

Replication Package for "Revisiting the Unintended Consequences of Ban the Box": Anne M. Burton and David N. Wasser, JPubE-105473

Overview

The code in this replication package constructs all of the analysis in "Revisiting the Unintended Consequences of Ban the Box" (JPubE-105473). Everything is executed in Stata, with master.do calling all other scripts in order to generate all tables and figures. Throughout this replication package we use "BTB" to abbreviate "Ban the Box." The replicator should expect the code to run for about 10 hours.

Data Availability and Provenance Statements

Statement about Rights

- ☒ I certify that the author(s) of the manuscript have legitimate access to and permission to use the data used in this manuscript.
- ☐ I certify that the author(s) of the manuscript have documented permission to redistribute/publish the data contained within this replication package. Appropriate permission are documented in the [LICENSE.txt](#) file.

Summary of Availability

- ☒ All data **are** publicly available.
- ☐ Some data **cannot be made** publicly available.
- ☐ **No data can be made** publicly available.

Details on each Data Source

Data Name	Data Files	Location	Provided	Citation
Current Population Survey (CPS) 2004-2014	cbspYYYYMM.dta	/build/RawData	No	U.S. Census Bureau and U.S. Bureau of Labor Statistics (2004-2014)
American Community Survey (ACS) (2004-2014)	usa_00008.dta	/build/build_data	No	Ruggles, et al. (2004-2018)
Doleac and Hansen (2020) BTB Law Coding	BTB_data.dta, BTB_ACS.dta	/dh_replication	Yes	Doleac and Hansen (2020)
Burton and Wasser (2025) BTB Law Coding	btb_annual_laws.dta, btb_monthly_laws.dta	/build/analysis_data	Yes	Burton and Wasser (2025)

Current Population Survey (CPS) 2004-2014

The paper uses publicly available CPS basic monthly microdata covering January 2004-December 2014. Data was accessed via the National Bureau of Economic Research (NBER). <https://doi.org/10.60592/d7gd-cx91>

These data are not provided here. They must be downloaded at the link above and placed in /build/RawData.

American Community Survey (ACS) (2004-2014)

The paper uses publicly available ACS microdata covering 2004-2014. Data were accessed via IPUMS (Ruggles et al., 2004-2018). Details on the specifics of the IPUMS extract are provided in [ipums_acs_extract_info.pdf](#). <https://usa.ipums.org/usa/>

These data are not provided here. They must be downloaded at the link above and placed in /build/build_data.

Doleac and Hansen (2020) BTB Law Coding

The paper uses data shared with us by Doleac and Hansen that includes their coding of BTB laws. These same data are also posted with their replication package on the *Journal of Labor Economics* website: <https://doi.org/10.1086/705880>

These data are provided in /dh_replication.

Burton and Wasser (2025) BTB Law Coding

Our coding of BTB laws used in this study has been deposited in the [Github](#) repository. The data were collected by the authors, and are available under a Creative Commons Non-commercial license.

These data are provided in /build/analysis_data.

MSA Delineation Files and Crosswalks

In addition to the data used above, we also use the following MSA delineation files and crosswalks, all of which are provided in /build/build_data:

Name	File	Source
U.S. Office of Management and Budget February 2013 MSA Delineations	msa_delineation_file_feb2013.xls	https://www.census.gov/geographies/reference-files/time-series/demo/metro-micro/historical-delineation-files.html
U.S. Office of Management and Budget February 2013 MSA Principal Cities	msa_principal_cities_feb2013.xls	https://www.census.gov/geographies/reference-files/time-series/demo/metro-micro/historical-delineation-files.html

Name	File	Source
CPS MSA Crosswalk: Harmonize Feb. 2003 Delineations with Feb. 2013 Delineations	cps_msa_xwalk.xlsx	https://www.census.gov/geographies/reference-files/time-series/demo/metro-micro/historical-delineation-files.html

Computational requirements

Software Requirements

- The replication package contains one or more programs to install all dependencies and set up the necessary directory structure.
- Stata (code was last run with version 17 on 9/17/25)
 - reghdfe
 - ftools
 - estout
 - erepost
 - spmap
 - maptile
 - carryforward
 - ereplace
 - coefplot
 - retrodesign
 - the program `config.do` will install all dependencies locally, and should be run once.

Controlled Randomness

- ☒ Random seed is set at line 11 of `/analyze/retro_design_analysis.do`.
- ☐ No Pseudo random generator is used in the analysis described here.

Memory, Runtime, Storage Requirements

Summary

- Approximate time needed to reproduce the analyses on a standard desktop machine: 10 hours.
 - The script `/analyze/stat_difference` takes 7 hours itself but can be run separately.
- Approximate storage space needed: 50 GB

Details

The code was last run on a 4-core Intel-based laptop with Windows 10 Pro.

Description of programs/code

Programs are partitioned into build and analysis scripts. Those in /build assemble the analysis datasets and those in /analyze perform all analysis in the paper.

- /build
 - `dh_replication_btb_policy.do`: creates intermediate dta files containing the Doleac and Hansen (2020) coding of BTB laws using data from their replication archive as described above.
 - `build_btb_annual_bw.co`: creates intermediate dta files containing our coding of BTB laws at an annual frequency.
 - `build_btb_monthly_bw.co`: creates intermediate dta files containing our coding of BTB laws at a monthly frequency.
 - `build_acs_data.do`: builds ACS analysis table from IPUMS extract.
 - `build_cps_data.do`: builds ACS analysis table from NBER extracts.
- /analyze
 - `analysis_btb_acs_reproduceDH.do`: reproduces Doleac and Hansen (2020) ACS estimates.
 - `analysis_btb_acs_correctDH.do`: produces corrected ACS estimates.
 - `analysis_btb_acs_additional.do`: produces additional ACS estimates as described below.
 - `summary_stats_acs.do`: produces summary stats for ACS sample.
 - `analysis_btb_cps_reproduceDH.do`: reproduces Doleac and Hansen (2020) CPS estimates.
 - `analysis_btb_cps_correctDH.do`: produces corrected CPS estimates.
 - `analysis_btb_cps_additional.do`: produces additional CPS estimates as described below.
 - `analysis_btb_cps_annual.do`: produces estimated based on annualized CPS sample.
 - `retro_design_analysis.do`: produces estimates for retrospective design analysis.
 - `analysis_btb_cps_acs_matching.do`: produces estimates for MSAs sampled in same year in both CPS and ACS.
 - `stat_difference.do`: performs tests of equality of coefficients across specifications. All p-values are recorded in log file.
 - `cps_acs_employmentfigure.do`: produces Figure A7.
 - `county_maps_creation.do`: produces Figure A1 (map).

License for Code

The code is licensed under a MIT license. See [LICENSE.txt](#) for details.

Instructions to Replicators

- Edit `master.do` line 11 to adjust the base path
- Download the data files referenced above.
 - Place CPS files in /build/RawData.
 - Place ACS extract in /build/build_data.
- Run `master.do` to run all steps in sequence.
- If running programs individually, note that order is important.

List of tables and programs

The provided code reproduces:

- ☐ All numbers provided in text in the paper
- ☐ All tables and figures in the paper
- ☒ Selected tables and figures in the paper, as explained and justified below.

Figure/Table #	Program	Line Number	Output file	Note
Figure 1	analysis_btb_cps_correctDH.do	319, 325	figure1a.pdf, figure1b.pdf	Panel A, B
Figure 1	analysis_btb_acs_correctDH.do	85, 91	figure1c.pdf, figure1d.pdf	Panel C, D
Figure 2	retro_design_analysis.do	57, 61, 68, 105, 109, 116, 153, 157, 165	fig2a1.pdf, fig2a2.pdf, fig2a3.pdf, fig2b1.pdf, fig2b2.pdf, fig2b3.pdf, fig2c1.pdf, fig2c2.pdf, fig2c3.pdf	
Table 1	analysis_btb_cps_correctDH.do	477	table1.tex	
Table 2	analysis_btb_acs_correctDH.do	351	table2.tex	
Table 3	analysis_btb_cps_annual.do	78, 281	table3columns1245.tex, table3columns36.tex	
Appendix Figure 1	county_maps_creation.do	56	figureA1.pdf	
Appendix Figure 2	analysis_btb_cps_correctDH.do	366, 380, 394	figureA2a.pdf, figureA2b.pdf, figureA2c.pdf	
Appendix Figure 3	analysis_btb_acs_correctDH.do	133, 147, 161	figureA3a.pdf, figureA3b.pdf, figureA3c.pdf	
Appendix Figure 4	analysis_btb_acs_correctDH.do	178, 192, 207	figureA4a.pdf, figureA4b.pdf, figureA4c.pdf	
Appendix Figure 5	analysis_btb_acs_correctDH.do	227, 241, 255	figureA5a.pdf, figureA5b.pdf, figureA5c.pdf	
Appendix Figure 6	analysis_btb_cps_acs_matching.do	178, 192, 206	figureA6a.pdf, figureA6b.pdf, figureA6c.pdf	
Appendix Figure 7	cps_acs_employmentfigure.do	132, 140, 148, 156, 164	figureA7a.pdf, figureA7b.pdf, figureA7c.pdf, figureA7d.pdf, figureA7e.pdf	
Appendix Table 1	summary_stats_acs.do	42	tableA1.tex	

Figure/Table #	Program	Line Number	Output file	Note
Appendix Table 2	analysis_btb_cps_reproduceDH.do	155	tableA2.tex	
Appendix Table 3	analysis_btb_acs_reproduceDH.do	134	tableA3.tex	
Appendix Table 4	See note below		burton_wasser_btb_tableA4.csv	
Appendix Table 5	analysis_btb_cps_additional.do	69	tableA5.tex	
Appendix Table 6	analysis_btb_acs_additional.do	96	tableA6.tex	
Appendix Table 7	analysis_btb_cps_additional.do	110	tableA7columns12.tex	Columns 1, 2
Appendix Table 7	analysis_btb_acs_additional.do	151	tableA7columns345.tex	Columns 3, 4, 5
Appendix Table 8	analysis_btb_cps_acs_matching.do	140	tableA8.tex	

- Note: Appendix Table A4 was constructed using Table 1 of Doleac and Hansen (2020), Avery and Lu (2020), local government websites, law firm websites, and news articles. We provide a csv file (burton_wasser_btb_tableA4.csv) with its contents in /build/analysis_data.
- There are many tests of equality of coefficients across specifications. All of these are performed in /analyze/stat_difference.do and the p-values are in the log file.

References

Avery, Beth and Han Lu (2020), "Ban the Box – Fair Chance State and Local Guide." *National Employment Law Project*.

Burton, Anne M. and David N. Wasser (2025), "Revisiting the Unintended Consequences of Ban the Box." *Journal of Public Economics*. Forthcoming.

Doleac, Jennifer L. and Benjamin Hansen (2020), "The Unintended Consequences of "Ban the Box": Statistical Discrimination and Employment Outcomes When Criminal Histories Are Hidden." *Journal of Labor Economics*, 38, 321–374. <https://doi.org/10.1086/705880>

Ruggles, Steven and Sarah Flood, Matthew Sobek, Daniel Backman, Grace Cooper, Julia A. Rivera Drew, Stephanie Richards, Renae Rodgers, Jonathan Schroeder, and Kari C.W. Williams. 2004-2018. "IPUMS USA: Version 16.0 American Community Survey." Minneapolis, MN: IPUMS, 2025. <https://doi.org/10.18128/D010.V16.0>

U.S. Census Bureau and U.S. Bureau of Labor Statistics. (2004-2014). Current Population Survey (CPS) Basic Monthly Data. Distributed by National Bureau of Economic Research. <https://doi.org/10.60592/d7gd-cx91>.
