

Supporting Materials for
“State-Building through Public Land Disposal? An
Application of Matrix Completion for Counterfactual
Prediction”

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1 Exploratory data analysis

Table 1: Definitions and data sources of variables.

| Theme | Variable | Coverage | Definition | Source |
|-----------------------|-------------------|-------------|--|--|
| Farms | Farm size | 1860-1950 | Log average farm size | Haines (2010) |
| | Farm value | 1850-1950 | Log average value of farmland and buildings per acre (\$) | Ibid. |
| | Land inequality | 1860-1950 | Gini coefficient based on distribution of farm sizes, adjusted for the share of propertyless farmers | Ibid. |
| State Capacity | Revenues | 1783-1982 | Log per-capita state government total revenue (1982\$) | Sylla et al. (1993, 1995a,b); Haines (2010) (total free pop. data from Haines (2010)) |
| | Expenditures | Ibid. | Log per-capita state government total expenditure (1982\$) | Ibid. |
| Homesteads | Homestead entries | 1862-2016 | Log per-capita total number of patents issued under the HSA | U.S. BLM (https://glorecords.blm.gov) (total free pop. data from Haines (2010)) |
| Railroads | Railroad access | 1830 - 1911 | Total miles of operational railroad track per sq mi | Constructed from Atack (2013) |

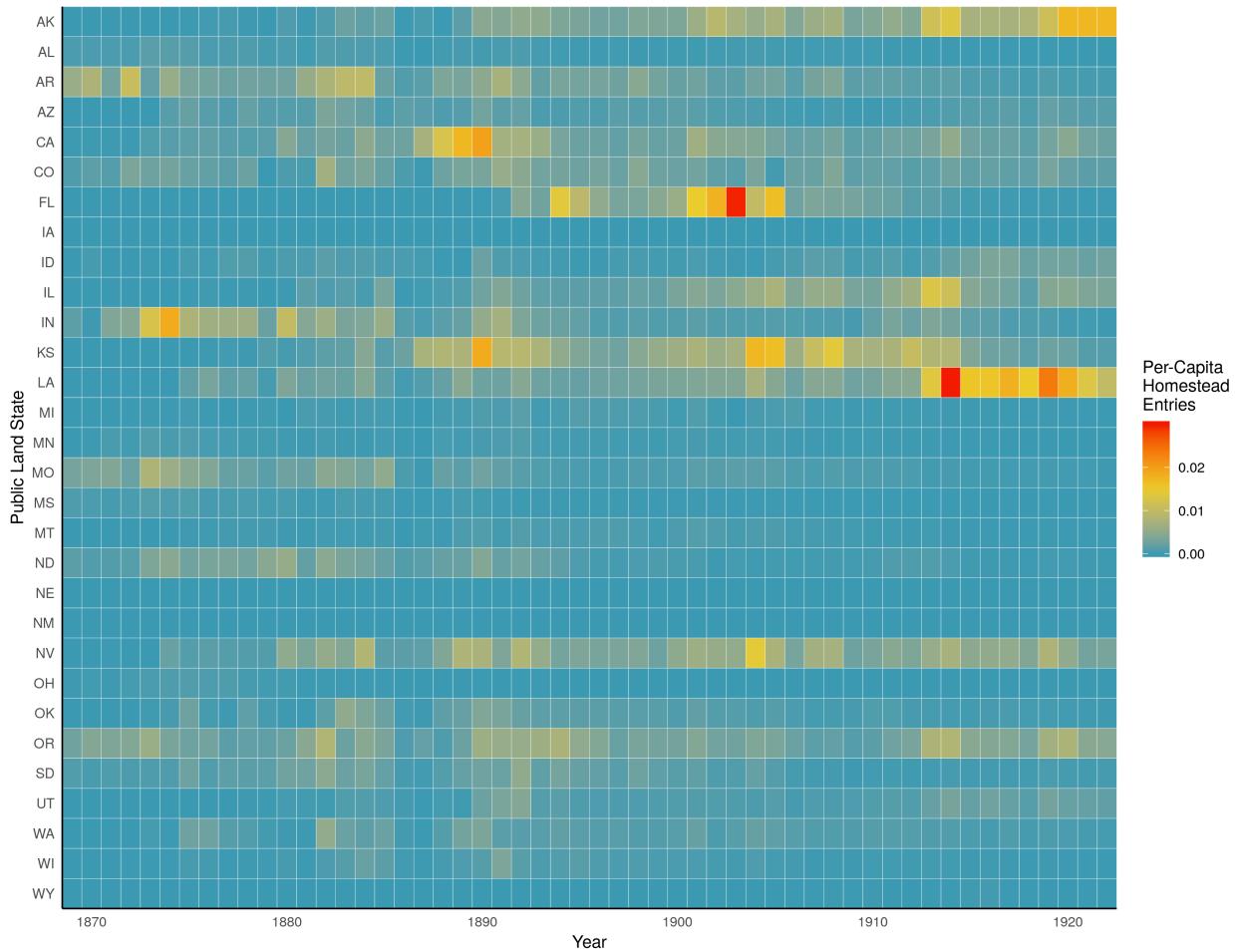
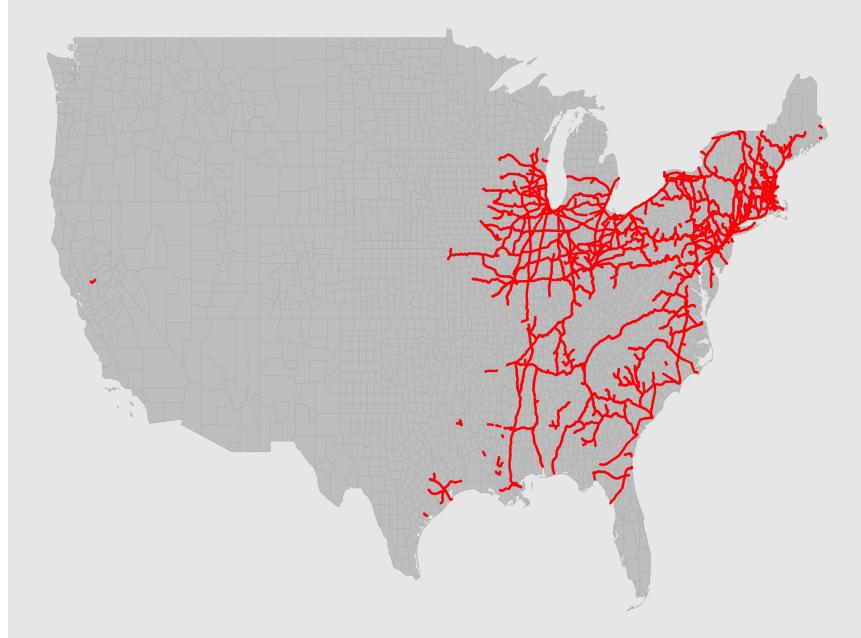


Figure 1: Per-capita homestead entries in state i and year t , 1869-1922.

1862 (1911 county borders)



1911

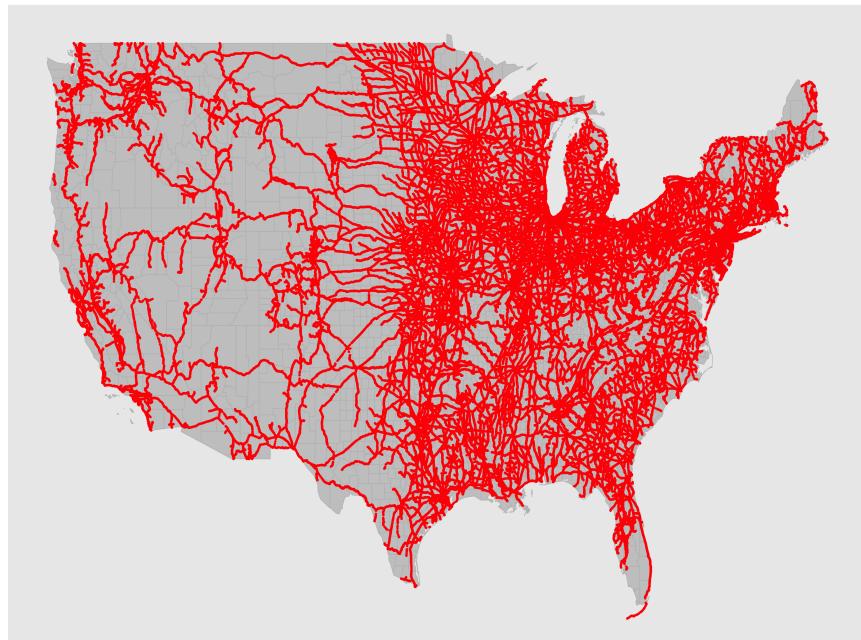


Figure 2: Railroad lines in 1862 and 1911, overlaid on 1911 county borders. Railroad data from Atack (2013) and county border data from Long (1995).

2 Simulations

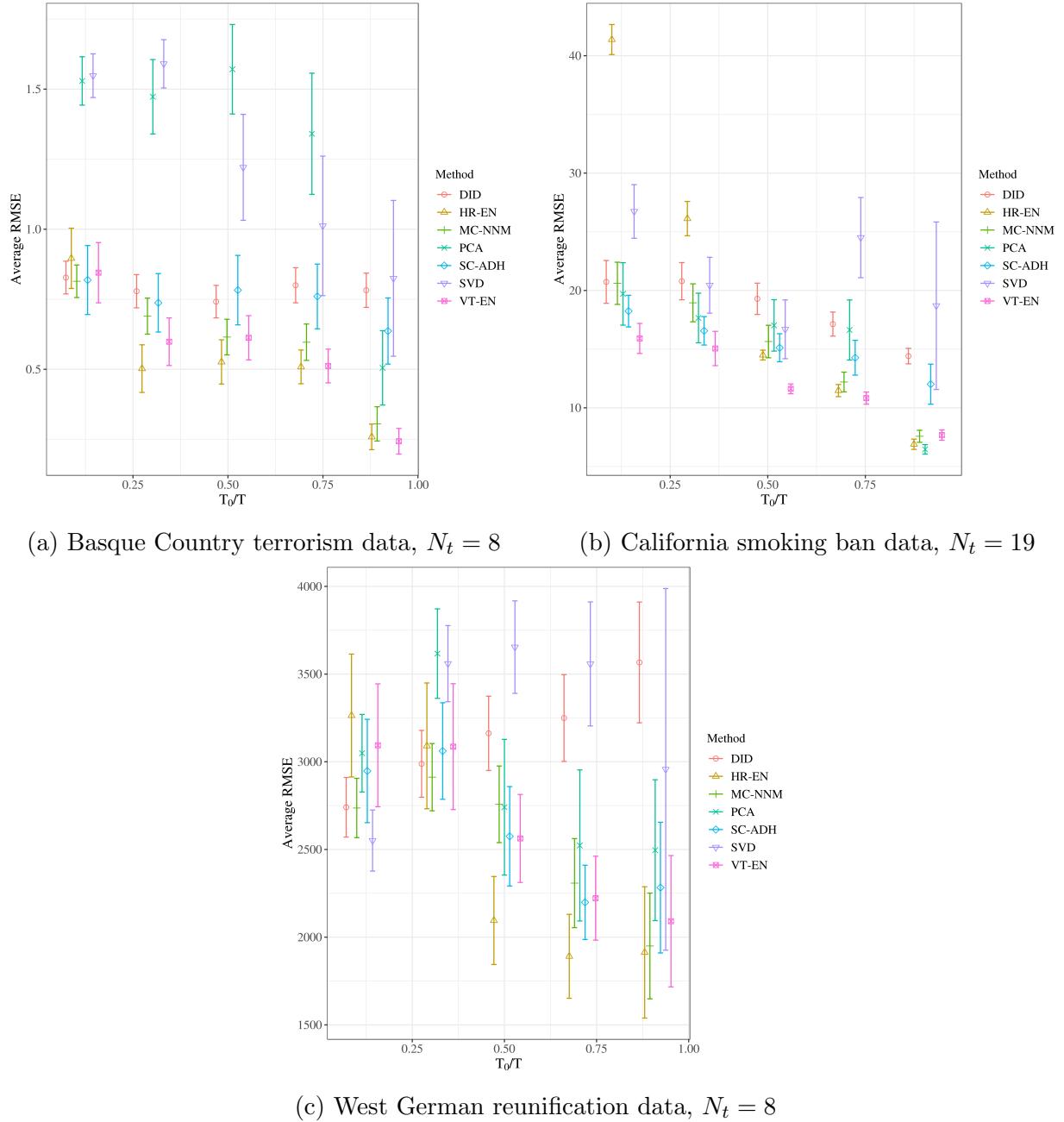


Figure 3: Placebo tests under simultaneous treatment adoption. See footnotes to Fig. 1.

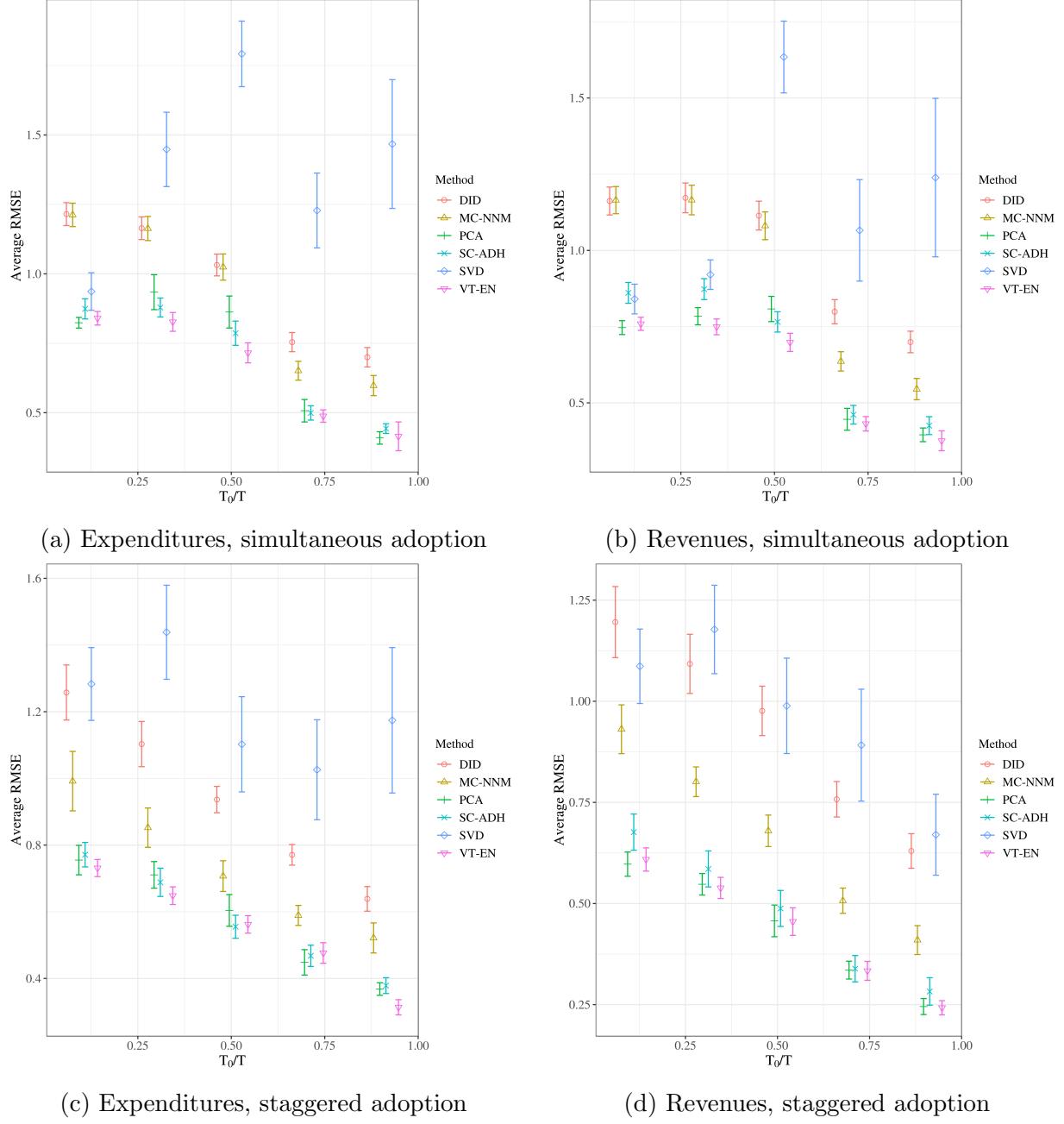


Figure 4: Placebo tests under simultaneous and staggered treatment adoption, with $N_t = 9$. See footnotes to Fig. 3.

3 Causal mechanisms

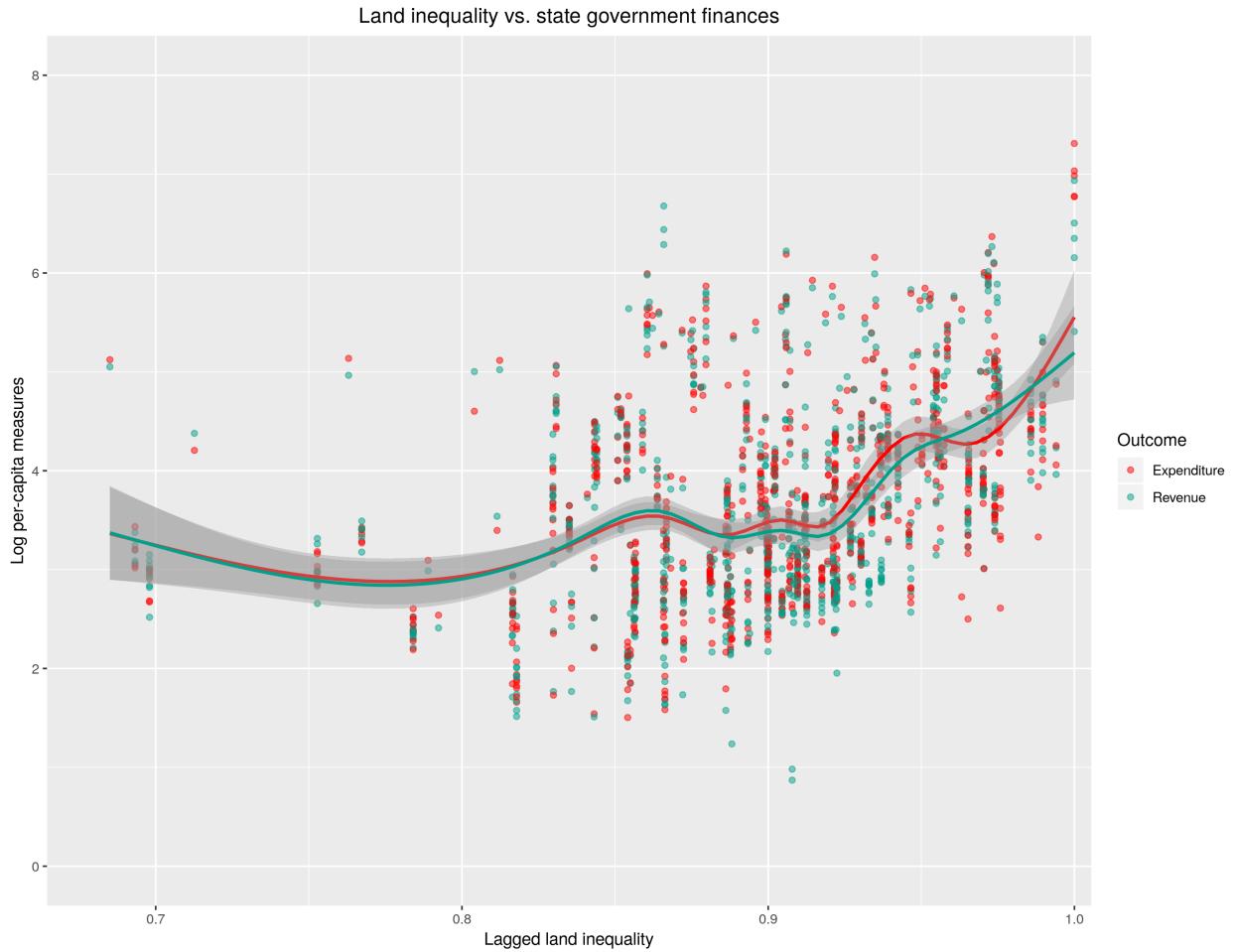


Figure 5: Land inequality (lagged by 10 years) vs. log per-capita revenue and expenditure, 1860-1950. Each point is a state-year observation. Lines represent generalized additive model (GAM) fits to the data and shaded regions represent corresponding 95% confidence intervals.

References

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