Infact mortality and the repeal of federal prohibition

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1 What is the main question?

1. What were the effects of the repeal of federal prohibition—and thereby, potential alcohol consumption—on infant mortality?

2. Were there any significant externalities from the individual policy choices of counties and states on their neighbors?

2 Why should we care about it?

The United States from 1920 to 1933 embarked on one of the Federal prohibition laws on the production, sale, and transportation of alcohol induced massive changes in the economic and social fabric of the then 48 states. Understanding the effects of federal prohibition is important with respect to contemporary policy issues related to alcohol and the control of illicit substances. Besides, while this literature has advanced our understanding of the rise and fall of the prohibition movement as the confluence of specific political and social forces, there is surprisingly little research in assessing the economic and social outcomes of federal prohibition in the United States, the country level. The policy externalities is seldom considered.

3 How did the author get there? (Strategy)

Nearly all of the literature in economics on the causes of infant death uses OLS to explain variation in infant mortality rates with variation in covariates (c.f., Anand and Bärnighausen, 2004; Baird, Friedman, and Schady, 2011). However, if the numbers of births are low, the observed infant mortality rates become discrete. Therefore, they utilize binomial fixed-effects model, which over the standard practice of OLS estimation in three ways. First, it models the discreteness of deaths given births. Secondly, it can accommodate the observation of zero deaths in a county-year but cannot predict negative deaths. Third, it automatically accounts for heteroskedasticity induced by variation in the number of births across county-years.

4 What is author answer? (Finding)

The counties which chose allow alcohol saw infant mortality increase by 4.0%, or 2.40 additional infant deaths per 1000 live births in 1934.
However, if we allow the externalities across county borders, we find the increasing baseline infant mortality by 4.7%, or 2.82 additional infant deaths per 1000 live births in 1934. That is to say, we explicitly recognizing the possibility of policy externalities across county borders. That is to say, infant mortality in this period was not only driven by any individual county’s choice of prohibition status but also by what its neighbors’ choice of prohibition status was.