ECON 470 Homework 5-2

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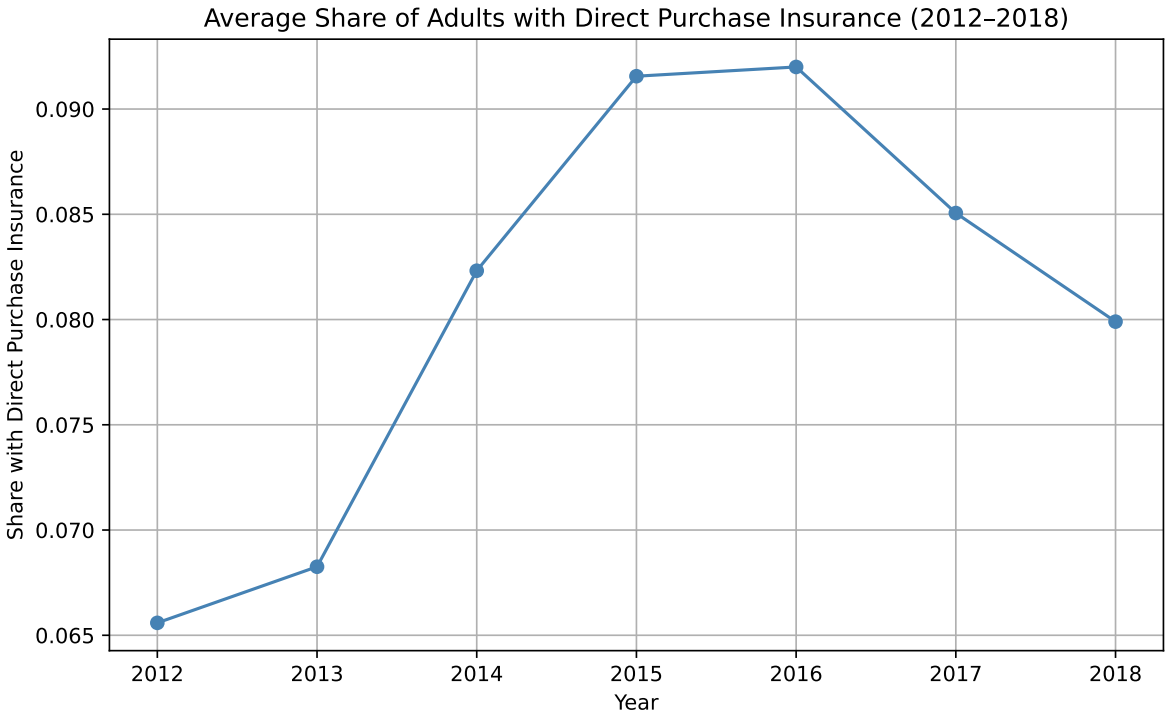
The link to my repository: https://github.com/sarina-tan/HLTH470hw5

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



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?

-Repeal of the Individual Mandate Penalty (Effective 2019)

Although the mandate's repeal was passed under the Tax Cuts and Jobs Act in late 2017, its anticipated removal may have influenced consumer behavior as early as 2018. Without the financial penalty, many healthier individuals likely chose not to purchase insurance, reducing overall enrollment and contributing to higher premiums for those who remained in the market.

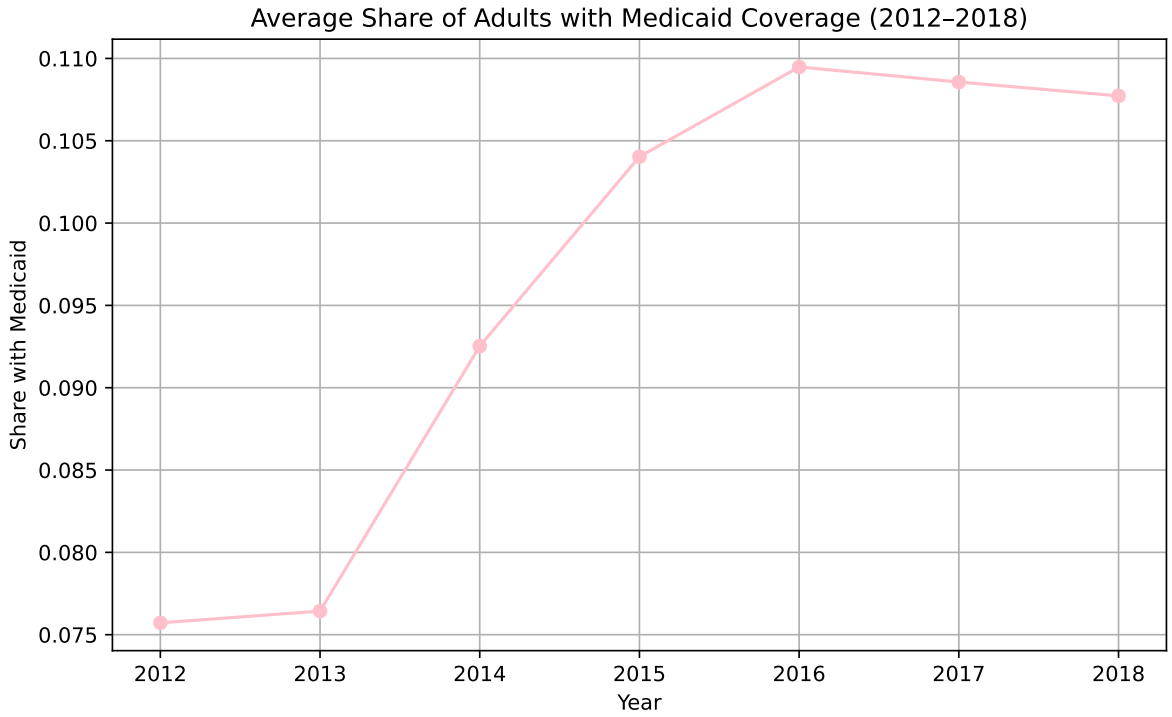
-Reductions in ACA Outreach and Enrollment Support

Beginning in 2017, the federal government significantly cut funding for advertising and navigator programs during the ACA's Open Enrollment periods. This reduced public awareness and access to enrollment assistance, particularly affecting low-income individuals and those less comfortable with technology.

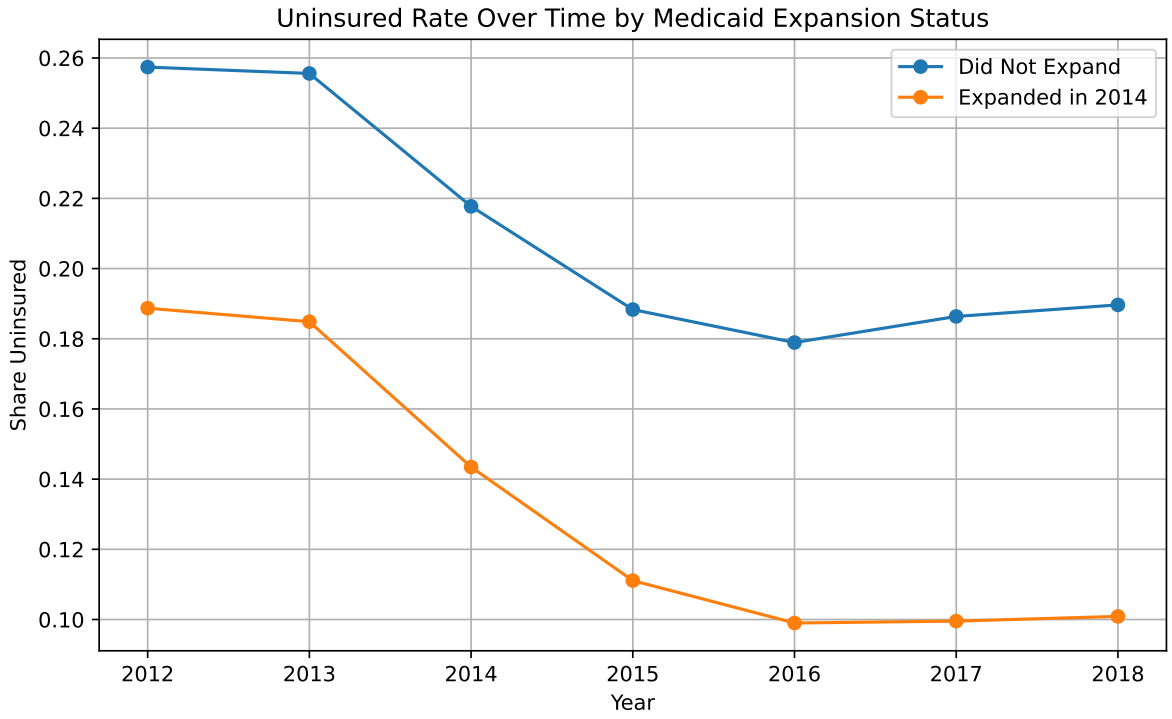
-Expansion of Non-ACA-Compliant Plans

In 2018, the Trump administration broadened access to short-term, limited-duration insurance plans. While these plans are more affordable, they often lack essential health benefits and consumer protections. Their availability attracted healthier individuals away from ACA-compliant plans, weakening the risk pool and further destabilizing the direct purchase market.

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



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.



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.

Group	Pre	Post
Non-expansion	0.224	0.164
Expansion	0.182	0.113

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.

	Standard DD
Post 2014	-0.057*** (0.012)
Expand	-0.042*** (0.011)
Post x Expand	-0.011 (0.013)
Num. Obs.	350
R2	0.394

7. 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.

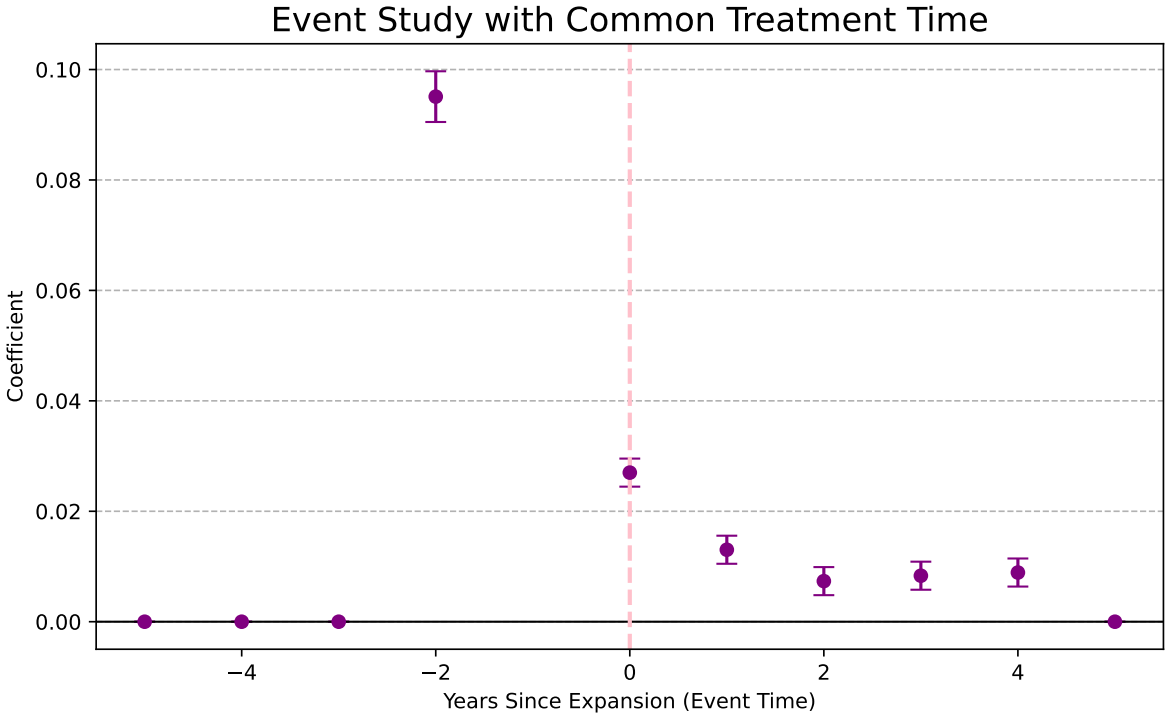
	TWFE
Post 2014	-0.049*** (0.004)
Expand	-0.027*** (0.006)
Post x Expand	-0.011** (0.004)
Num. Obs.	350
R2	0.942

8. Repeat the analysis in question 7 but include all states (even those that expanded after 2014). Are your results different? If so, why?

	Time-varying Treatment
Time-varying Treat	-0.011** (0.004)
Num. Obs.	350
R2	0.942

The results changed slightly in Question 8 after including all states, even those that expanded Medicaid after 2014. The ATE, which was –0.0188 in Question 7, became larger in magnitude at –0.0204 in Question 8. This change reflects the additional post-treatment variation introduced by later-expanding states such as Virginia and Louisiana, which transitioned from untreated to treated during the study period. By incorporating these states, the model captured more within-state changes over time, slightly strengthening the estimated effect.

9. Provide an "event study" graph showing the effects of Medicaid expansion in each year. Use the specification that includes state and year fixed effects, limited to states that expanded in 2014 or never expanded.



10. Repeat part 9 but again include states that expanded after 2014. Note: this is tricky…you need to put all states onto "event time" to create this graph.