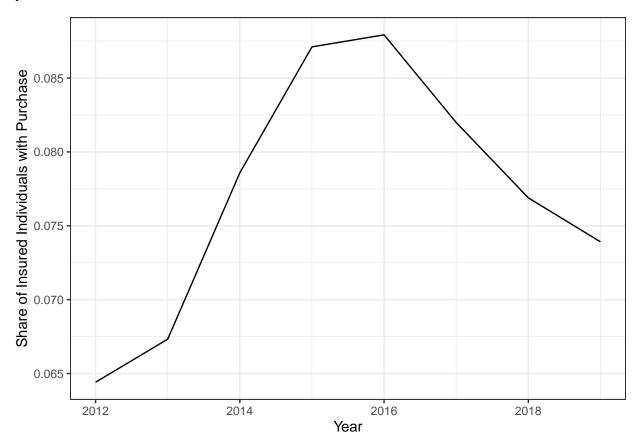
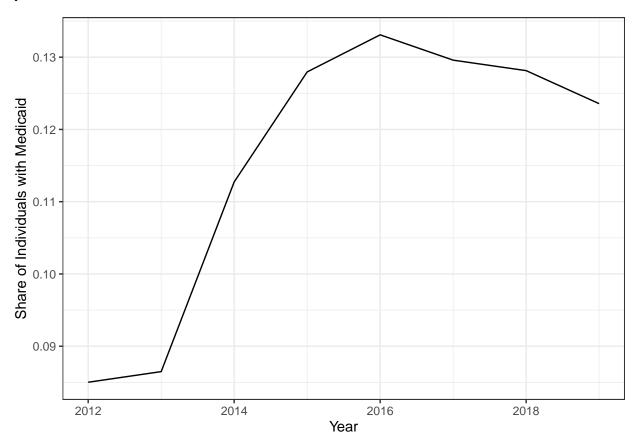
# Homework 5

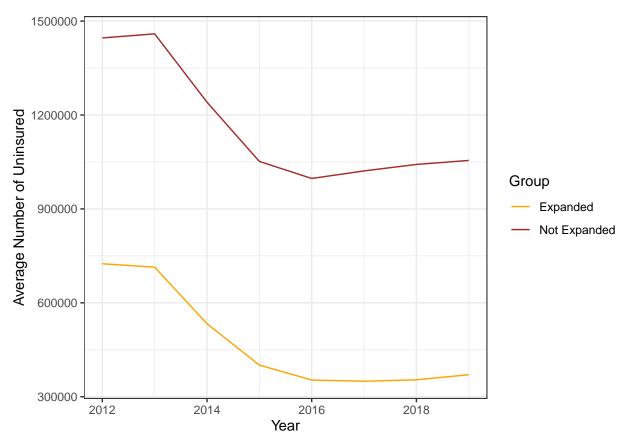
Virginia Sanson

16 April 2023



The plot shows a reduction in the share of insured individuals with direct purchase insurance over time. This reduction could be due to the implementation of the Affordable Care Act, which allowed individuals to purchase insurance through state and federal exchanges. Additionally, the expansion of Medicaid, as individuals who were previously uninsured and eligible for Medicaid coverage may have transitioned to that program instead of purchasing private insurance.





#### Estimate ATEs Question 1

| expand_ever  | 2012     | 2015      |
|--------------|----------|-----------|
| Not Expanded | 6.771735 | 10.146206 |
| Expanded     | 6.415987 | 8.435992  |

|                         | (1)      |
|-------------------------|----------|
| (Intercept)             | 6.938    |
|                         | (0.280)  |
| treatment               | -0.404   |
|                         | (0.353)  |
| time                    | 2.423    |
|                         | (0.323)  |
| $treatment \times time$ | -1.085   |
|                         | (0.408)  |
| Num.Obs.                | 344      |
| R2                      | 0.280    |
| R2 Adj.                 | 0.274    |
| AIC                     | 1298.8   |
| BIC                     | 1318.0   |
| Log.Lik.                | -644.414 |
| F                       | 44.171   |
| RMSE                    | 1.58     |

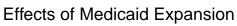
|                                   | (1)       |
|-----------------------------------|-----------|
| $year = 2012 \times expand_ever$  | 0.096     |
|                                   | (0.146)   |
| $year = 2014 \times expand\_ever$ | -0.737    |
|                                   | (0.182)   |
| $year = 2015 \times expand\_ever$ | -1.258    |
|                                   | (0.304)   |
| $year = 2016 \times expand\_ever$ | -1.306    |
|                                   | (0.299)   |
| $year = 2017 \times expand\_ever$ | -0.952    |
|                                   | (0.337)   |
| $year = 2018 \times expand\_ever$ | -0.928    |
|                                   | (0.387)   |
| $year = 2019 \times expand\_ever$ | -1.043    |
|                                   | (0.406)   |
| Num.Obs.                          | 344       |
| R2                                | 0.921     |
| R2 Adj.                           | 0.905     |
| R2 Within                         | 0.176     |
| R2 Within Adj.                    | 0.156     |
| AIC                               | 643.9     |
| BIC                               | 862.8     |
| RMSE                              | 0.52      |
| Std.Errors                        | by: State |
| FE: State                         | X         |
| FE: year                          | X         |

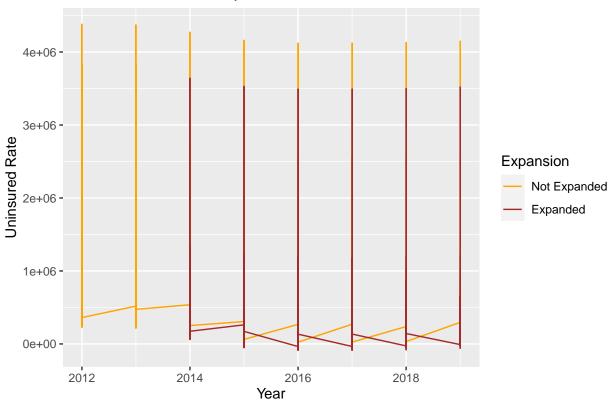
Question 3

|   | (1)       |
|---|-----------|
| $\overline{\text{time\_to\_treat} = -3 \times \text{expand\_ever}}$ | -0.398    |
|   | (0.356)   |
| $time\_to\_treat = -2 \times expand\_ever$                          | 0.017     |
|   | (0.099)   |
| $time\_to\_treat = 0 \times expand\_ever$                           | -0.680    |
|   | (0.135)   |
| $time\_to\_treat = 1 \times expand\_ever$                           | -1.209    |
|   | (0.218)   |
| $time\_to\_treat = 2 \times expand\_ever$                           | -1.333    |
|   | (0.238)   |
| $time\_to\_treat = 3 \times expand\_ever$                           | -1.071    |
|   | (0.275)   |
| $time\_to\_treat = 4 \times expand\_ever$                           | -0.988    |
|   | (0.328)   |
| $time\_to\_treat = 5 \times expand\_ever$                           | -1.051    |
|   | (0.382)   |
| Num.Obs.  | 400       |
| R2  | 0.930     |
| R2 Adj.   | 0.917     |
| R2 Within   | 0.214     |
| R2 Within Adj.  | 0.195     |
| AIC   | 724.2     |
| BIC   | 983.7     |
| RMSE  | 0.51      |
| Std.Errors  | by: State |
| FE: State   | X         |
| FE: year  | X         |

The results varied widely between questions. When including the states that expanded after 2014, the analysis now includes some states may have expanded Medicaid in response to the ACA, and states that may have implemented the expansion more slowly than others.

Question 5





Question 6

## Effects of Medicaid Expansion

