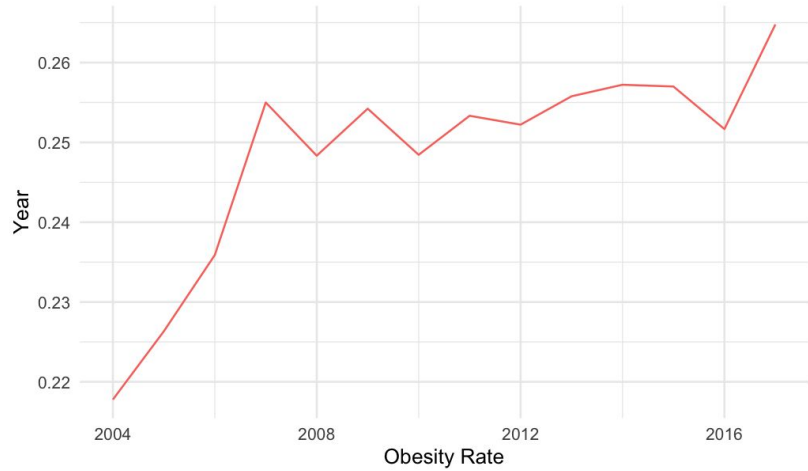


Sugar Tax in Philadelphia

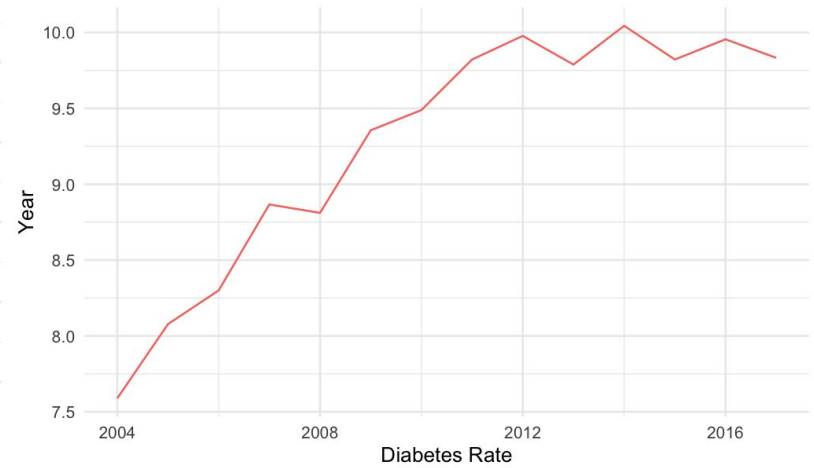
Daniel Bandler

Average Obesity per Year in Sample Counties
2004-2017



CDC Data

Average Diabetes Rate per Year in Sample Counties
2004-2017

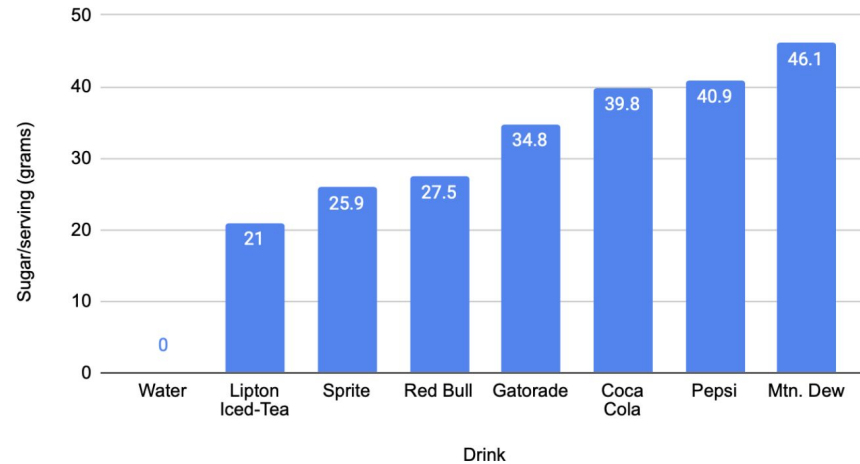


CDC Data

What is the sugar tax?

- 1.5¢ per oz (+18¢ per can, +\$1 for a two liter)
- All artificially sweetened beverages (including Diet)
- Pigouvian tax
- Began January 2017

Grams/Serving of Sugar in Various Drinks



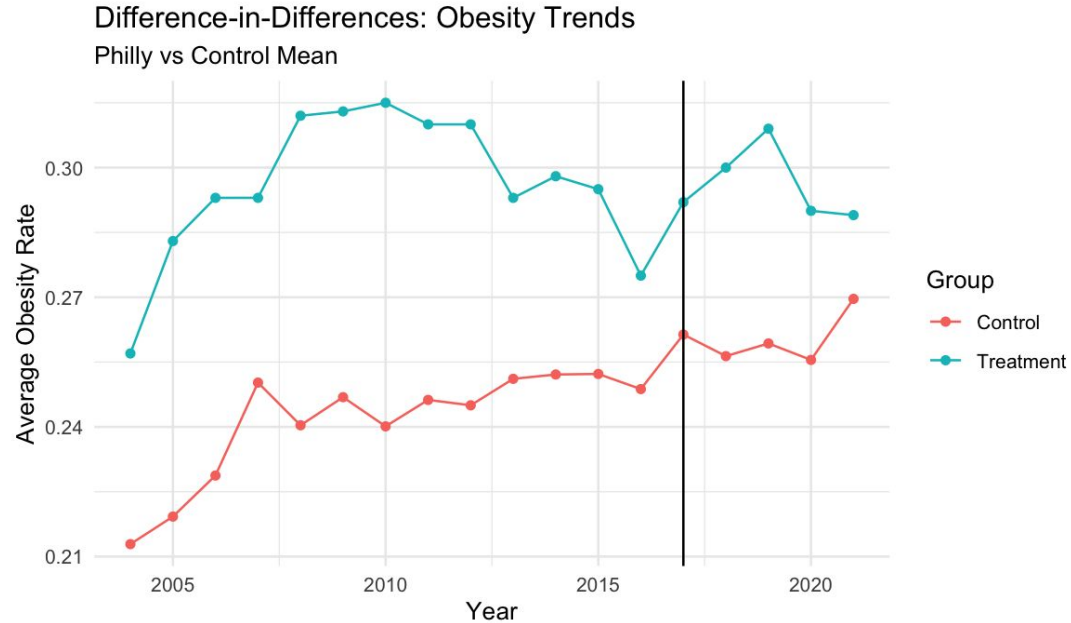
Literature

- Americans: 10-15% of calories from soft drinks
- 2 Years after implementation, Philadelphia saw a 50% reduction in taxed beverage sales relative to control
 - (16% increase in supermarkets bordering Philadelphia)
 - No studies on health effects conducted in Philly—this analysis aims to fill that gap
- Other locations: 0-3% reduction in obesity in jurisdictions with sugar tax

Health Effects

DiD: Robust 2 p.p. decline in Obesity vs Control

- Parallel pretrends is dubious
- Diabetes insignificant



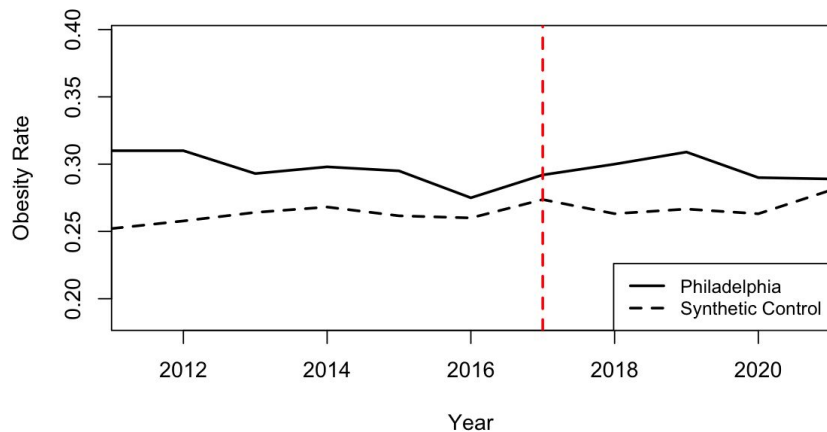
Health Effects cont.

Synthetic Control:

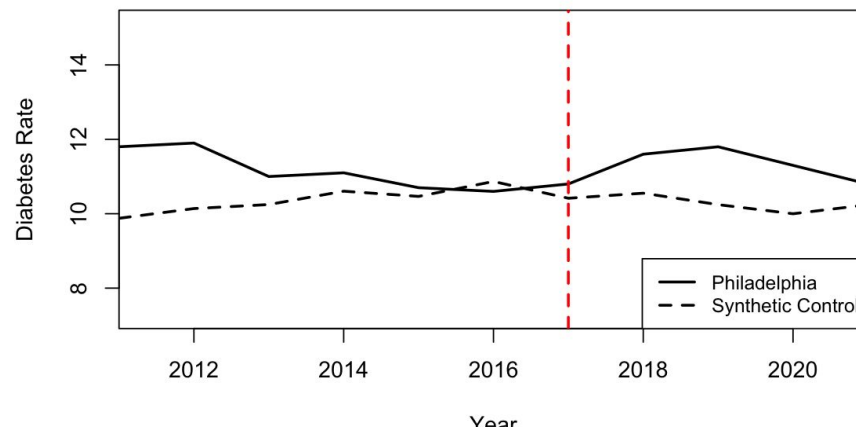
Main weights: Brooklyn, Bronx, Baltimore, and New York; per capita income

The synthetic control matched pre-treatment trends, however there was no divergence post-2017

Obesity



Diabetes



What does this mean?

No measurable improvement of health outcomes in Philadelphia after the sugar tax.

- Health indicators are lagged
- Effects may be demographic-specific
- Null result does not mean policy failure
 - Tax has been shown to reduce consumption
- Not a silver bullet for promoting healthy lifestyles