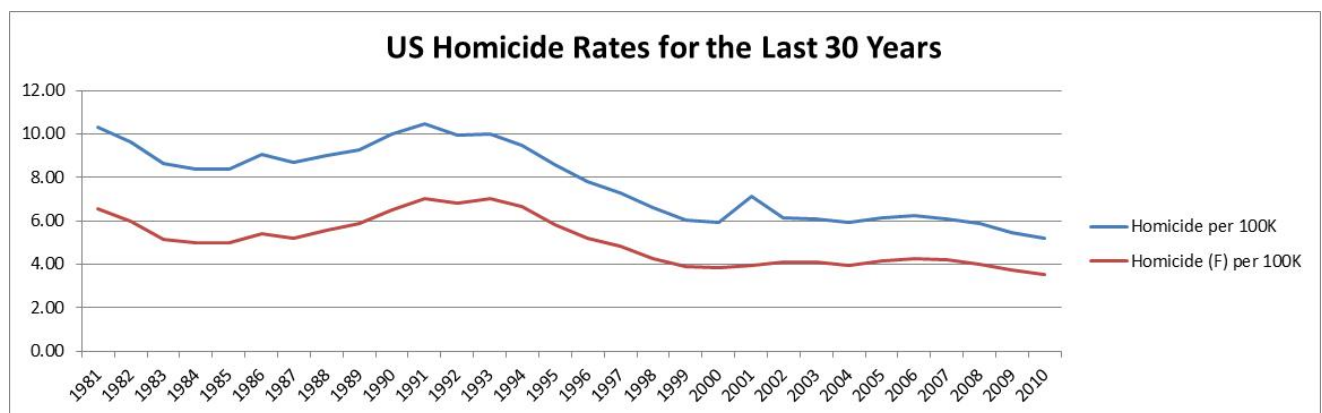


My first analysis involved comparing US homicide rates, and firearm-related homicide rates, with those of other countries. There were two questions I wanted to explore:

1. How do the level of gun-related deaths in the US compare to countries of similar levels of prosperity?
2. Which countries experience similar levels of gun-related deaths as the US?

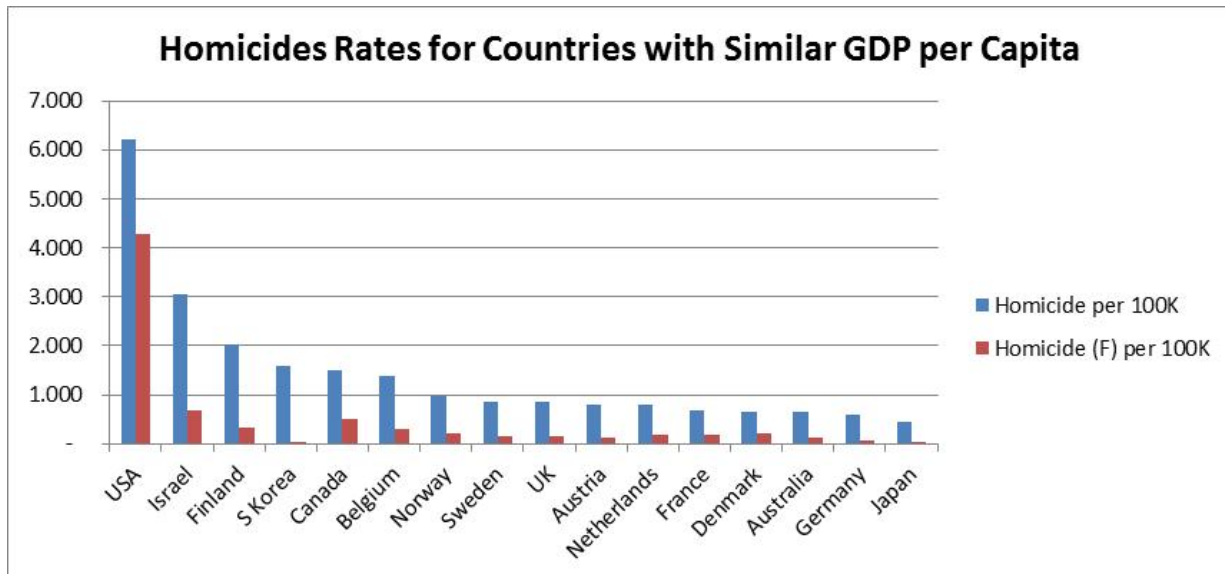
While these numbers have been presented numerous times in the past, I wanted to ensure that I fully understood the data sources and methodologies employed for calculating the homicide rates.

I started with the mortality statistics published each year in the National Vital Statistics Report of Deaths. These reports provide a detailed breakdown of US deaths by method and intent. Using these reports, I was able to compile 30 years of data regarding firearm-related deaths. There were two interesting findings derived from this effort. First, the homicide rate in the US has reduced by 50% over the past 20 years. While recent events might create the impression that gun-related violence is on the rise, overall firearm violence continues to trend lower. Second, a close relationship has existed between homicide rates and firearm-related deaths over the past 30 years. While I haven't demonstrated the relationship mathematically, visually the relationship is striking. The only significant deviation appears to be due to the events of 9/11/2001. This does not prove a causal relationship between firearms and homicides but it definitely indicates that further exploration of this relationship is warranted.



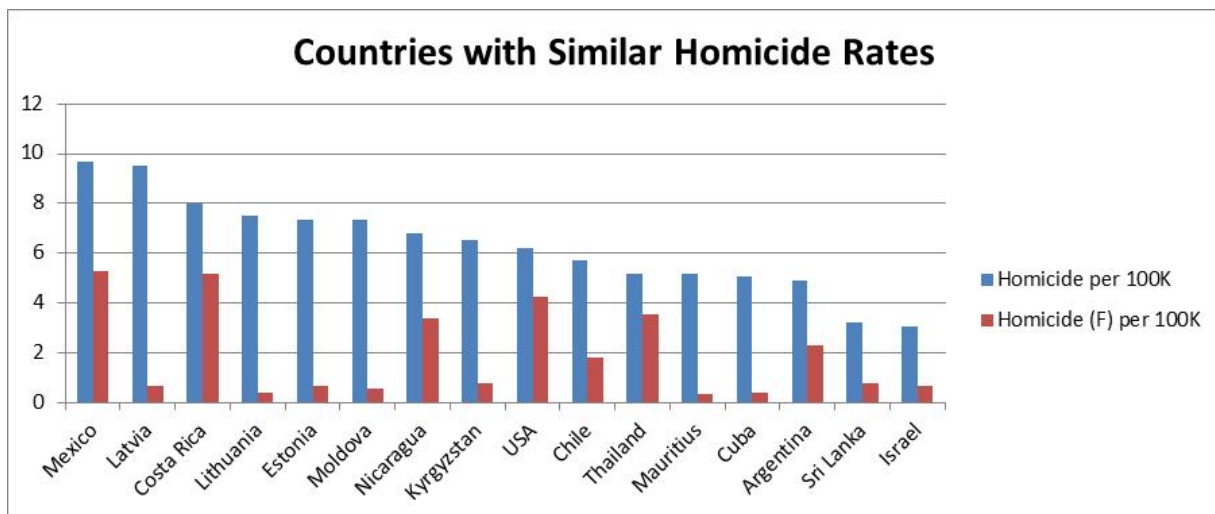
I then wanted to compare these homicide rates with those of other countries. For the comparison to be relevant, I sought out countries with similar levels of prosperity to the US. Using the World Bank figures for gross domestic product at purchasing power parity per capita I identified a set of sixteen countries with a PPP between 125% and 70% of the USA. I excluded countries such as Luxembourg, Qatar and Brunei, as their relatively small populations might make comparisons irrelevant.

I obtained mortality data for over 100 countries from the World Health Organization's Statistical Information System (WHOSIS). To get the cause and intent, I had to employ the raw data provided by the WHO. Unfortunately, details regarding the method and intent were only effectively captured in the tenth revision of the International Classification of Diseases (ICD-10). Therefore, only the date ranges of 1999 to 2010 are useful. Furthermore, data is not complete for all countries for this date range. For this reason, I selected data collected in 2006 to compare countries.



Once again, the findings were striking. Homicide rates in the US were more than twice that of Israel, the second highest on the list. Firearm-related homicides of other countries were much lower than the US. The rate of firearm-related homicides in the US was six times greater than the country with the second highest rate of firearm-related homicides.

In a second pass, I sought to identify countries with similar homicide rates as the US. I ordered the reporting countries by homicide rate for 2006 and selected eight countries preceding and seven countries succeeding the US in that list.



Of these countries, five stand out particularly for the same relatively high proportion of firearm-related homicides: Mexico, Costa Rica, Nicaragua, Thailand and Argentina. In subsequent postings I will explore the attributes of those countries in contrast to the US, as well as those of the five closest from the similar GDP per capita list (Israel, Finland, South Korea, Canada and Belgium).

In subsequent postings I will explore the attributes of these five countries to understand what characteristics they share in common. An aspiration of mine would be to produce a model that accurately represents these relationships, but given the small set of countries I am working with I am not confident in the viability of that.