the initial question was either doubled or halved, depending on whether the respondent's initial answer was positive or negative about paying more to reduce gun injuries. The results suggest that a broad cross-section of the public is concerned about gun violence – and prepared to pay a considerable amount to reduce the threat:

- Fully 76 percent of all respondents reported that they would pay \$50 more per year in taxes to reduce crime-related gunshot injuries by 30 percent – and 64 percent said they would pay \$200 more in taxes.
- The average American household would pay \$239 more per year in taxes to fund such a program, according to our statistical analysis.
- The safety of children is a crucial consideration. Holding constant other household characteristics such as income and number of adults, households with children under age 18 were willing to pay \$108 more to reduce gun violence than households without children.

According to our calculations, all U.S. households together (there were approximately 102.5 million households in 1998) were willing to pay an estimated \$24.5 billion to reduce assault-related gunshot injuries by 30 percent.

Americans Place a High Value on Safety from Gun Violence

Our research allowed us to estimate the total cost of gun violence, as people perceived it. As of 1998, the total cost to Americans was on the order of \$80 billion (given that 30% of 80 is 24.5). We also discovered that the perceived high cost of gun violence is much more widespread than statistics about direct victims of gun attacks would suggest. Poor people are the ones who disproportionately experience gunshot injuries and deaths from direct assaults. But the threat of gun violence reduces the quality of life for a broad cross-section of Americans. Even those who live in relatively safe neighborhoods know that they and their children and friends are not entirely immune – as we are reminded by both the local newscasts and, all too frequently, the shooting rampages that make the national news.

Cost estimates of this sort can help policymakers and voters consider the relative importance of reducing gun violence in comparison with all of the other social problems that compete for the attention of our towns, cities, states, and national government. Placing a dollar value on enhanced safety may seem a bit mechanistic, but it brings into focus the value of paying to enhance safety by fighting gun violence in comparison with paying to improve schools, health care, and housing. Based on our results, gun violence deserves a fairly prominent place on the agenda.

Read more in Philip J. Cook and Jens Ludwig, *Gun Violence: The Real Costs* (Oxford University Press, 2000).