

Felony Records and the Decline in U.S. Labor Force Participation, 1980-2010

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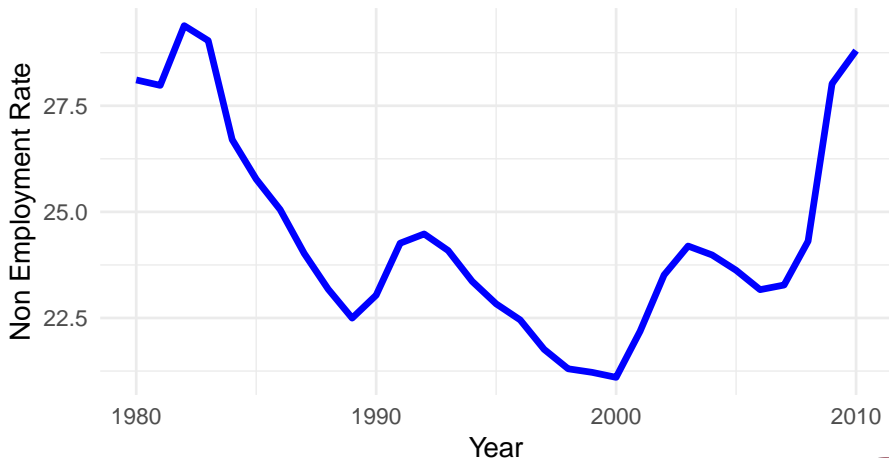
Outline

- 1 Introduction
- 2 Literature
- 3 Methods
 - Data
 - Measures
 - Analytical Strategy
- 4 Results
- 5 Summary



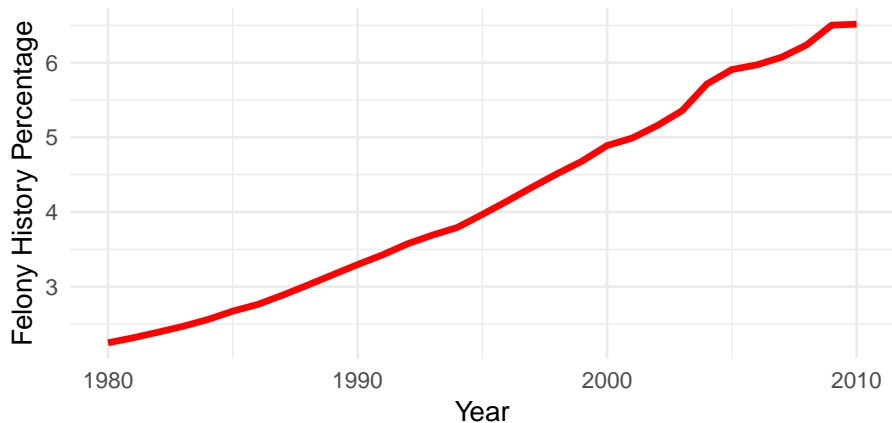
Context - Employment

US 18–54 Non Employment Rate



Context - Criminal Records

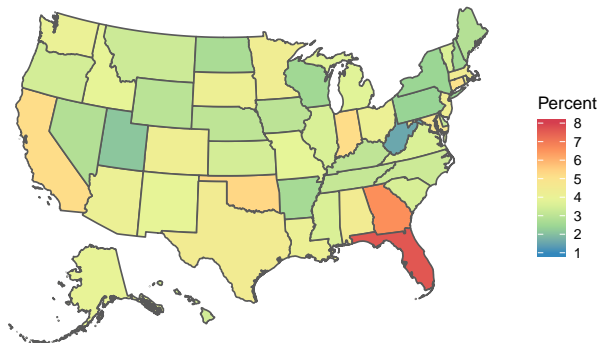
US Felony History % (Shannon et. al. 2017)



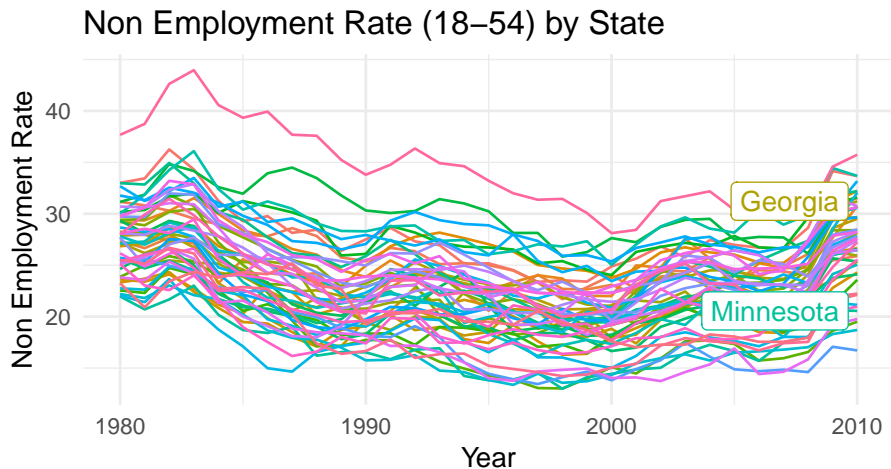
Spatial Variation

Felony History in the United States: 1980–2010

Shannon et al. 2017



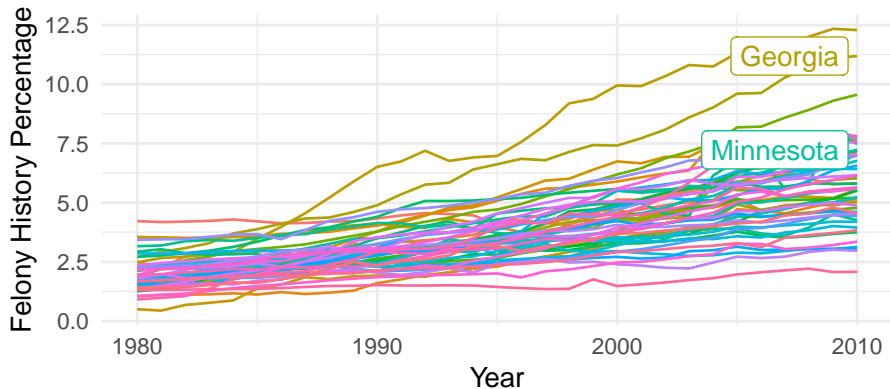
State variation in Non Employment



State Variation in Felony History

Estimated Felony History Pct. by State

Shannon et. al. 2017



Questions

- How has the proliferation of criminal record altered chances in the U.S. labor market?
- Is the effect robust across subpopulations? Chiricos et. al. (2005), Western (2002)



Theory

- Labeling and Stigma (Goffman 1963, Becker 1963)
- Age-Graded Life Course (Sampson and Laub 1997)
- Statistical Discrimination (Arrow 1973) and Signaling (Bushway and Apel 2011)

Empirical

- Experimental Audits: Pager (2003), Uggen et. al. (2014)
- Observational data: Sampson and Laub (1993), Western (2002), Stoll and Bushway (2008), Apel and Sweeten (2010), Harding et. al. (2018)
- No record effect on worker performance in Military context (Lundquist et. al. 2018)



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Data

- Balanced Panel of U.S. State-Years 1980-2010 ($50 \times 31 = 1,550$ obs.*)
- Population: U.S. adults ages 18-54 (excludes those incarcerated)
- Current Population Survey data aggregated to state-year level
- Merge covariates from UKCPR, CSP, SSA
- Leverage new state-year estimates of population with felony record (Shannon et. al. 2017)
 - estimated via demographic life-tables of correctional out-flows
 - adjusts each cohort accounting for mortality and recidivism
 - excludes those currently under correctional supervision



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Measures

Outcome Measures

- DV: not employed share $(\text{unemployed} + \text{NILF}) / \text{population}$
- IV: felony history percentage
- Time-Varying Controls:
 - Population age shares
 - Overall unemployment rate lags (proxies for business cycle)
 - Disability, marriage, and bachelor's degree rates
 - Effective wage, unemployment compensation, mean TANF max



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Analytical Strategy

Generalized Difference-in-Difference

- "treatment" as dosage of felony history
- assumes units would follow a common employment trajectory with equivalent doses
- modeled as a "two-way" fixed effects panel model
- $Y_{st} = \beta F_{st} + \alpha X_{st} + \lambda_s + \lambda_t + \epsilon_{st}$
- stable, unobserved influences across states and years captured by fixed effects
- causal if*: unobserved within state changes, not due to common time shocks, independent of changes in F_{st}
- cluster SEs by state and year
 - state: heteroskedasticity and autocorrelation across time within state
 - year: spatial autocorrelation within year



Overall FE Model

Table: Panel Model of Not Employed Rate, 1988-2010

Felony History Pct.	0.33 (0.10)***
Disab. Rate	0.15 (0.03)***
Marriage Rate	0.02 (0.03)
Effective Wage	-0.04 (0.11)
Mean TANF Maximum	0.00 (0.00)
Unemployment Comp.	-0.00 (0.00)
Degree Rate	-0.04 (0.02)*
State FE	Yes
Year FE	Yes
Observations	1,150
R ²	0.57

Notes:

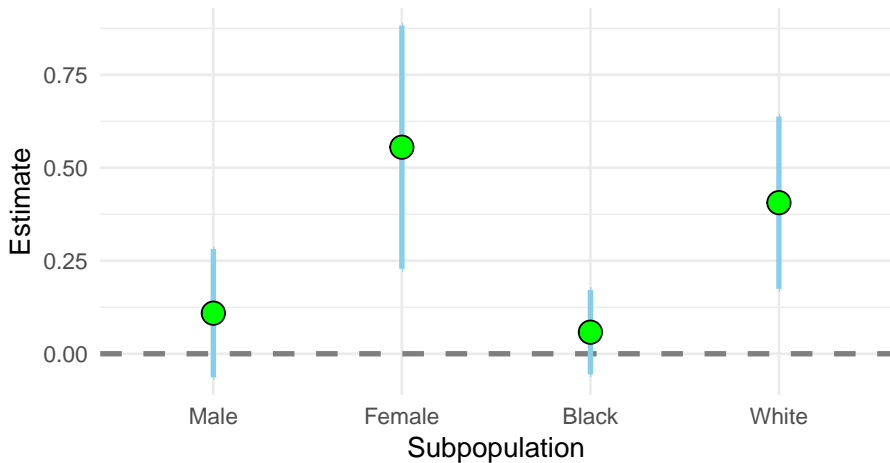
***Significant at the 0.1 percent level.

**Significant at the 1 percent level.

*Significant at the 5 percent level.



Coefficient Plot of Subpop. Models



Summary

Conclusions

- collateral consequences do move the needle in aggregate employment
- but only for females and whites; effects vs. levels
- consistent with Chiricos et. al. 2005

Limitations and future research

- causal identification: threat of time-varying unmeasured idiosyncrasies
- do not have sub population specific IV at state-year level
- further work leverage exogenous policy change to indentify effect (e.g., truth in sentencing)



Questions/Comments?

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Appendix: Rolling Window Estimates

5-Year Rolling Window Estimates

