

Authors: Kenneth A. Couch and Tao Chen
University of Connecticut
Department of Economics
341 Mansfield Rd. U-1063
Storrs, CT 06269

Email: Kenneth.Couch@UConn.edu

Title:

Model Specification Tests and the Estimation of Treatment Effects: An Application with Random and Non-Random Administrative Records

Abstract:

Individual level records from a randomized experiment of time limited welfare benefits carried out in Connecticut prior to the passage of PRWORA are used in conjunction with other administrative records to evaluate the ability of statistical methods to recover estimates of program impact obtained from an experiment. Within the analysis, the original administrative records from the experiment are linked to wage records that allow post-randomization impacts to be observed for 13 years. As in the original evaluation, no average long-term impacts are observed on earnings for program participants. However, among some sub-groups for whom significant earnings impacts were observed in the original experiment, which covered 4 post-randomization years of information, those positive results are also maintained when additional years of wage information are attached to the data.

For this study, a set of administrative records covering individuals not included in the experimental study but who were active clients at the time of the randomized trial are available for constructing non-random comparison groups. Those non-random comparison groups are used in conjunction with data on those who were randomized treatments in the original experiment to obtain quasi-experimental estimates of the impact of the program. Model specification tests are used to reject estimates for which underlying assumptions of the methods are not satisfied. We find that we are able to closely replicate the results of the original experiment.

Although there is a public use version of the data used in this paper, our analysis is based on the original administrative records from the experiment along with an enhanced set of information on other clients. This is the first paper from this new source of information. Access to experimental data of this type is still relatively rare. An important aspect of our analysis is that it is entirely based on administrative records rather than from a combination of administrative and survey information.

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