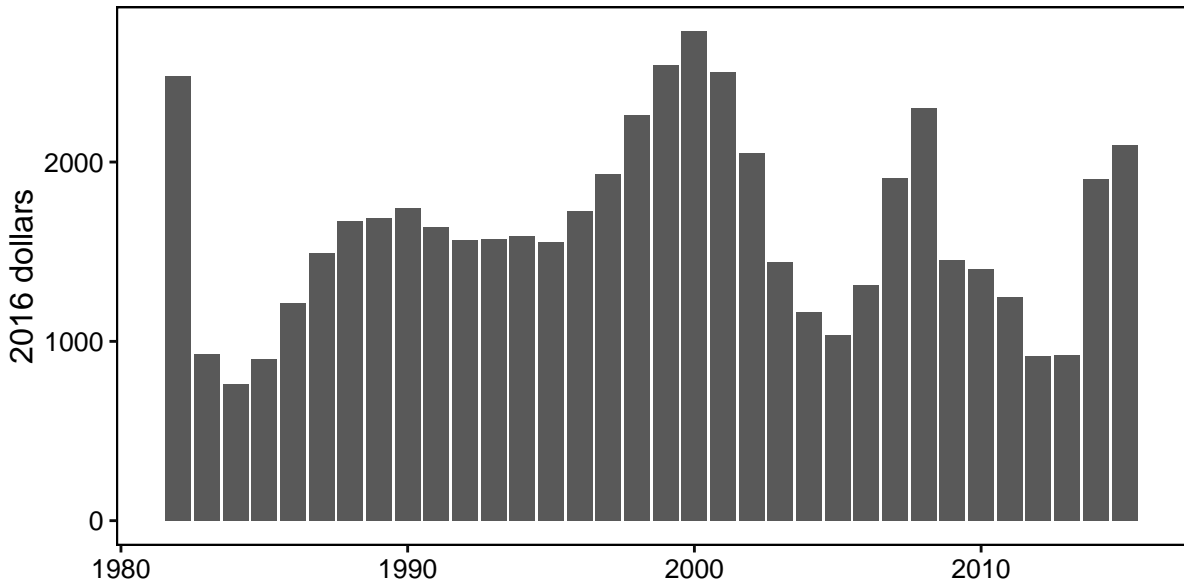


Cohort Presentation – Alaska Permanent Fund

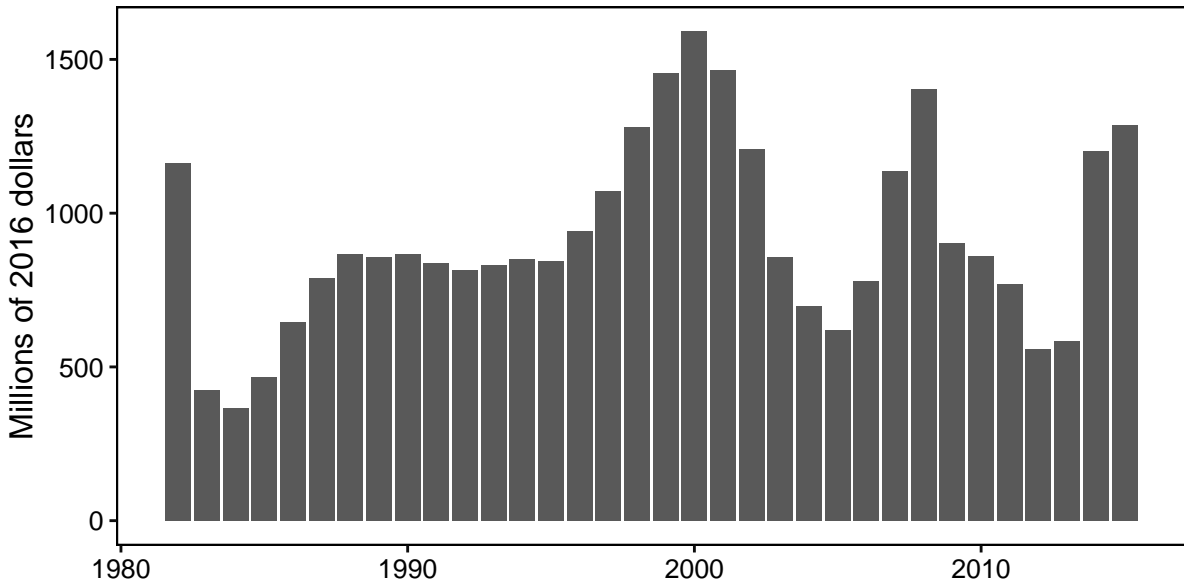
Karl Dunkle Werner

November 9, 2016

Alaska Permanent Fund payments, per individual



Alaska Permanent Fund payments, state total



Hsieh (2003)

$$\log\left(\frac{C_h^{Q4}}{C_h^{Q3}}\right) = \alpha_1 \frac{PFD_t \times Family\ size_h}{Family\ income_h} + \mathbf{z}_h' \alpha_2$$

- ▶ Do people smooth their consumption when they get the payment?
 - ▶ Measured by log of the ratio of Q4 to Q3 consumption.
- ▶ Use differences in PFD payout and family size as variation in amount household receives in last quarter of the year.
 - ▶ Can't control for both year fixed effects and family size.

Big expenses

Data I have:

- ▶ County-by-quarter counts of new vehicle registrations
- ▶ Wholesale auto auctions, with buyer's and seller's billing zip code
- ▶ Quarterly consumer expenditure data (CEX)

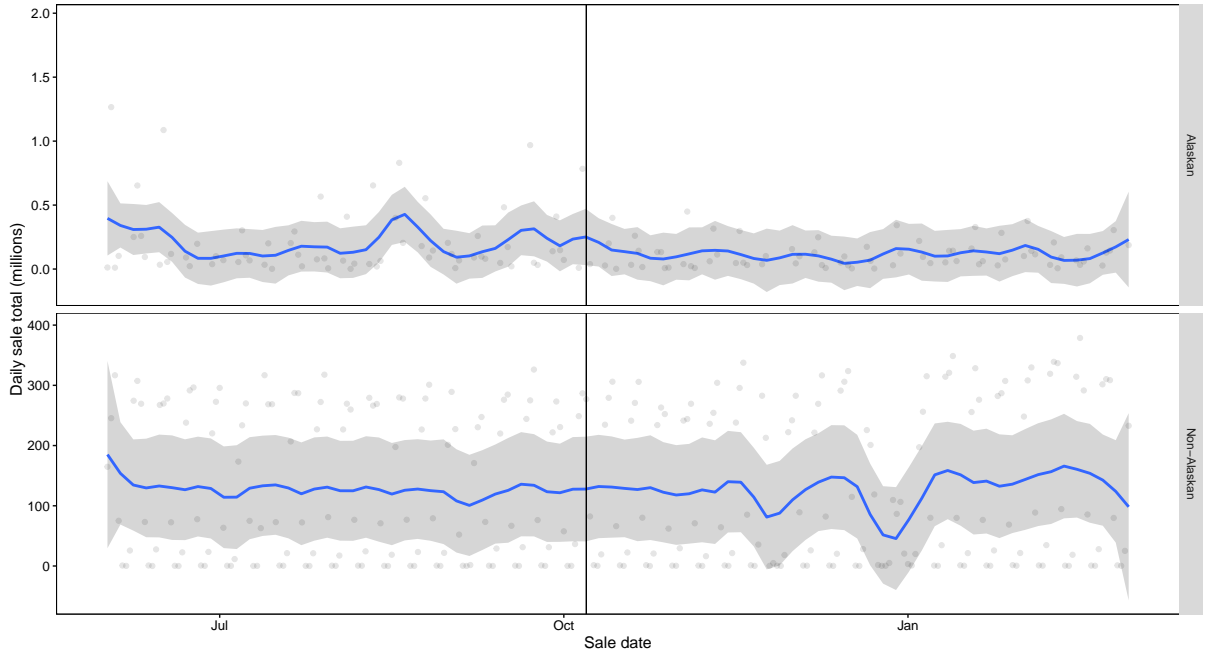
Data I want:

- ▶ Medical expenditures (state-by-day or state-by-week)
- ▶ Debt info?
- ▶ Other stuff?

Difference in Differences

Still lots of cleaning to do...

Wholesale car auctions, 2004

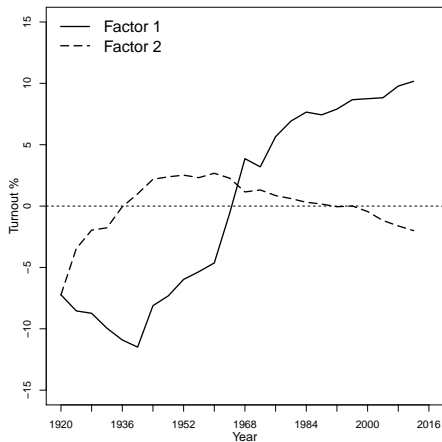


Synthetic Controls!

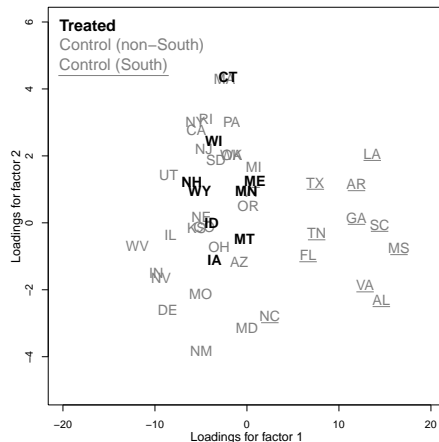
Generalized Synthetic Controls!!

Synthetic controls, with time-varying factors.
Depends on $N \rightarrow \infty$ and $T \rightarrow \infty$.

Xu (2016): election-day registration example



(a) Factors



(b) Loadings