Submission2-HW5

Research Methods, Spring 2024

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Answers for Homework 5: Submission 2

Problem 1

1. Plot the share of the adult population with direct purchase health insurance over time.

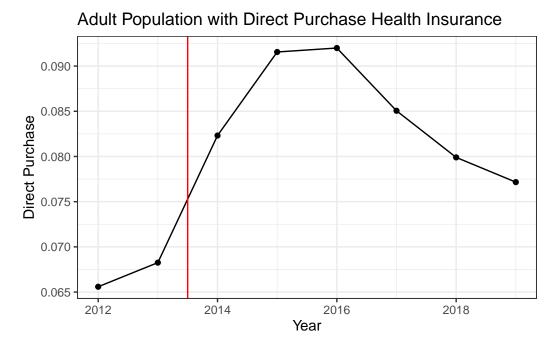


Figure 1: Direct Purchase Health Insurance

Problem 2

2. Discuss the reduction in direct purchase health insurance in later years. Can you list a couple of policies that might have affected the success of the direct purchase insurance market?

The Affordable Care Act lead to people who do not have employer insurance, who might have bought individual insurance otherwise.

Problem 3

3. Plot the share of the adult population with Medicaid over time.

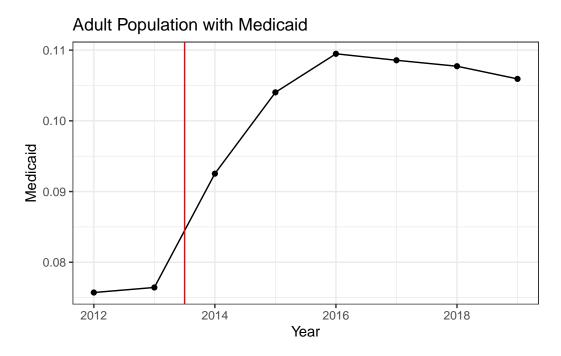


Figure 2: Medicaid Over Time

Problem 4

4. Plot the share of uninsured over time, separately by states that expanded Medicaid in 2014 versus those that did not. Drop all states that expanded after 2014.

Share of Uninsured over Time

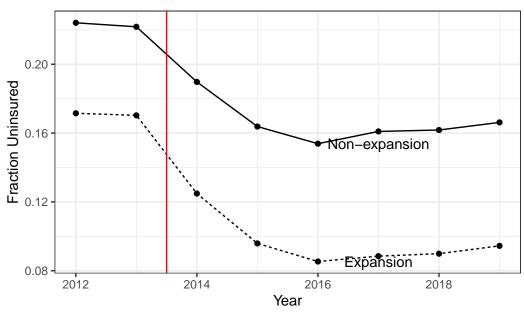


Figure 3: Medicaid Over Time

Problem 5

5. Calculate the average percent of uninsured individuals in 2012 and 2015, separately for expansion and non-expansion states. Present your results in a basic 2x2 DD table.

Expansion Status	Percent Uninsured
FALSE	-0.0602991
TRUE	-0.0690232

Average Percent of Uninsured Individuals in 2012 and 2015

Problem 6

6. Estimate the effect of Medicaid expansion on the uninsurance rate using a standard DD regression estimator, again focusing only on states that expanded in 2014 versus those that never expanded.

	(1)
(Intercept)	0.223
	(0.009)
Post 2014	-0.057
	(0.011)
Expand	-0.052
	(0.011)
Post 2014:Expand	-0.018
	(0.013)
Num.Obs.	288
R2	0.510
RMSE	0.04

Medicaid Expansion DD Regression Estimator

Problem 7

7.I nclude state and year fixed effects in your estimates. Try using the lfe or fixest package to estimate this instead of directly including the fixed effects.

	Standard DD	TWFE
(Intercept)	0.223	
	(0.009)	
Post 2014	-0.057	
	(0.011)	
Expand	-0.052	
	(0.011)	
Post x Expand	-0.018	-0.018
	(0.013)	(0.008)
Num.Obs.	288	288
R2	0.510	0.950
R2 Adj.	0.504	0.941
R2 Within		0.063
R2 Within Adj.		0.059
AIC	-1008.5	-1589.3
BIC	-990.2	-1428.1
Log.Lik.	509.236	
RMSE	0.04	0.01
Std.Errors		by: State
FE: State		X
FE: year		X

Medicaid Expansion DD Regression Estimator

Problem 8

8.Include state and year fixed effects in your estimates. Try using the lfe or fixest package to estimate this instead of directly including the fixed effects.

	DD	TWFE
postTRUE	-0.039	
	(0.007)	
${\rm expand_everTRUE}$	-0.025	
	(0.016)	
treat	-0.045	-0.023
	(0.008)	(0.005)

Fixed Effects in Estimate

Problem 9

9.Include state and year fixed effects in your estimates. Try using the lfe or fixest package to estimate this instead of directly including the fixed effects.

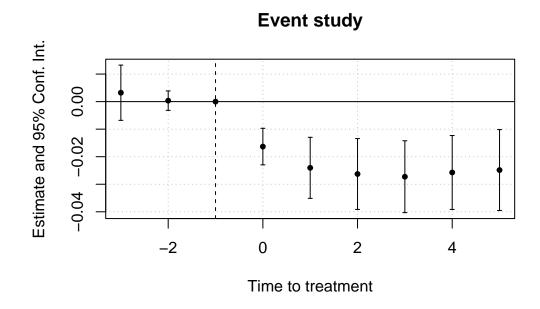


Figure 4: Fixed Effects in Estimate

Problem 10

10.Include state and year fixed effects in your estimates. Try using the lfe or fixest package to estimate this instead of directly including the fixed effects.

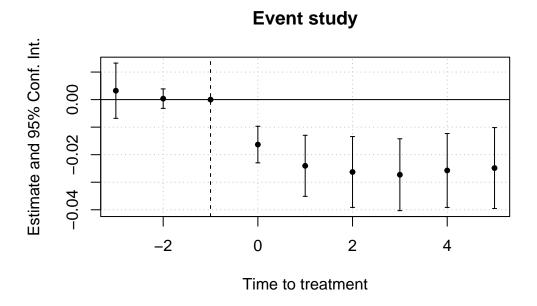


Figure 5: Fixed Effects in Estimate