1 Introduction

Buchmueller, DiNardo and Valletta (2011) recommends using Fisher-like permutation tests for when there is only one treatment unit. This file explains the do file, data and data structure needed to implement these tests.

2 Texas experiment

Texas expanded its operational capacity in prisons starting in 1993. For three years – 1993, 1994, 1995 – operational capacity expanded 35% per year causing its overall operational capacity to approximately double in three years. This expansion is described in more detail in Cornwell and Cunningham (2016) and Perkinson (2010). We use the 1993-1995 expansion as a natural experiment to examine the effect of prison expansion on incarceration rates.

3 Files

There are two files you will need to download: `permute.do` and `txdd.dta`.[1] Briefly, `permute.do` is a STATA do-file which estimates three differences-in-differences models per outcome. It then implements the Buchmueller, DiNardo and Valletta (2011) Fisher permutations, creates LaTeXstyle tables using `estout`.[2] The program will also create histograms of the distribution of all point estimates, including the DD estimate for the treatment unit.

4 Variables

There are 16 variables in `texas.dta`. They are listed below.

---

[1] I have also included a STATA 13 version entitled `txdd13.dta`

[2] You will need to install `estout` before running this do file.

Table 1 Variable names

variable name	type	format
statefip	float	%9.0g
year	float	%8.0g
bmprison	double	%10.0g
wmprison	double	%10.0g
bmpop	long	%12.0g
wmpop	long	%12.0g
alcohol	float	%9.0g
income	long	%12.0g
ur	float	%9.0g
poverty	float	%9.0g
black	float	%9.0g
perc1519	float	%9.0g
aidscapita	float	%9.0g
state	str20	%20s
bmprate	float	%9.0g
wmprate	float	%9.0g

5 Program directory

The do-file makes extensive use of sub-directories. Create a main directory with two subdirectories: /Do and /Data. Place `permute.do` in the /Do subdirectory and `txdd.dta` in the /Data subdirectory. Create a /Figures/Inference, /Tables and /Inference/dd as well off the main directory. Create a figures directory off the main subdirectory entitled /Figures. All figures will be saved to this subdirectory. To summarize your directory structure should be as follows:

- Do

- Data

- Inference

    - dd

- Figures

    - inference

- Tables

Please contact with me errors or questions at the following address. And if you find ways to improve on this do-file, please share it with me as well.

Scott Cunningham

Associate Professor

Department of Economics

Baylor University

Waco, TX 76798-8003

http://www.scunning.com

scunning@gmail.com

References

Buchmueller, Thomas C., John DiNardo and Robert G. Valletta. 2011. "The Effect of an Employer Health Insurance Mandate on Health Insurance Coverage and the Demand for Labor: Evidence from Hawaii." *American Economic Journal: Economic Policy* 3(4):25–51.

Cornwell, Christopher and Scott Cunningham. 2016. "Mass Incarcration's Effect on Risky Sex." Unpublished Manuscript.

Perkinson, Robert. 2010. *Texas Tough: The Rise of America's Prison Empire.* First ed. Picador.