

# Statistical Analysis of Monthly Background Checks of Gun Purchases

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## About

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This document provides the analysis from the [New York Times](#) on-line article "[What Drives Gun Sales: Terrorism, Obama and Calls for Restrictions](#)". The [R](#) code underlying the analysis is provided in the [GitHub](#) repository [gunsales](#) which contains the R package

## Part I Data

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The first step consists in transforming the two raw data sets included in the package into the data.frame used for the subsequent plotting.

```
gunsales <- analysis()
```

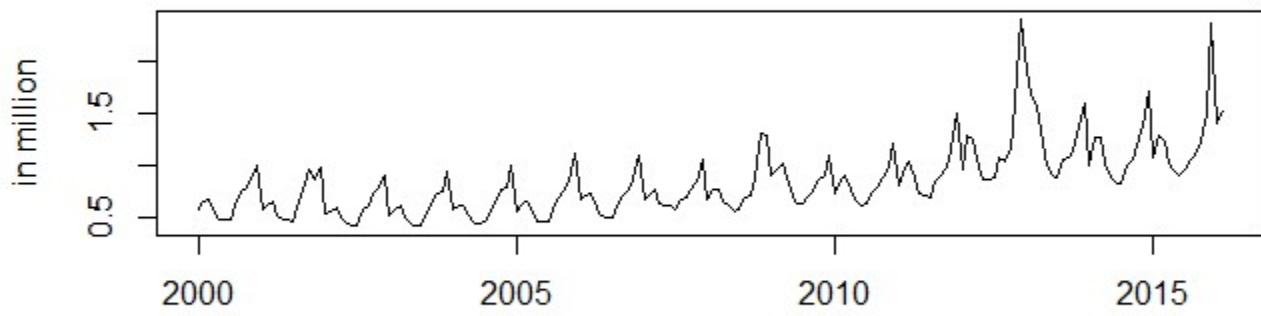
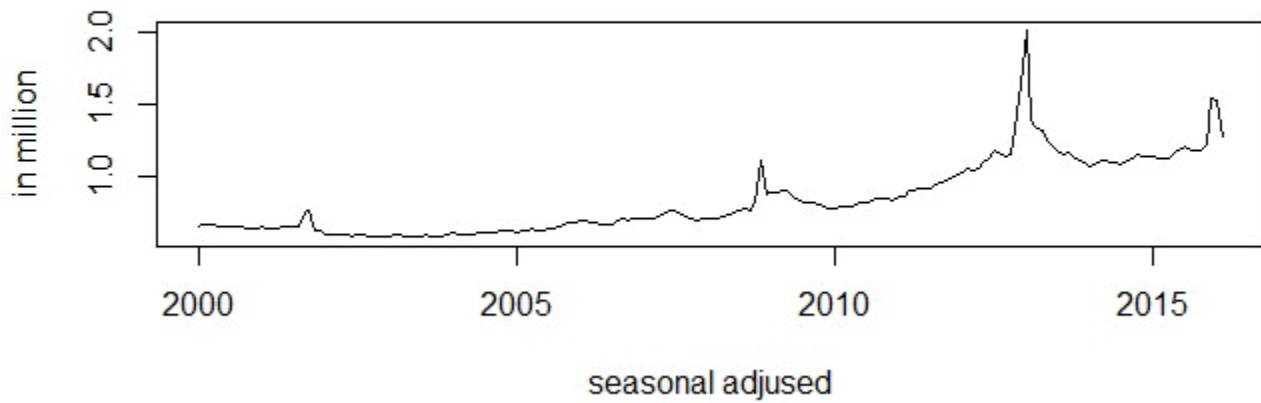
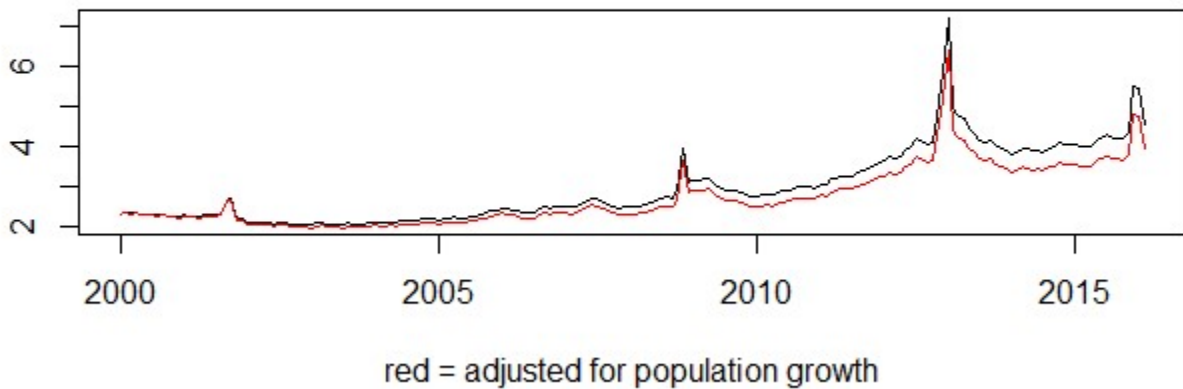
```
## [1] "Increase in monthly gun sales in Missouri = 8773.09"
```

## Part II: Base Plots

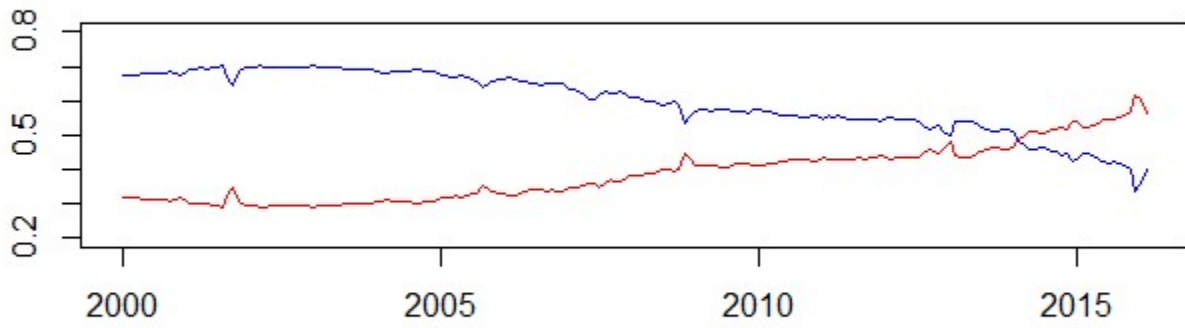
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Given the transformed data, we can display the variety of plots contained in the New York Times analysis (which uses post-processed variants suitable for publication).

```
plot_gunsales(gunsales)
```

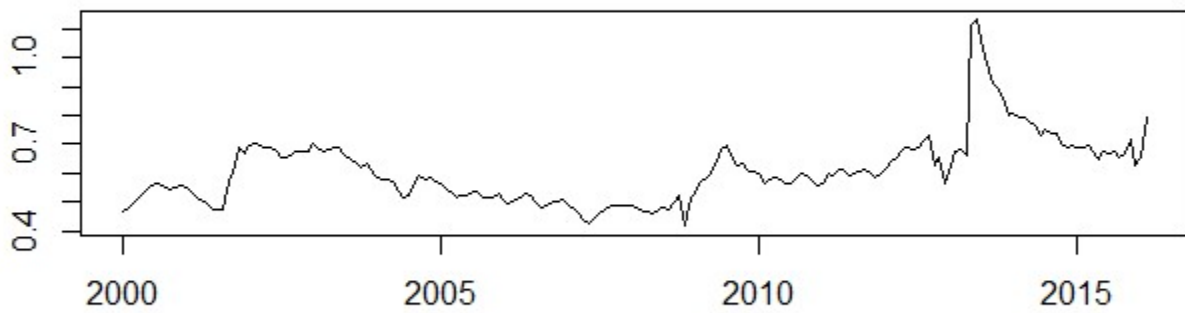
**Total estimated gun sales****Total estimated gun sales****Estimated gun sales per 1000**

### Long guns vs handguns



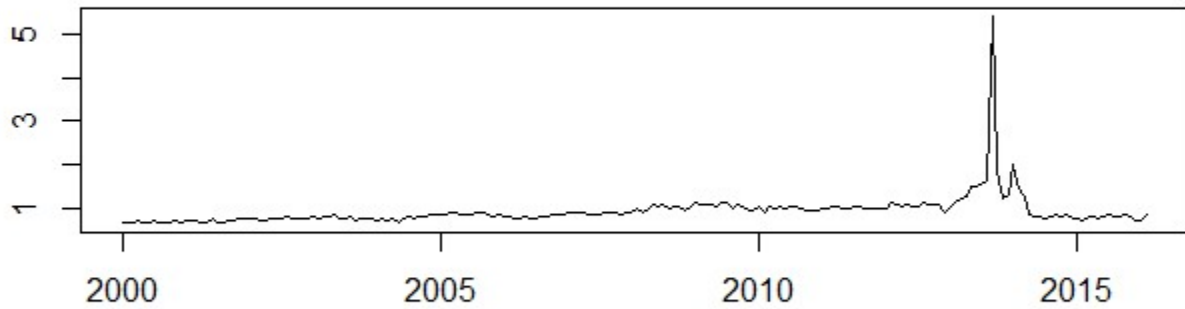
red = handguns, blue = long guns

### New Jersey

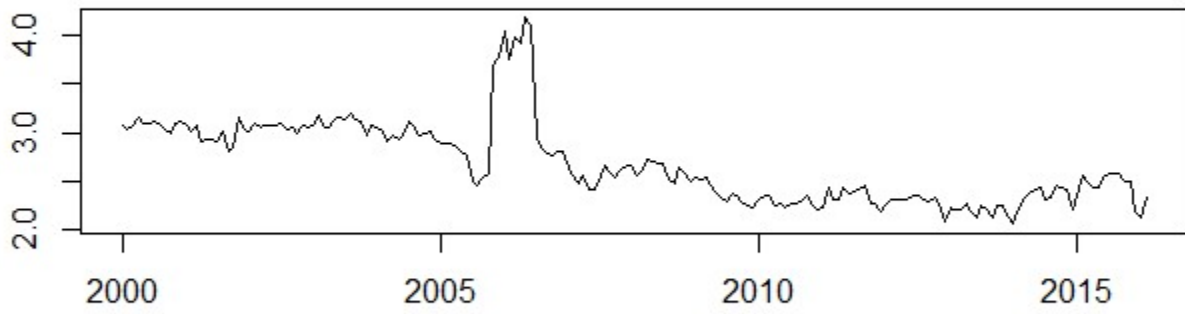


pct of national gun sales

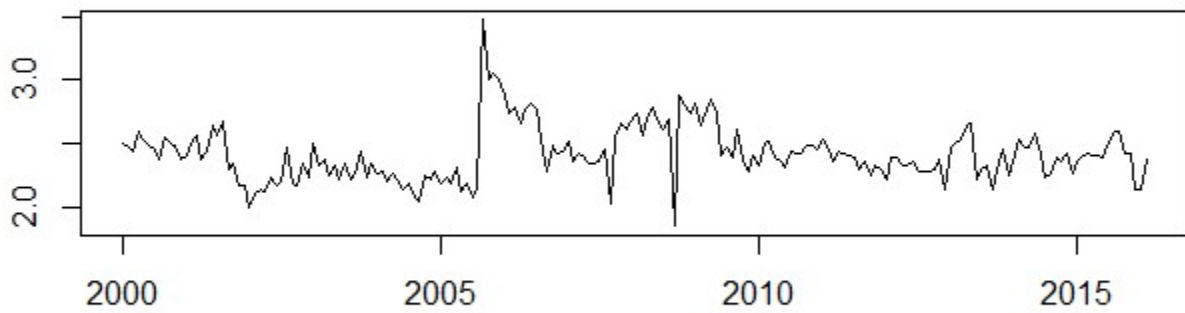
### Maryland



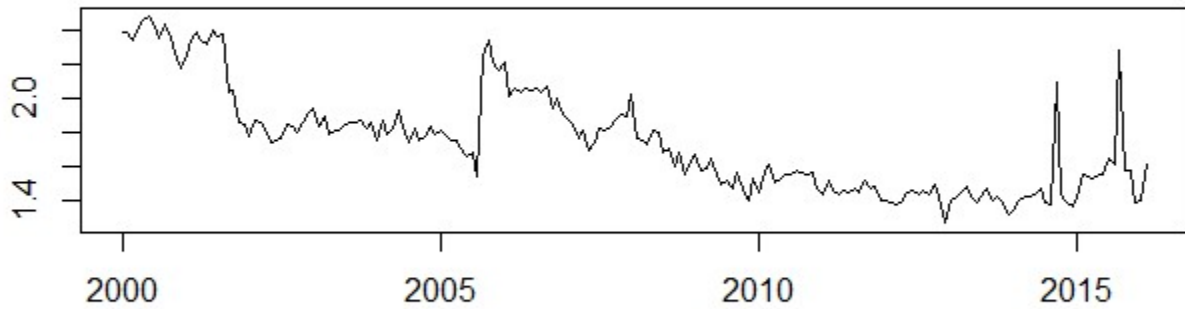
pct of national gun sales

**Georgia**

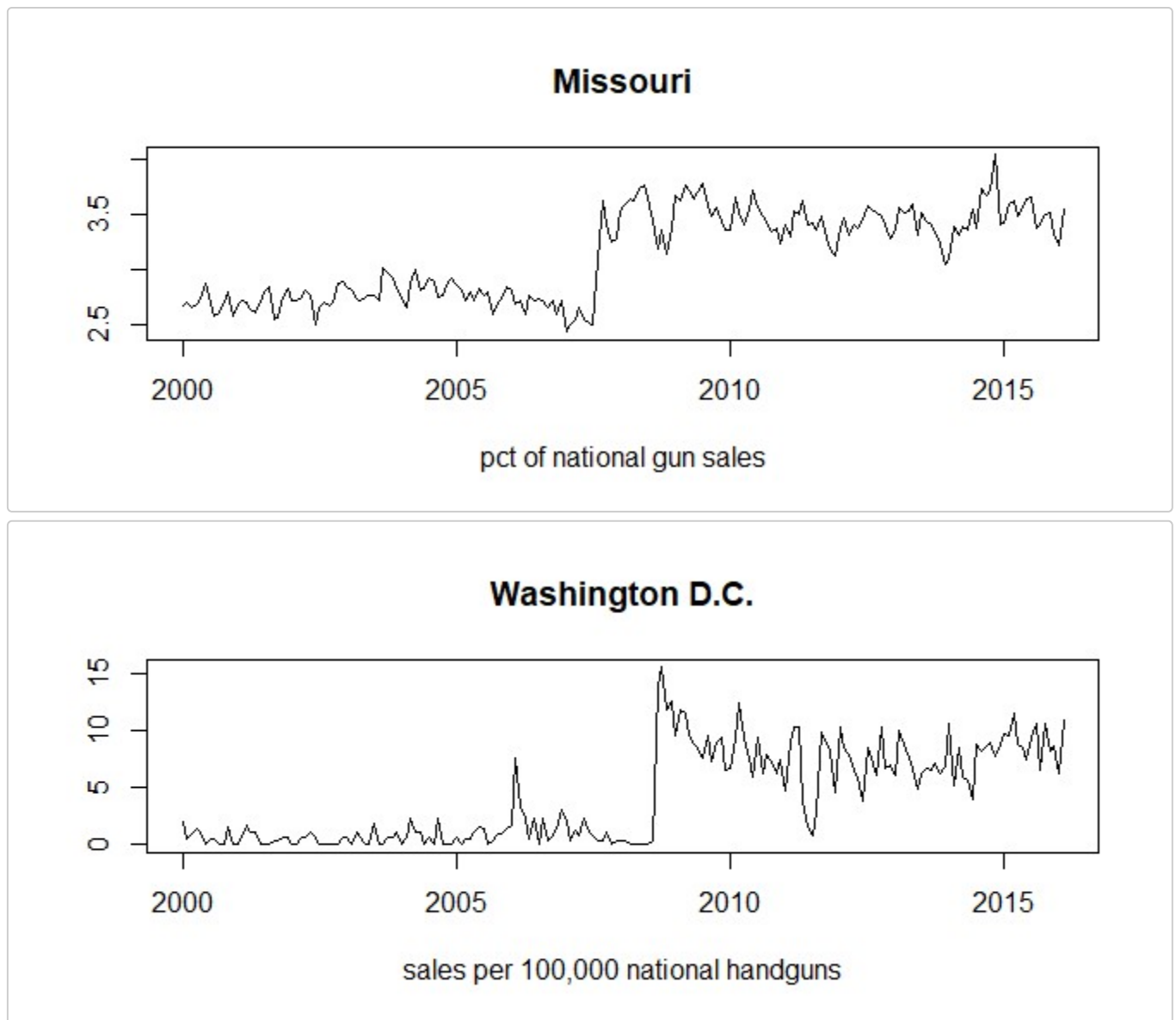
pct of national gun sales

**Louisiana**

pct of national gun sales

**Mississippi**

pct of national gun sales

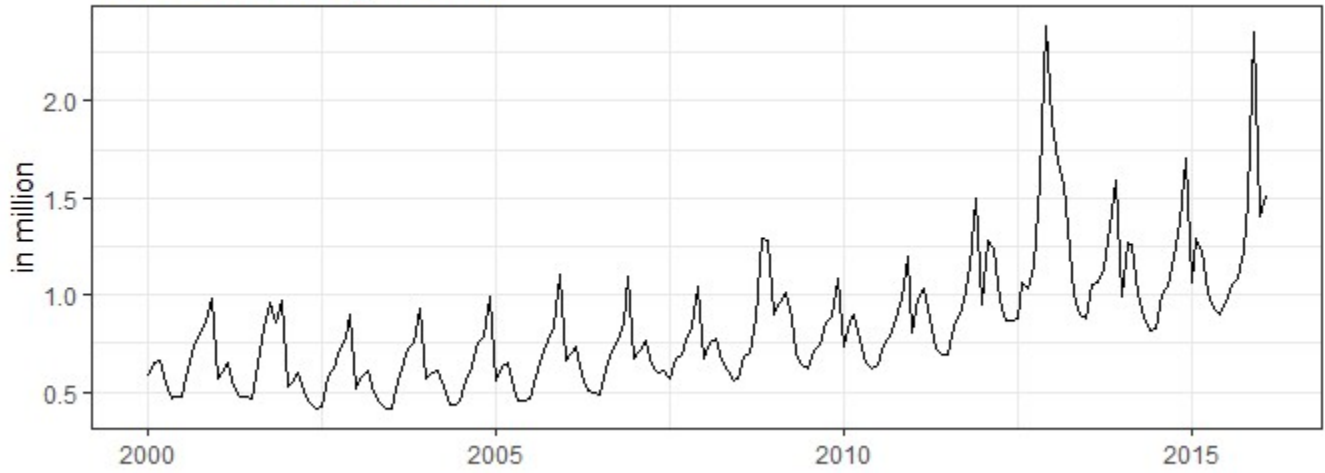


## Part III: Using ggplot

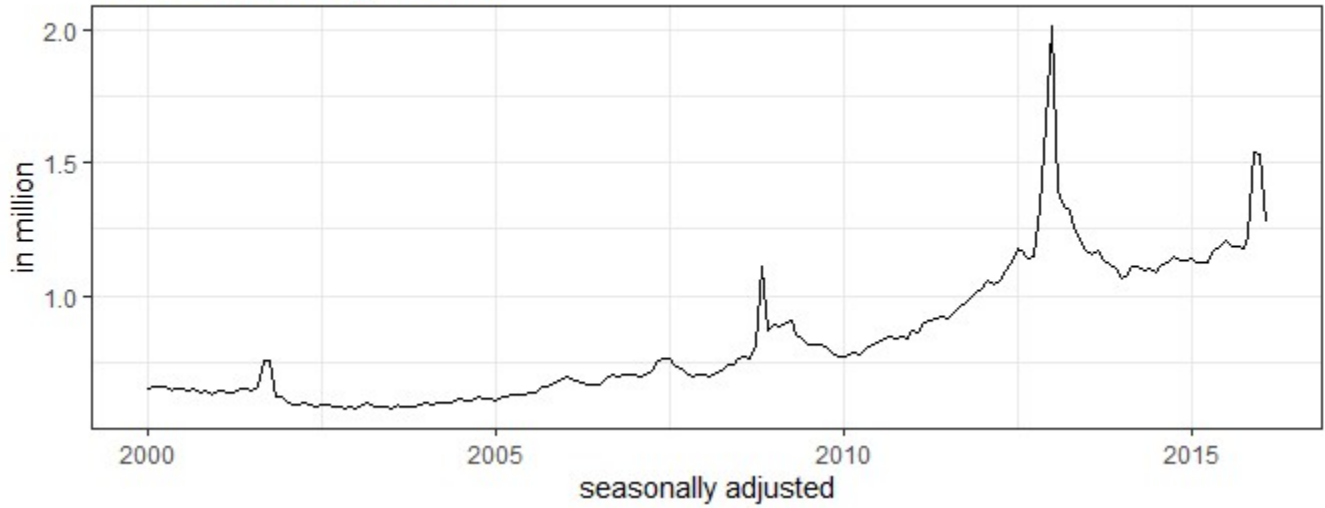
The second set of charts redisplay the same charts as before, but using the [ggplot2](#) package.

```
ggplot_gunsales(gunsales)
```

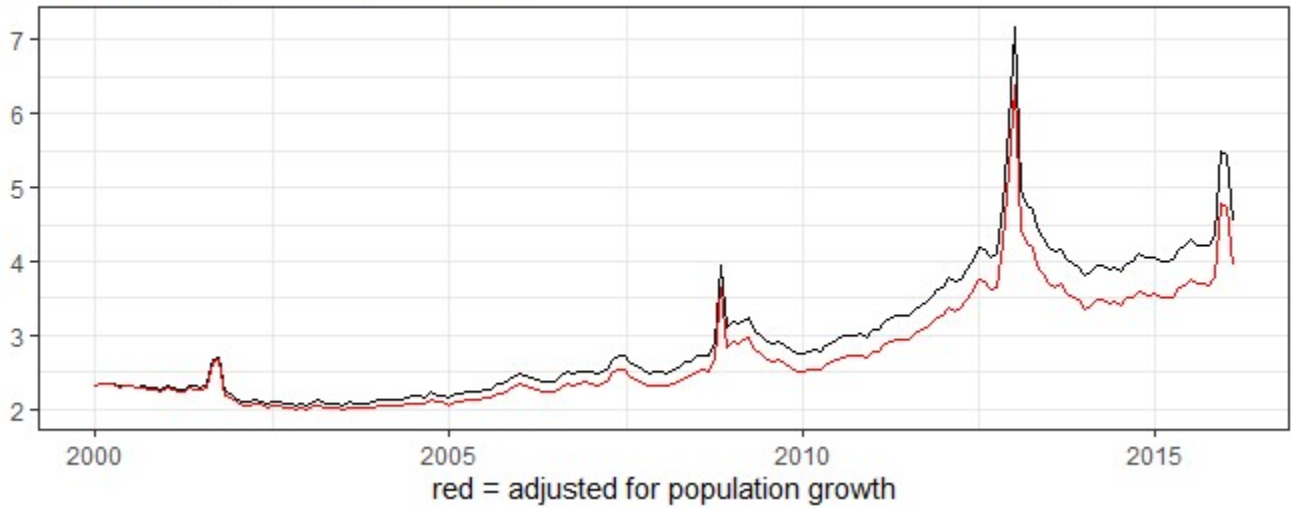
**Total estimated gun sales**



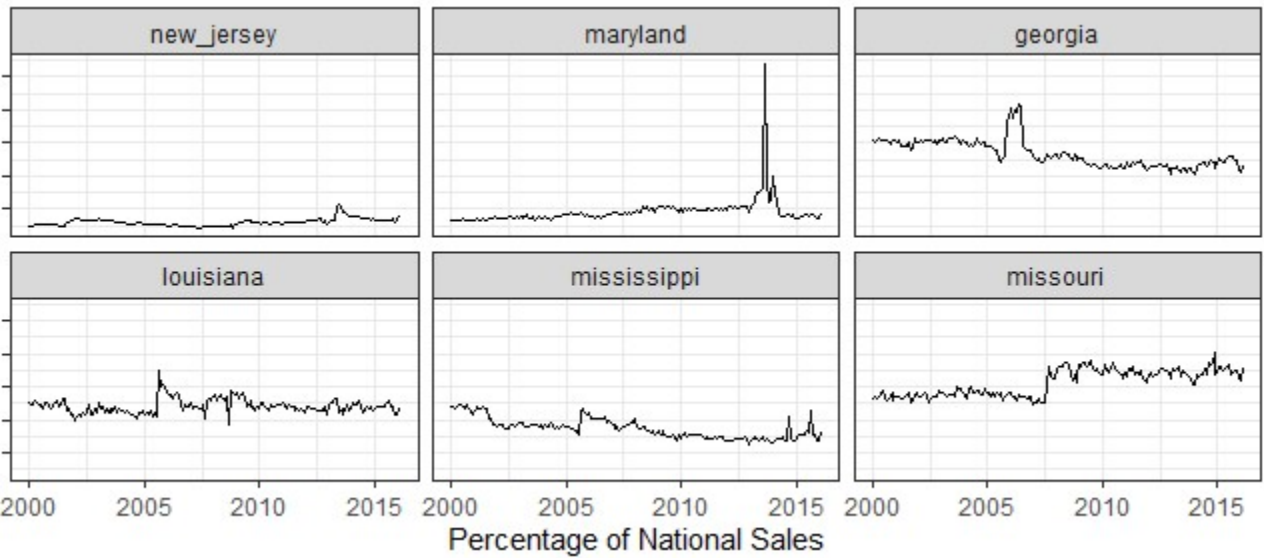
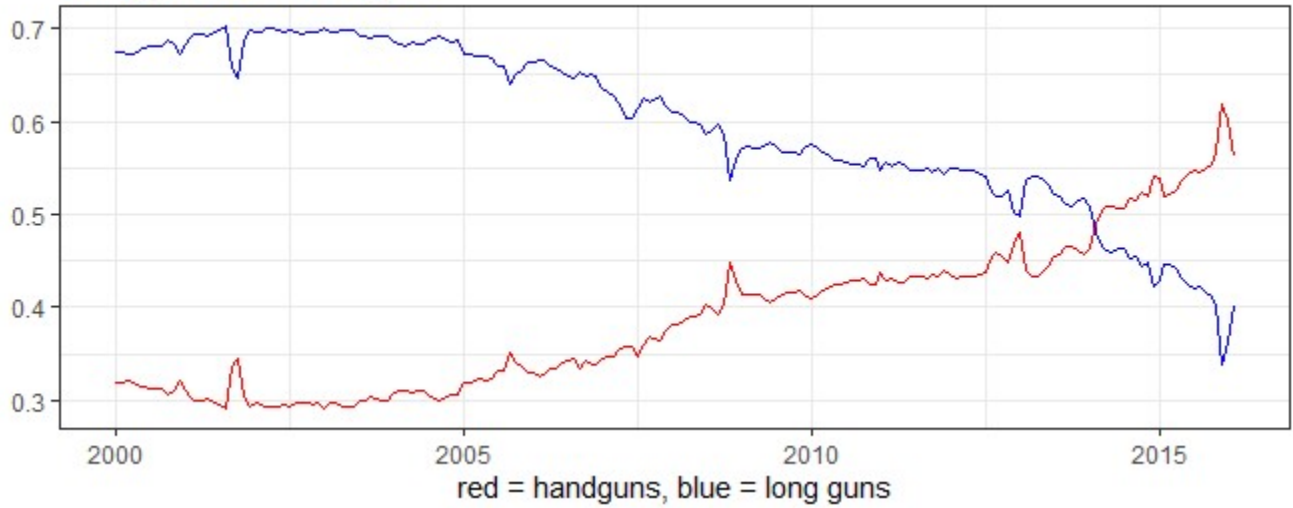
**Total estimated gun sales**



**Estimated gun sales per 1000**



### Long guns vs handguns



### Washington D.C.

