

Data and Programs for “Quantile and Probability Curves Without Crossing”

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This supplement to the paper “Quantile and Probability Curves Without Crossing” provides added details related to the data and the programs used in the numerical examples. The data come from the Current Population Survey as in Abadie (2002). The programs include the R code (R Development Team, 2007) used to construct Figures 3–5, and Table 1.

1 Data

The Stata data file *vietnam.dta* contains the data used in the analysis. These data consist of a sample of white men, born in 1950–1953, from the March Current Population Surveys of 1979 and 1981–1985. The data include annual labor earnings, the Vietnam veteran status and an indicator on the Vietnam era lottery. There are 11,637 men in the sample, with 2,461 Vietnam veterans and 3,234 eligible for U.S. military service according to the draft lottery. The data set contains the following variables

awage : annual labor real earnings,
wwage : weekly real wage,
veteran : veteran status indicator with value 1 for veterans,
draft : Vietnam draft lottery eligibility indicator with value 1 for eligible men.

We use *awage* as the earnings variable in all the computations. Abadie (2002) gives additional information on the data and the construction of these variables.

2 R Command Files

We use three R command files for the numerical examples. The first file, *vietnam-point-estimates*, includes the commands to generate Figures 3 and 4. The second file, *vietnam-uniform-bands*, includes the commands to generate Figure 5. The third file, *vietnam-monte-carlo*, includes the commands to generate Table 1.

For replication purposes, note that all the command files assume that the data set *vietnam.dta* is located in a folder with path `z:\quantile_curves\IVQR\data`. Some of the programs produce graphic files located in a folder with path `z:\quantile_curves\IVQR\results`. These folders should be created before running the command files. Alternatively, the folder paths can be changed in the programs.

References

- [1] Abadie, A. (2002): “Bootstrap tests for distributional treatment effects in instrumental variable models,” *Journal of the American Statistical Association* 457, pp. 284–292.
- [2] R Development Core Team (2007): *R: A language and environment for statistical computing*. R Foundation for Statistical Computing, Vienna, Austria. ISBN 3-900051-07-0, URL <http://www.R-project.org>.