

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

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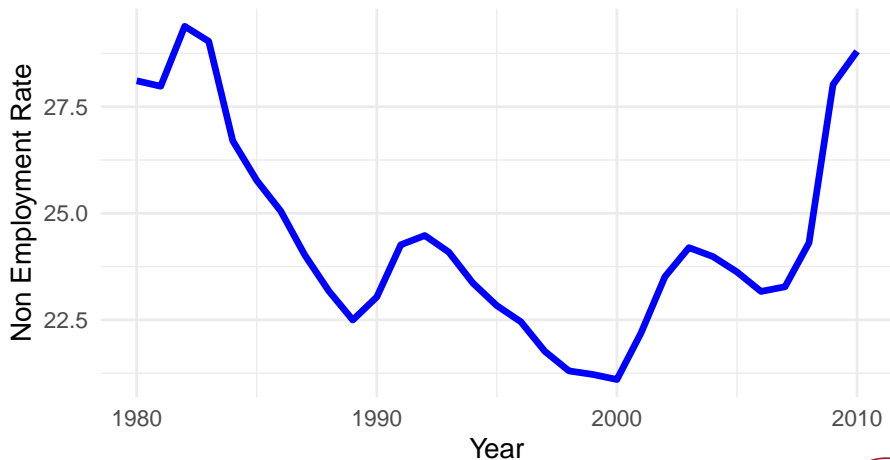
Outline

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



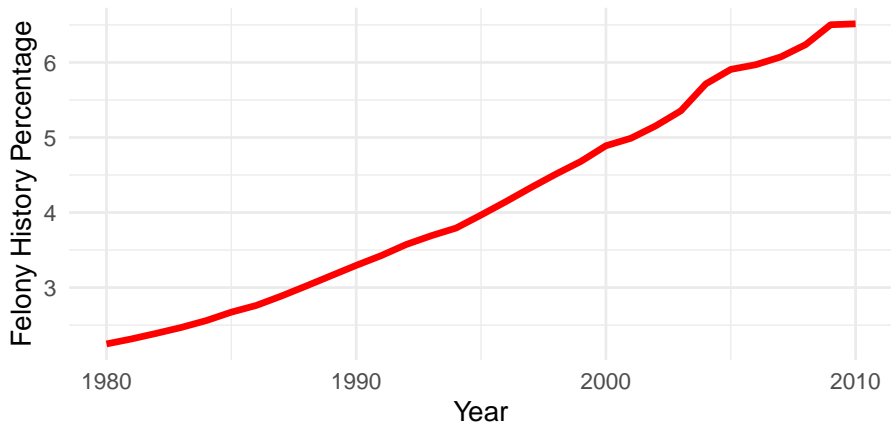
Context - Employment

US 18–54 Non Employment Rate



Context - Criminal Records

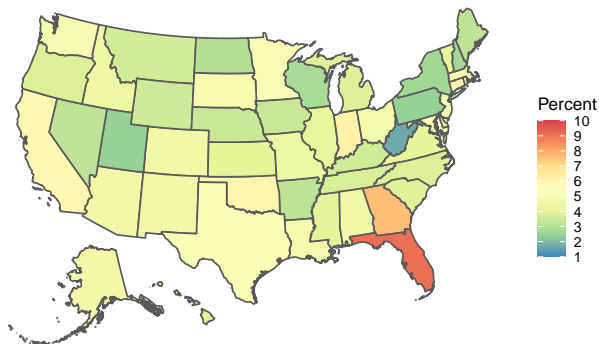
US Felony History % (Shannon et. al. 2017)



Spatial Variation

Felony History in the United States: 1988–2010

Shannon et al. 2017



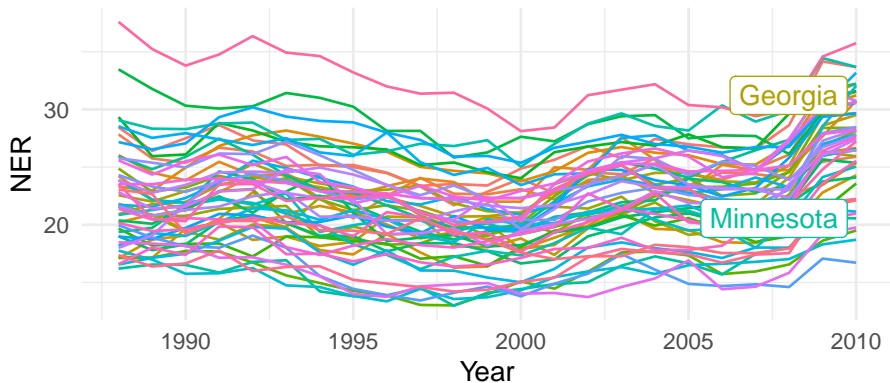
NER in the United States: 1988–2010

Current Population Survey



State variation in Non Employment

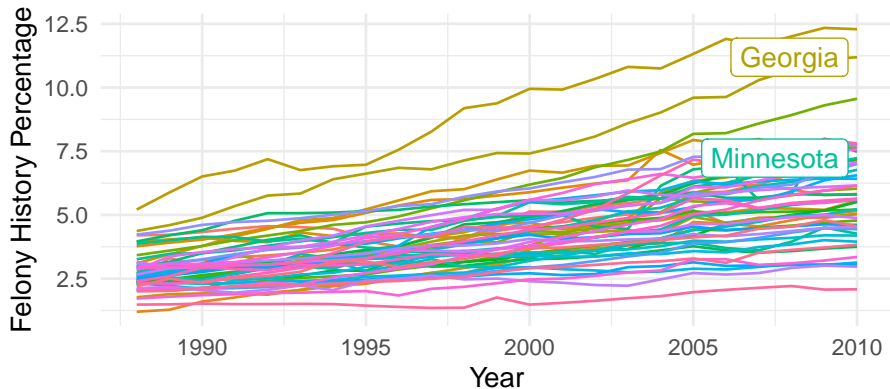
NER by State and Year
Current Population Survey



State Variation in Felony History

Estimated Felony History Pct. by State and Year

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)
- Macro Level: effects range from 0-0.13 (Looney & Turner 2018, Abraham & Kearney 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 (0.11)** |
| Disab. Rate | 0.15 (0.05)** |
| Marriage Rate | 0.01 (0.04) |
| Effective Wage | −0.05 (0.13) |
| Mean TANF Maximum | 0.00 (0.00) |
| Unemployment Comp. | −0.00 (0.00) |
| Degree Rate | −0.05 (0.04) |
| State FE | Yes |
| Year FE | Yes |

Notes:

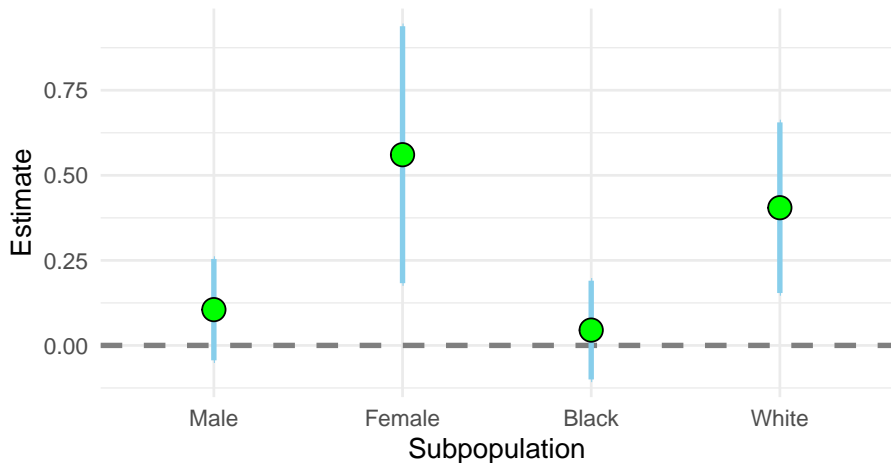
***Significant at the 0.1 percent level.

**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

