The Impact of Police Violence on Confidence in Institutions

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1 Motivation and Relevant Literature

While there have been numerous studies in economics and other social sciences that have examined the determinants of police violence, there has been no examination of its effects. In his paper on police use of force, Roland Fryer finds that police officers use non-lethal force more often on minorities; however, this differential use of force toward minorities ceases when force turns deadly [2]. Other studies in sociology have examined the determinants of deadly police force [3] [4], yet I have seen no studies within economics or other fields that look at the effects of police violence. Although there have been precious few studies on the effects of police violence, Alsan and Wanamaker's analysis of the effects of the illicit Tuskegee syphilis experiment [1]. They show that years after the illicit experiment, black men in the area still distrusted health professionals while trust levels for other races near the experiment remained nearly the same.

Others have examine police violence and fatalities as an outcome, but I elect to use police violence as an explanatory variable to account for the variation in confidence in institutions. Similar to Alsan's method, I intend to use a difference in difference analysis between races before and after a particular police fatality to determine its effect on an individuals confidence in institutions. Based on Alsan findings, the effects on trust will be stronger for fatalities close to an individual and where the individual can identify with the victim (2016). I also intend to add another variable to this data that will capture the salience of a particular fatality as it is very likely that fatalities with more press will produce a larger effect on institutions.

2 The Data and Summary Statistics

2.1 Fatal Encounters: The Police Induced Fatality Data

The data I propose to use is a combination of data sets from the website Fatal Encounters which is a data set of all police induced fatalities since 2000 with

information on the location of the fatality, the victim's demographic information (particularly the victim's race), and the department involved with the fatality. Below I give a two summary representations of the data: the first is the number of police fatalities by year and the second is the number of police fatalities by race. I forgo any spatial representation of the data solely because my analysis will be forced to pool observations for different fatalities [1]

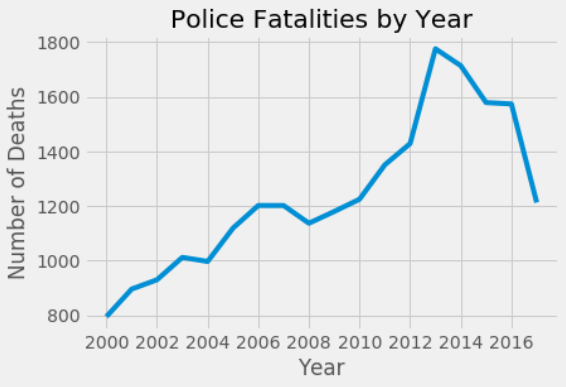

Figure 1:

The above graph tracks police induced fatalities for all races by year. It is interesting to note that until 2013 there seemed to be an upward trend in police induced fatalities. It would seem that after 2013 the number of police induced deaths declined, although one cannot be certain of this trend as the data for 2017 is not complete. While such a representation is not necessary for a difference in difference analysis, it can show what years one should use for the two sets of cross-sectional data. Here police fatalities spike between 2012 and 2013 which would mean if one expects an effect based on volume of shootings, these would be the years to examine.

Figure two displays the number of police induced fatalities by race.

It would seems that there are more minority deaths at the hands of police relative to their respective population weights. However, this graph fails to control for other factors like socioeconomic status, whether or not the victim was armed, or the victim's criminal history all of which could lead to a different result.

[1] For example, a shooting that occurs in Flagstaff cannot be counted as a single event, rather for a given time frame, I will have to create a proximity to a police fatality variable. This is because of the relatively low number of observations in the Gallup data. The Gallup data also only has individuals' geographic information at the city level.

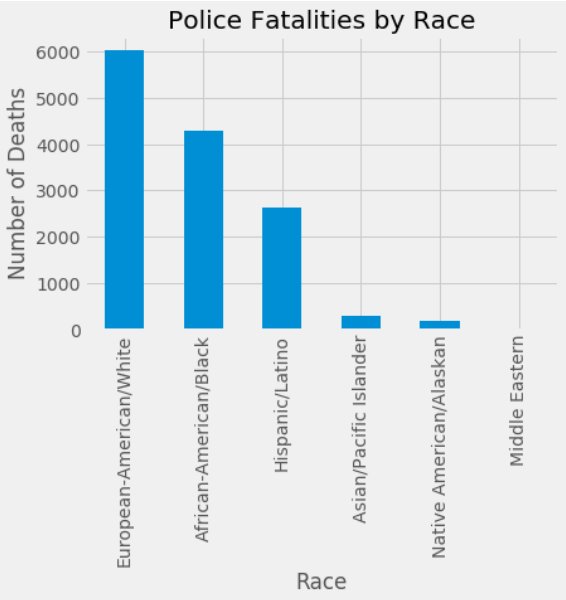

Figure 2:

2.2 Gallup Confidence in Institutions Poll: The Proxy For Trust

My analysis will merge the above data set with information from Gallup's *Confidence in Institutions* survey. This data stretches from 1973 to 2016. Since this data begins far before the fatality data, I will be able to examine the parallel trends assumption without any loss of observations. The one caveat of this data set is that that it only contains about $1,000$ observations per year despite its rich information for each observation. The subsequent figure displays the number of respondents of each race in the data set.

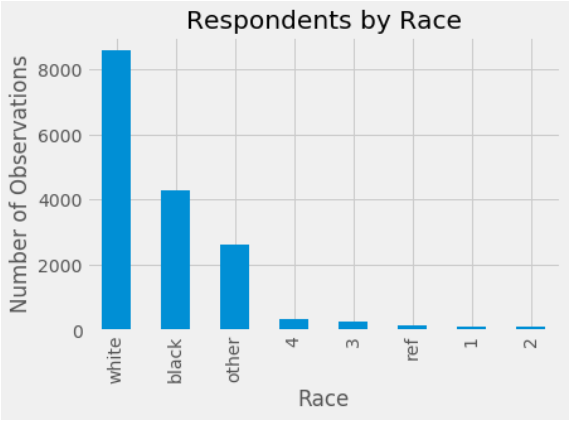

Figure 3:

This figure present what may be a potential problem with our identification strategy. Despite the large numbers of Black and Hispanic victims of police fatalities, the respondent data set is much more heavily white. This does not necessarily pose a problem for the overall research question; however, the low number of minority respondents could make it difficult to find any effect for police induced fatalities on minority confidence in institutions. This also means that if there is a negative effect, it is likely biased downwards since one would expect that minorities would have a more negative reaction to institutions as a result of police induced fatalities.

References

[1] Marcella Alsan and Marianne Wanamaker. Tuskegee and the health of black men. Technical report, National Bureau of Economic Research, 2016.

[2] Roland G Fryer Jr. An empirical analysis of racial differences in police use of force. Technical report, National Bureau of Economic Research, 2016.

[3] David Jacobs. The determinants of deadly force: A structural analysis of police violence. *American Journal of Sociology*, 103(4):837–862, 1998.

[4] David Jacobs and David Britt. Inequality and police use of deadly force: An empirical assessment of a conflict hypothesis. *Social Problems*, 26(4):403–412, 1979.