

In my last posting I had demonstrated that “Right to Carry” legislation had no verifiable impact on the homicide rate in those states that had adopted it. A number of people who read that posting asked if I would perform a similar analysis regarding the impact of gun control legislation. If enabling citizens to bear arms in public had no demonstrable impact on violence, would removing their ability to bear arms have any impact? And if gun control did have an impact, would it be positive or negative?

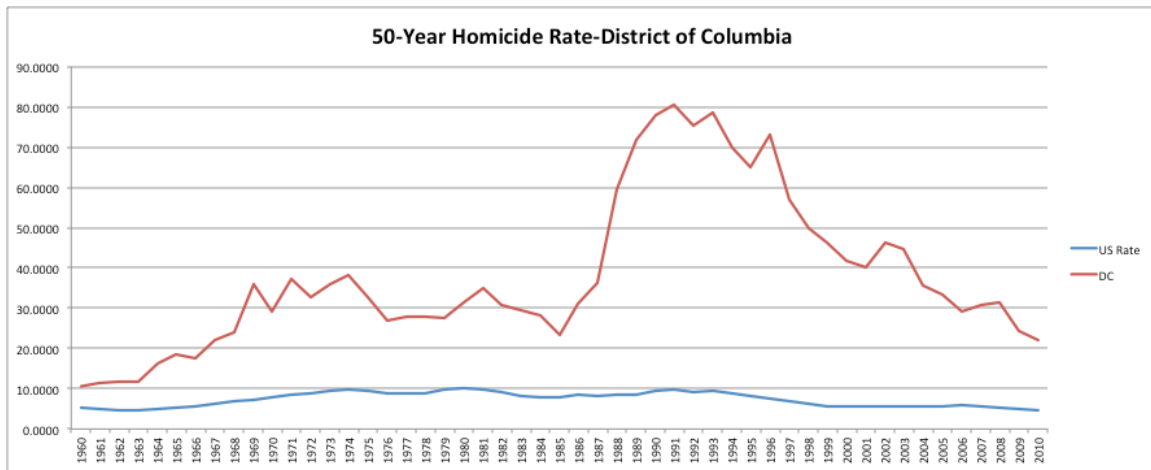
Two cities in the US (Chicago and Washington DC) have enacted legislation that specifically bans the ownership of handguns. In both cases, those laws were eventually found unconstitutional and overturned. I will first focus on Washington DC. In 1975, The Firearms Control Regulations Act was established. This law prohibited residents from owning handguns, automatic weapons and high-capacity semi-automatic weapons. Those citizens who had purchased and registered handguns prior to 1976 were allowed to keep them but were not allowed to carry them in public. This law was challenged on the basis that it violated citizens’ second amendment rights and was overturned in 2008.

The goal of this analysis is to determine if any conclusions can be drawn from the roughly thirty years that this law was in effect. I will explore two scenarios:

- Did preventing citizens from bearing handguns reduce the levels violence in Washington DC?
- Conversely, did removing criminals’ concerns about citizens being able to defend themselves actually lead to an increase in violence?

As in my last analysis, I have selected the overall homicide rate (homicides per 100,000 people) as the figure of merit. While assessing the specific impact on firearm-related homicides and violence would be enable us to draw more specific conclusions, the intent of these laws is to have an overall impact on violence. If gun control legislation only impacts the method by which people killed, then such legislation is ultimately ineffective.

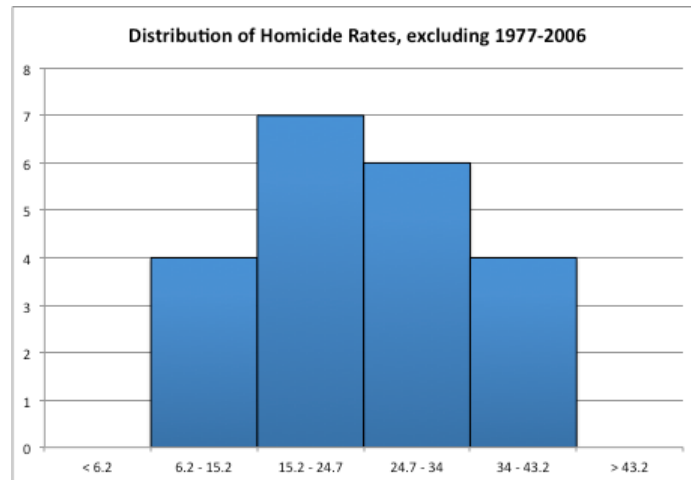
The statistics for homicides in Washington DC have been extracted from the US Justice Department’s Uniform Crime Reporting Statistics site. The following graph depicts the homicide rate for the District of Columbia from 1965 – 2010.



It is immediately evident that Washington DC experienced a massive spike in homicides during this 30-year period. Based on this data, it would be impossible to make any claims that the introduction of the Firearms Control Regulations Act had a positive impact on violence. The question is, does this data indicate that the removal of a citizen's right to bear arms lead to an uptick in violence?

I would argue it does not. While there is clearly a dramatic jump in homicide rates from 1986 to 1991, that trend begins to reverse itself in 1992 and is essentially negated by 2005. If we compare the homicide rate for the year prior to the law going into effect (1975) and the first full year after the law was overturned (2008), there was a net decrease in homicide rates of 4%. Since a simple year over year comparison can be misleading, I calculated the mean homicide rate for the years 1960 to 1976 and the mean homicide rate for 2008 to 2010. The mean homicide rate for the years preceding the gun ban was 24.3. The average homicide rate for the years following the law's repeal was 25.9. This represents a 6.57% increase.

If we take the set of the homicide rates for the years preceding and following the ban, we see that the mean homicide rate was 24.7, with a coefficient of variance of 36%. Given the degree of variance in this population, a 7% fluctuation cannot be considered statistically relevant and it is impossible to derive any conclusions from the change in homicide rates.



Because the trend was corrected well before the reinstatement of 2<sup>nd</sup> amendment rights, there is no real correlation between the ability to bear arms in public and the increase in crime. What did cause this bump? The jump experienced during this period has been attributed to illegal drug use, particularly the “crack epidemic” of the 1980’s through 1990’s. Increases in major crime rates (not only homicides) during this period were particularly prevalent in areas of higher poverty, such as Washington DC. I have started to validate this hypothesis by correlating homicides and drug-related crime, but obtaining a quantitative measure of the extent of drug crime is proving challenging.

Even without establishing this relationship, I think it is safe to say that Washington DC’s efforts to band handguns had no demonstrable impact on the homicide rate in that city. This seems reasonable, as the law did little to eliminate the existing supply of handguns from the criminal population, or even reduce the number of legal gun owners as of 1976. Furthermore, gun control legislation at the municipal level does virtually nothing to prevent individuals from procuring guns in nearby areas without gun control legislation. Until gun control legislation is ubiquitous and includes measures to reduce the number of illegal guns in circulation, it will probably be very challenging to demonstrate whether such legislation is effective.

At the same time, this data seems refutes an argument that an armed public is required to deter crime. While the crime rate significantly increased shortly after the ban went in place, an equally significant reduction was also achieved while the ban was in place. If armed citizens are critical to deterring crime, then rates should have continued to increase until the law was repealed.