**What causes what?**Bao Doquang, Dhwanit Agarwal, Akksay Singh and Shristi Singh  
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1.WHY CAN'T I JUST GET DATA FROM A FEW DIFFERENT CITIES AND RUN THE REGRESSION OF CRIME ON POLICE TO UNDERSTAND HOW MORE COPS ON THE STREETS AFFECT CRIME?

When looking at cities or places in general to examine, there is an incentive for cities with higher rates of crime to hire more cops, which is not helpful in looking for the effect of cops on street crime; because in most cases, there is an effect of street crime on the number of cops. Also, the different cities may be structurally different from one another such as level of education of the people, number of tourists visiting that city and so on. If we compare different cities which are structurally different from one another, we would be comparing apples with oranges.

2. HOW WERE THE RESEARCHERS FROM UPENN ABLE TO ISOLATE THIS EFFECT? BRIEFLY DESCRIBE THEIR APPROACH AND DISCUSS THEIR RESULT IN THE TABLE 2 BELOW FROM THE RESEARCHER'S PAPER.

Washington DC is one of the cities more likely to be attacked by terrorists. Hence in Washington D.C, there is a system which monitors terror attack risk. The output of the system on any given day affects the number of cops in the streets. From this, the researchers were able to examine if on the days where there were more cops because of the terror system’s warning of possible terrorist events, if there was a decrease in street crime rates. From the data result in Table 2, we can see that the days with higher numbers of cops (on the days where the terror level was high) there was a decrease in the daily number of crimes with significance at 5% level or the 95% confidence level. The coefficient is -6.046 with standard error = 2.537 giving t value = 2.4.

3. WHY DID THEY HAVE TO CONTROL FOR METRO RIDERSHIP? WHAT WAS THAT TRYING TO CAPTURE?

The researchers were looking to see if there was another explanation as to why crime was lower on days of high alert. One of the theories was that when terror levels were high there might be fewer tourists and people in the city, lowering the numbers of potential victims of crimes, and therefore reducing the crime rate. In order to do this, researchers used metro ridership as a metric of tourism and people in the city and they found no reduction in number of tourists in the city on high alert days.

4. CAN YOU DESCRBE THE MODEL BEING ESTIMATED IN TABLE 4 IN THE FIRST COLUMN? WHAT IS THE CONCLUSION?

In this model we are looking to see if there is an effect of being in a particular district of DC affects the relationship of the number of cops in the street (as measured by the terrorism alert level) on the amount of crime. Though we can see that increased numbers of cops decreases the amount of crime more so in district 1 than in other districts because 2.621 > 0.571, they both appear to be negative. However, in other districts the coefficient is not significant even at 5% level while in District 1, the coefficient is significant at 1% level. Hence, we fail to reject the hypothesis in other district that increase in number of cops reduces the amount of crime. The other conclusion is that Mid-day ridership is positively related to amount of crime and is significant at 5%.