

Were the Activists Right? Outcomes for Women and Children Under Prohibition

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THE BIG PICTURE

The movement to prohibit alcohol in the late 19th and early 20th-century United States was spearheaded by women activists campaigning on the platform that alcohol consumption had especially negative consequences for women, children, and family life. Were they correct? We use variation in county- and state-level alcohol regulations before the passage of the nation-wide 18th Amendment to the U.S. Constitution to examine the impact of living in a locale that prohibited the sale or consumption of alcohol on socio-economic outcomes for women and children, namely, marriage rates and the absence of male heads of households.



LITERATURE

We place our research in the context of an empirical literature on other aspects of the effects of experiments with alcohol prohibition, including but not limited to works such as

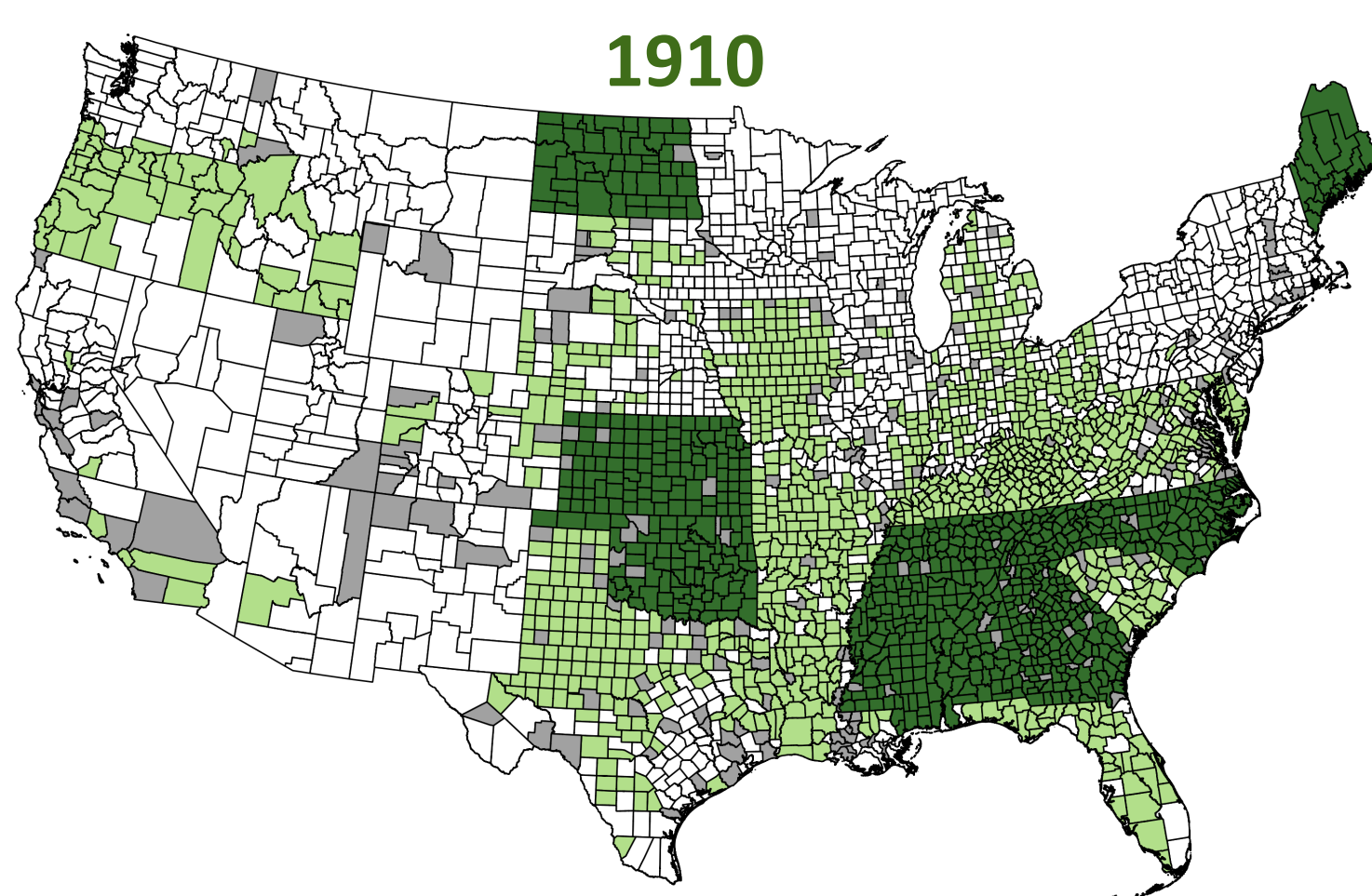
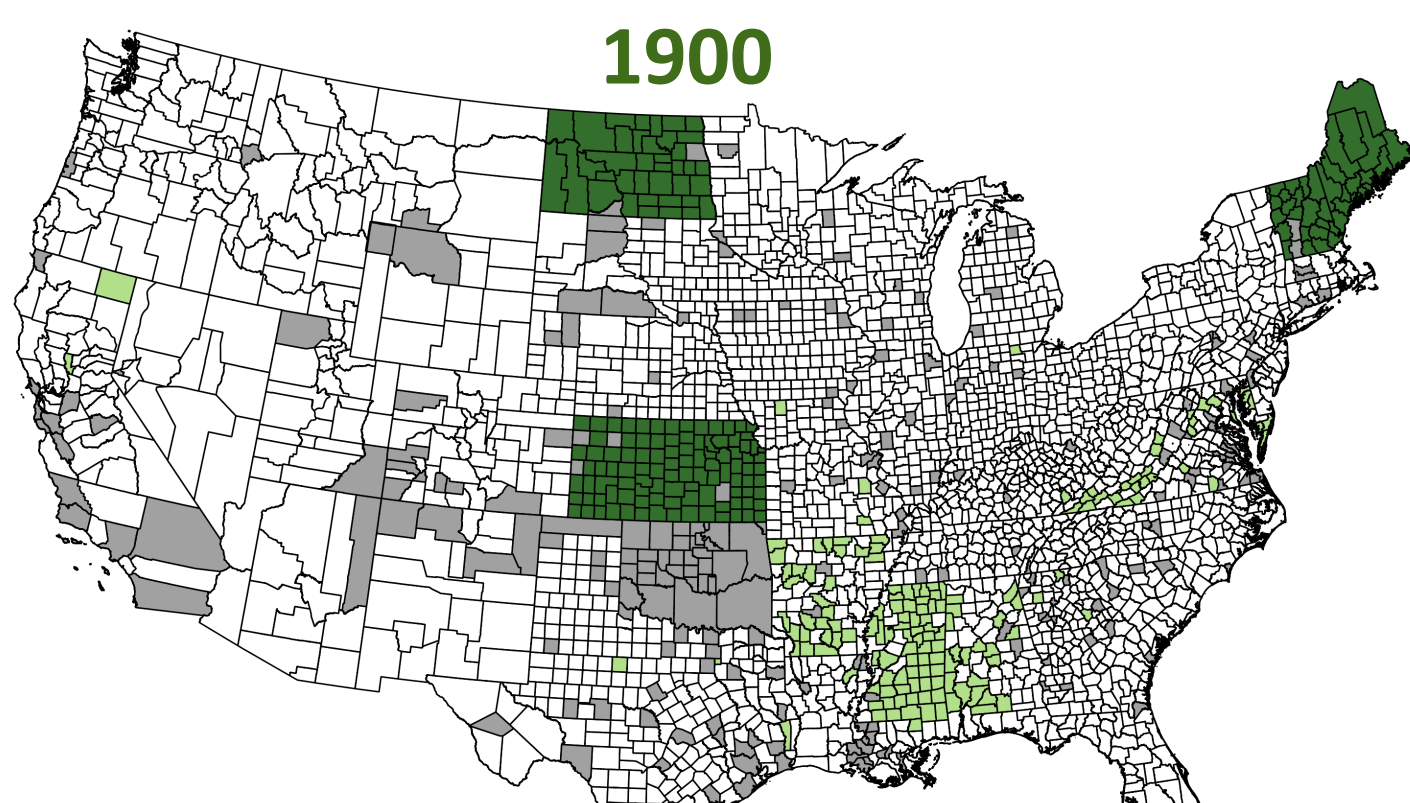
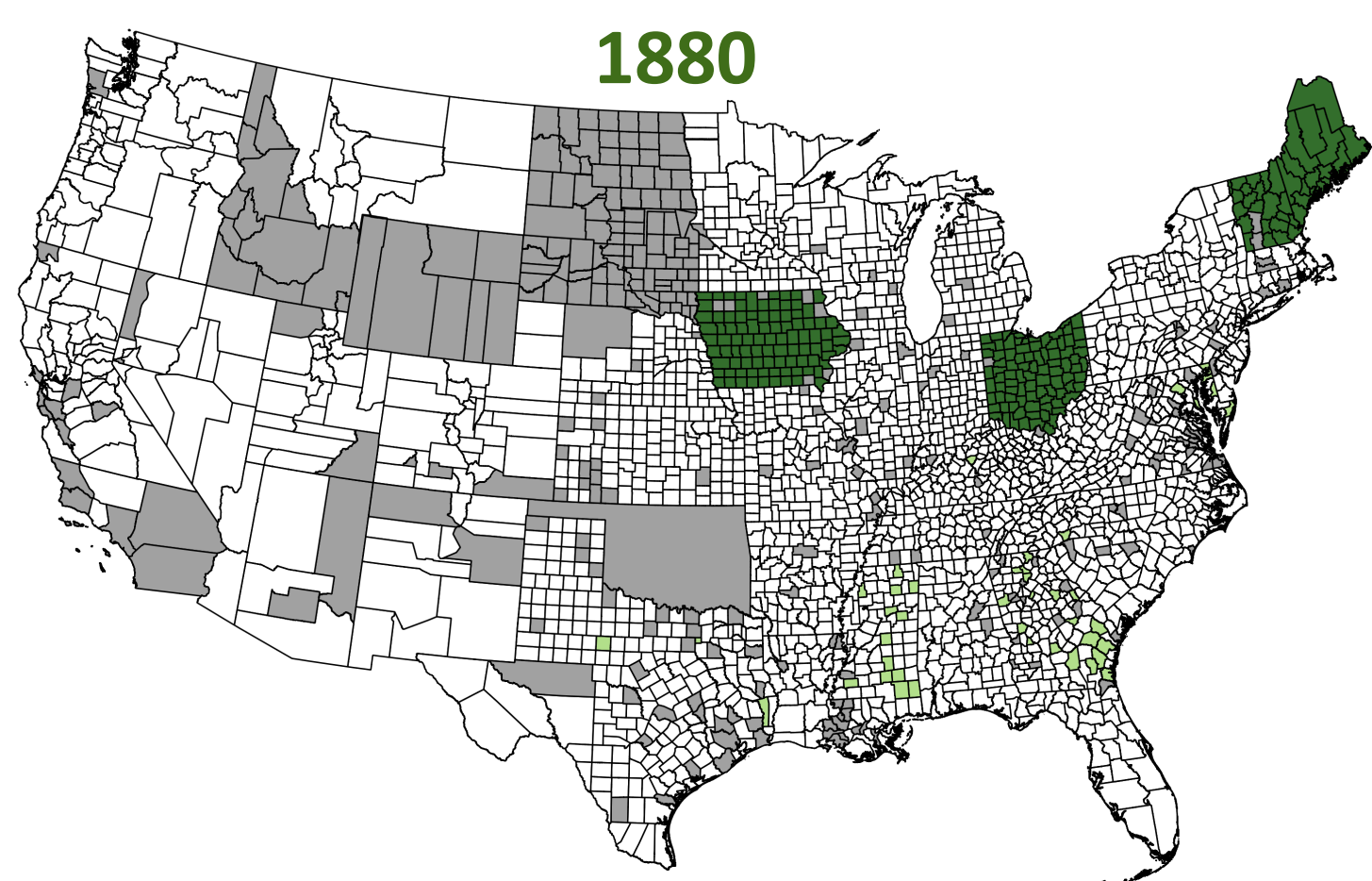
- Miron and Zwiebel (1991) – Prohibition led to a sharp decline (followed by a rebound) of alcohol consumption as measured by alcohol-related hospitalizations and arrests
- Luca, Owens, and Sharma (2015) – Alcohol prohibition in India reduces crimes against women
- Jacks, Pendakur, and Shigeoka (NBER Working Paper No. 23372, 2017) – the repeal of federal prohibition led to a spike in infant mortality

Findings like these inspire the hypothesis that prohibition could lead to improved outcomes for women at the extensive margin.

DATA

Data on prohibition at the county level before the passage of the 18th Amendment in 1919 comes from Sechrist (2012). To the right are figures showing counties and states that had enacted prohibition laws by 1880, 1900, and 1910, respectively. Individual-level marriage and education outcomes beginning in 1880 are from the 1% and 5% samples of the U.S. Census at decadal intervals, available through the IPUMS online database. (The 1890 Census is omitted, as those records were destroyed in a fire.) We also utilize a sample of data on women applying for government assistance made available by Aizer et al. (2016). Means of key outcome variables and covariates are available to the right.

PROHIBITION OVER TIME



Key:
White: wet county
Light green: dry county
Dark green: dry state
Grey: Unmapped due to missing data or inconsistent border

	Men, 17-34	Women, 17-34	Men 35-64	Women, 35-64
In a marriage	0.37	0.538	0.813	0.747
Divorced	0.002	0.004	0.005	0.006

Mean share of marriage with non-absent spouse and divorce across all white, native-born citizens by marriage and age group. Means need not be the same for men and women if they marry outside of their age group.

METHODOLOGY AND PRELIMINARY RESULTS

Outcome 1: Marriage Formation/Duration

We test whether counties with prohibition policies had higher average percentages of married (vs. single) women. The OLS specification takes the form:

$$Married_{ict} = \alpha + \beta DryCounty_{ct} + X_{ict} + \delta_t + \gamma_c + \varepsilon$$

where $Married_{ict}$ is the marriage outcome for individual i in county c at time t ; X_{ict} is a vector of county and individual characteristics;¹ δ_t are year fixed effects; γ_c are county fixed effects. We restrict to white, native-born Census respondents. We examine younger versus older respondents separately, informed by Salisbury (2017), which finds that older women's marriage decisions are more likely to be influenced by economic outcomes in this period.

¹ Age-region fixed effects, population size, region-city size fixed effects, urban vs. rural indicator, and literacy.

	1	2	3	4
A Prohibition in year t	0.003 (0.003)	0.003 (0.009)	0.010 (0.003)***	0.017 (0.006)***
R-squared	0.36	0.25	0.03	0.07
n	831,909	810,562	617,004	594,705
B Prohibition in year t-10	-0.002 (0.003)	-0.0007 (0.006)	0.011 (0.003)***	0.027 (0.007)***
R-squared	0.36	0.37	0.03	0.03
n	821,679	232,831	611,101	0.0071164
C Prohibition in year t	0.0001 (0.0002)	0.0002 (0.0006)	-0.0008 (0.0006)	-0.0008 (0.0005)
R-squared	0.005	0.01	0.008	0.007
n	845,045	245,022	633,296	608,020
D Prohibition in year t-10	0.0002 (0.0003)	-0.0007 (0.0003)**	-0.002 (0.0006)***	-0.002 (0.0006)***
R-squared	0.36	0.006	0.03	0.07
n	821,679	818,927	611,101	590,113

Heteroscedasticity-robust standard errors are clustered at the state level. (The lagged specifications omit time-varying covariates in period t , which may be impacted by prohibition.)

LHS Group	RHS Variable
(1) White, native men aged 17-34	(A) Marriage, spouse present
(2) White, native women aged 17-34	(B) Marriage, spouse present
(3) White, native men aged 35-64	(C) Divorce
(4) White, native women aged 35-64	(D) Divorce

Outcome 2: Absence of Male Head of Household

Next, we use data from Aizer et al. (2016) on female applicants for government assistance between 1912 and 1919 for a similar specification, with the outcome being applicant reporting that her husband has left her, is in prison, or is in the hospital.

	1	2	3
Prohibition in year t	-0.048 (0.034)	-0.062 (0.030)**	-0.067 (0.028)**
Urban		-0.117 (0.071)	-0.029 (0.088)
% widows in county			-0.300 (0.664)
% in poverty in county			0.830 (.470)*
FE	state, year	state, year	state, year
R-squared	0.08	0.08	0.08
n	5,192	5,192	5,192
Mean of outcome	0.18	0.18	0.18

DISCUSSION

These findings, conditional on the assumptions of the specifications, are consistent with a hypothesis that locales with alcohol prohibition saw higher rates of stable marriage for white, native-born women and men of older prime age – a better outcome if we assume that women benefitted from the economic support of a marriage. We expect that if this finding were purely an artifact of selection into prohibition, younger women (whose motives for marriage may be different than that of older women) would also be affected. (We note that our current specifications have more explanatory power for younger women overall.) Of a subset of women applying for government assistance, those who live in dry counties were less likely to report an absent husband.

NEXT STEPS

- Using the Census to observe marriages at 10-year intervals, while intuitively important, provides little information about how outcomes change over time after a policy change. We will expand our scope to include outcomes with more granular variation.
- How do outcomes under prohibition policies vary for different racial groups, or among native-born vs. non-native residents?
- What further evidence can we bring to bear for the causal impacts of prohibition versus the characteristics of counties that select into these policies? What political, economic, or social characteristics best explain *demand* for prohibition laws?
- What can individual-level data tell us about outcomes for individuals from dry counties? We plan to expand on our analysis by moving to full-count linked U.S. Census data, which will allow us to access outcomes for every individual surveyed and to link individuals to other data sources.

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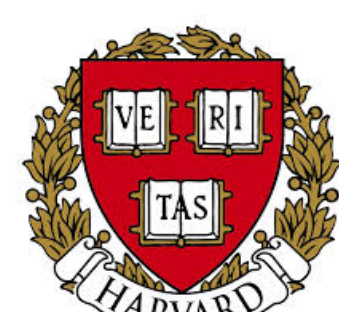
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