Lott and Mustard Replication

Afif Mazhar

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I. Introduction

In 1997, John R. Lott and David B. Mustard published "Crime, Deterrence, and Right-to-Carry Concealed Handguns," an article that delineated the causality between citizens carrying concealed weapons and the violent crime rate. The orthodox method for causal inference prior to the 2000s was predicated about the fixed effects model, more particularly the panel fixed effects model. In the modern era, however, an amalgamation of research design methods have risen to prominence. The primary purpose of this study is to understand the contemporary methods of research design and scrutinize these studies with earlier analyses. It is significant, almost vital to have the specific understanding behind the historical changes of causality design as they include an additional factor for interpretation – treatment timing. For those interested in causal inference, it is best to understand the initial evaluations of causality design to have a full grasp of status quo research methods.

When you click the **Knit** button a document will be generated that includes both content as well as the output of any embedded R code chunks within the document. You can embed an R code chunk like this:

```
summary(cars)
```

```
##      speed           dist
##  Min.   : 4.0   Min.   :  2.00
##  1st Qu.:12.0   1st Qu.: 26.00
##  Median :15.0   Median : 36.00
##  Mean   :15.4   Mean   : 42.98
##  3rd Qu.:19.0   3rd Qu.: 56.00
##  Max.   :25.0   Max.   :120.00
```

II. Background and Economic Theory

"Crime, Deterrence, and Right-to-Carry Concealed Handguns" was written to dive further into the effects of concealed handgun permits on citizens and the crime rate. Gun violence is rampant across the United States, resulting in hundreds of thousands of gun encounters that can potentially result in fatalities. The literature surrounding gun control emphasizes that guns have been used defensively and have proved effective in preventing crime; thus, on net, saved lives. Lott and Mustard argue about the defensive nature of gun use and the reduced "hot burglary" (residents at home during burglary) percentage in the United States compared to Canada or Britain, correlative with the laxer restrictions on gun laws that America propagates. In fact, Lott and Mustard argue that the individual stories which use guns to defend themselves have given way for 31 states to adopt laws that give authorities the right to issue concealed-weapons permits to qualified applications (up from 9 states in 1986). More specifically, Lott and Mustard argue about the "shall issue" concelead handgun permit laws, which require permit requests be granted unless the individual has a criminal record or a history of significant mental illness.

And thus, the question must be asked: "Will allowed concealed handguns make it likely that otherwise law-abiding citizens will harm each other? Or will the threat of citizens carrying weapons primarily deter criminals?" The analysis utilized a cross-sectional time series data for US counties in 1977 to 1992, ultimately

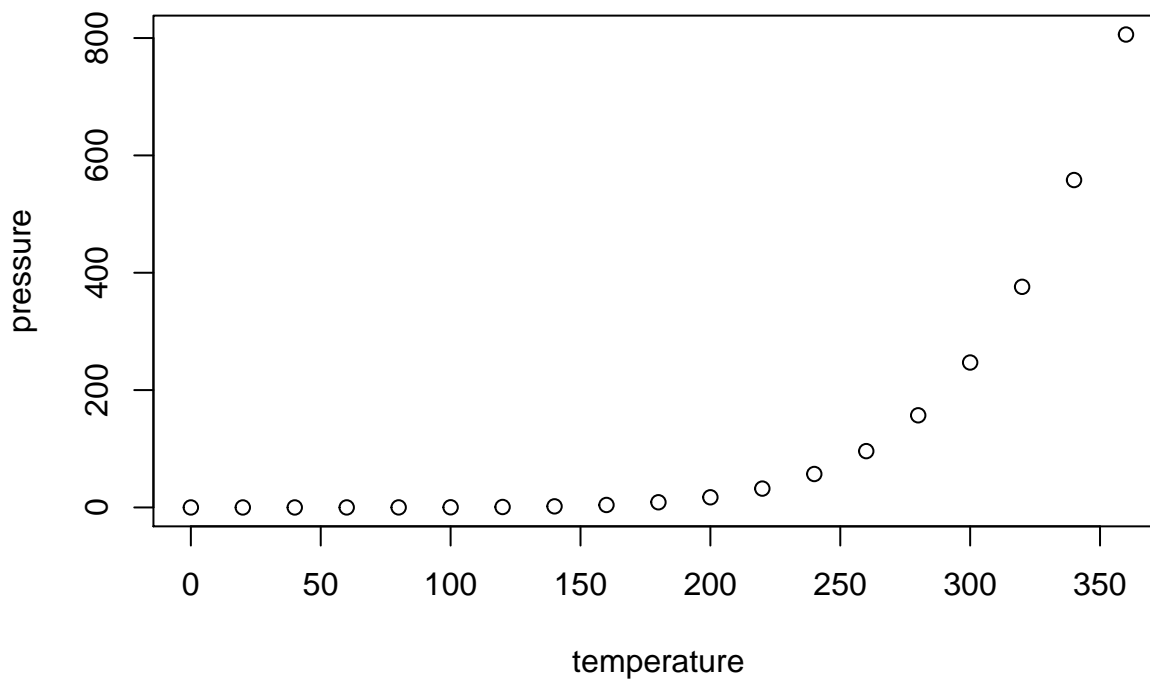finding that citizens with concealed carry deter violent crimes. Lott and Mustard

III. Data

IV. Empirical Model and Estimation

a. Two way Fixed Effects

b. Bacon Decomposition

c. Callaway and Sant'anna

d. Event Study

V. Conclusion

You can also embed plots, for example:

Note that the `echo = FALSE` parameter was added to the code chunk to prevent printing of the R code that generated the plot.