

Supporting Materials for
“Building State Capacity 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 (decennial)	Log average farm size	Haines (2010)
	Farm value	1860-1950 (decennial)	Log average value of farmland and buildings per acre (\$)	Haines (2010)
	Land inequality	Ibid.	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.
	Education spending	1783-1942	Log per-capita state government education spending (1942\$)	Ibid.
Homesteads	Homestead entries	1869-1982	Log per-capita statewide sum of patents issued under the HSA	U.S. BLM (https://glorerecords.blm.gov) (total free pop. data from Haines (2010))
Railroads	Railroad access	1826-1911	County-wide cumulative sum of railroad track miles per sq mi	Constructed from Atack (2013)

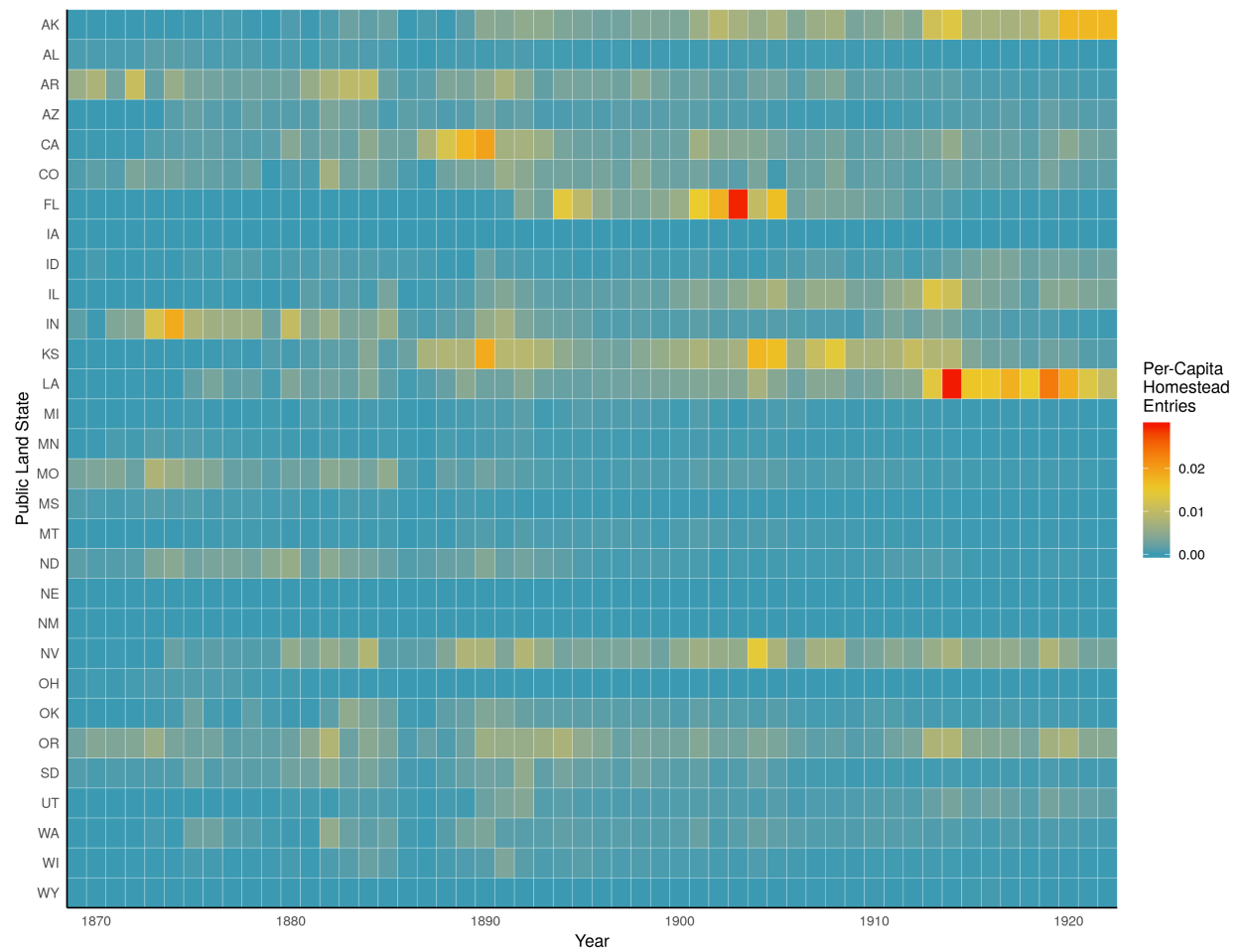
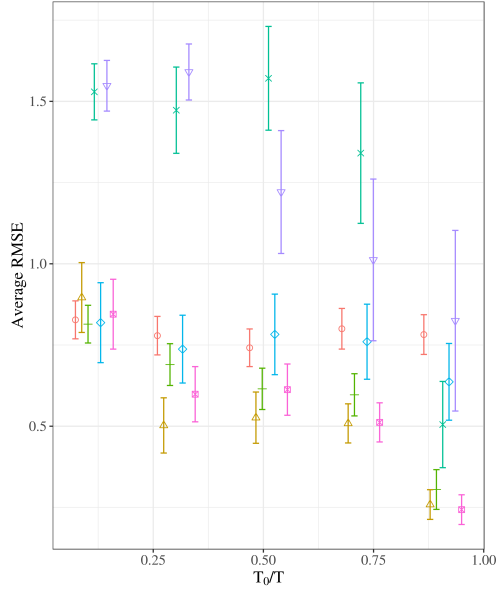
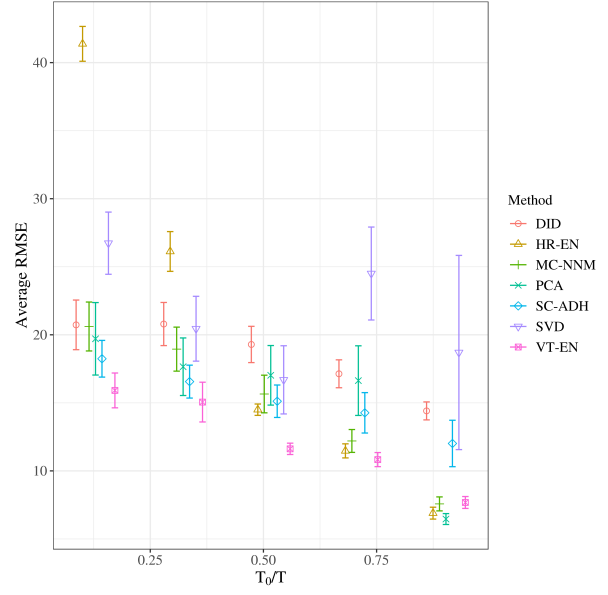


Figure 1: Per-capita statewide sum of homestead entries in state i and year t , 1869-1922.

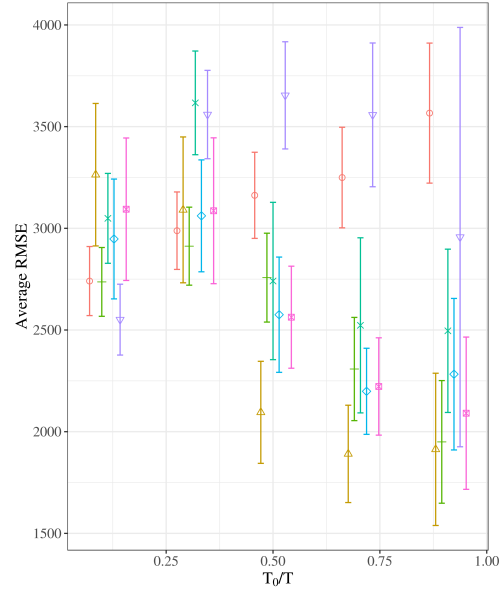
2 Simulations



(a) Basque Country terrorism data, $N_t = 8$

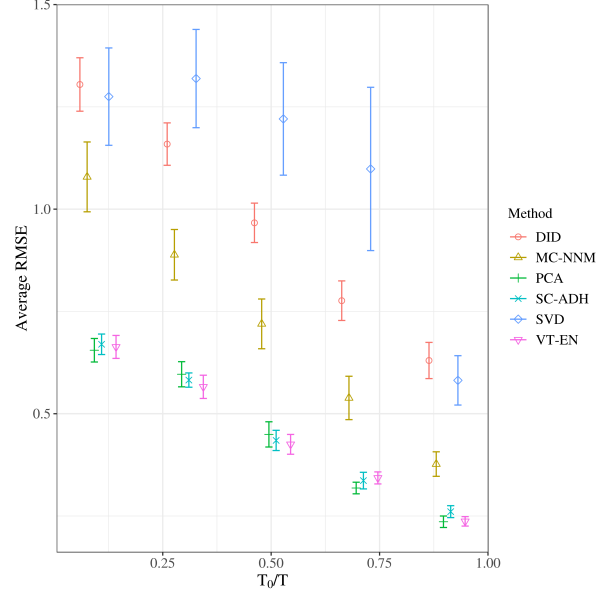
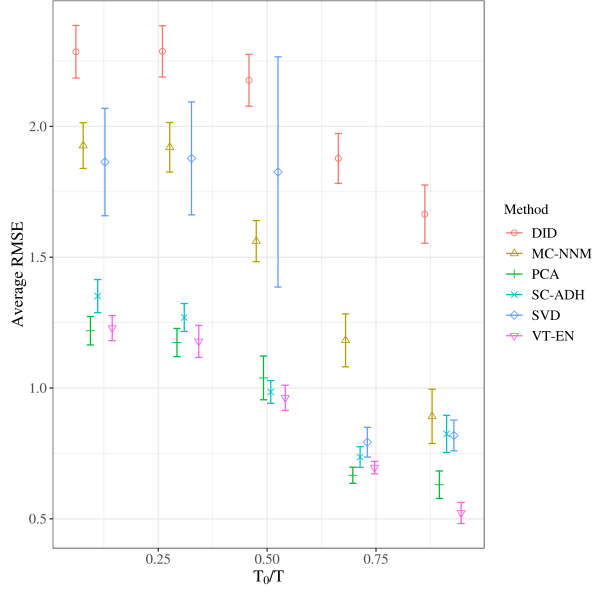


(b) California smoking ban data, $N_t = 19$



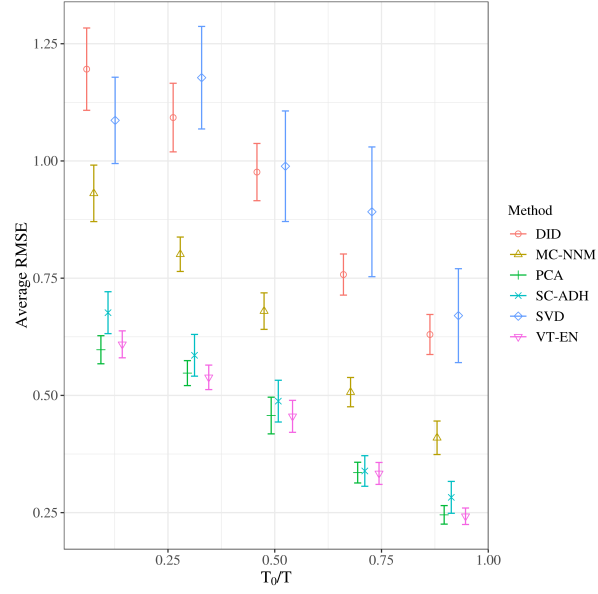
(c) West German reunification data, $N_t = 8$

Figure 2: Placebo tests under simultaneous treatment adoption. See footnotes to Fig. 1.



(a) State government education spending, $N_t = 10$

(b) State government expenditures, $N_t = 10$



(c) State government revenues, $N_t = 10$

Figure 3: Placebo tests under staggered treatment adoption. See footnotes to Fig. 2.

3 Estimates

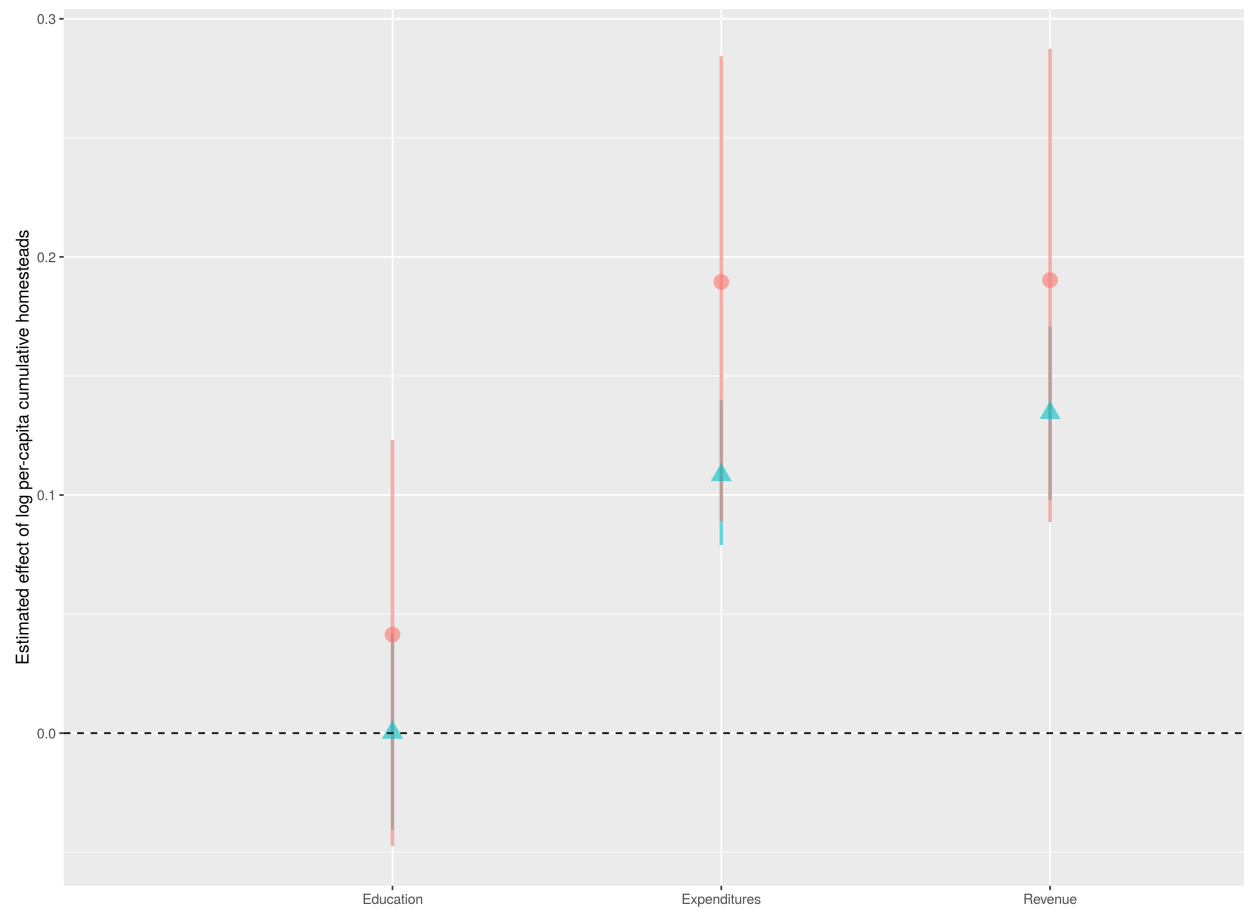


Figure 4: DD estimates of log per-capita cumulative homesteads on log per-capita state government finance, without including average farm values in the regression. See notes to Fig. 3.

4 Causal mechanisms

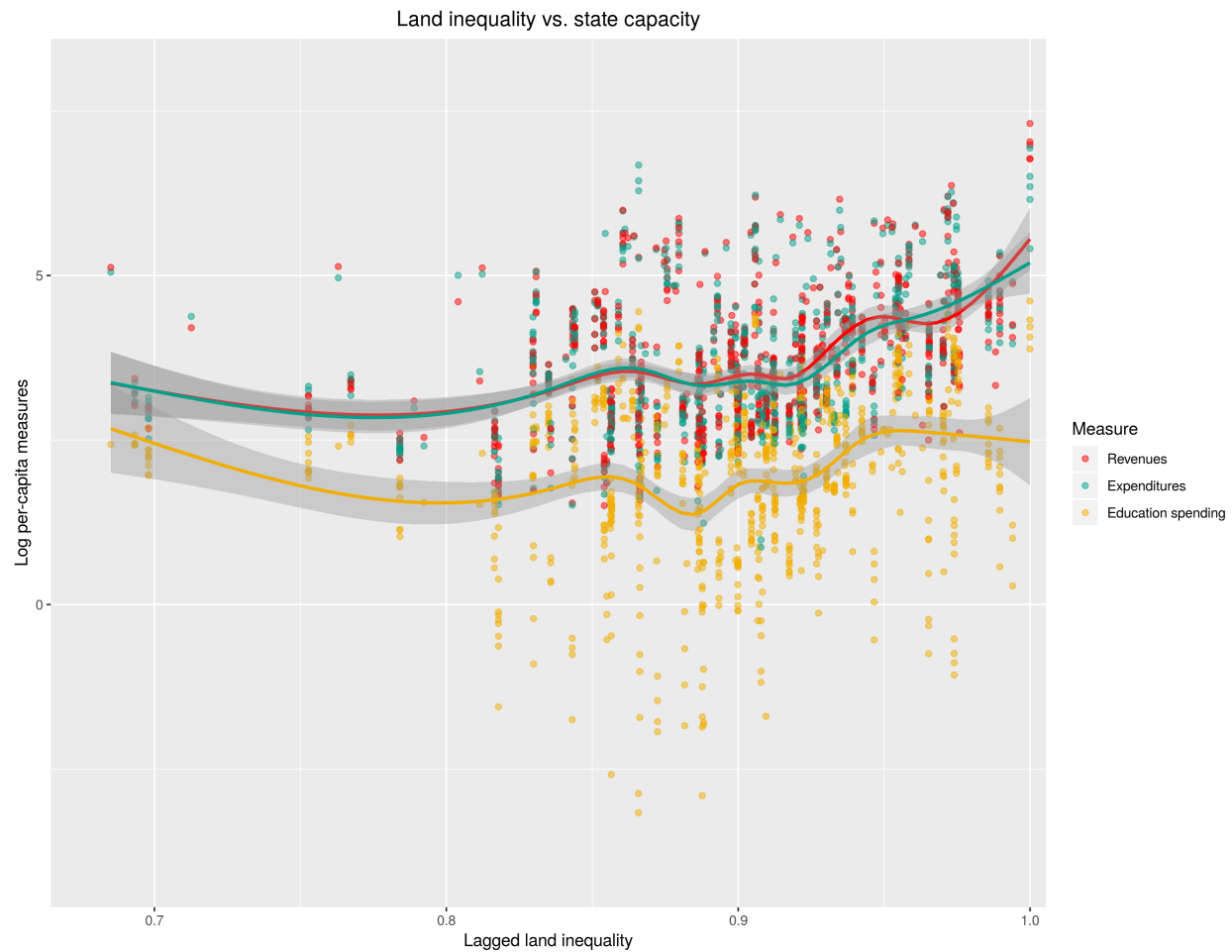


Figure 5: Land inequality vs. log per-capita revenues and expenditures at the state-level, 1860-1950. Each point is a state-year observation. Lines represent generalized additive model (GAM) fits to the data and shaded regions represent corresponding 95% confidence intervals.

Table 2: DD estimates: Impact of log per-capita cumulative homesteads (county-level).

Outcome \ Region	Region	
	South	West
Land inequality	-0.001 [-0.003, 0.0004], $N = 523$	-0.004 [-0.005, -0.002], $N = 2,002$
Land inequality (no farm values)	0.0007 [-0.0008, 0.002], $N = 590$	-0.001 [-0.002, -0.0001], $N = 2,549$
Railroad access	0.03 [0.01, 0.05], $N = 350$	0.09 [0.07, 0.1], $N = 1,053$
Railroad access (no farm values)	0.06 [0.04, 0.08], $N = 361$	0.12 [0.11, 0.13], $N = 1,251$

Notes: Values in brackets represent 95% confidence intervals constructed using 1,000 state-stratified bootstrap samples.

References

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