

QTM220: Regression Analysis

Project Report

Due on 12/4 with paper copy in class and e-copy to the course website

Read Washington (2008, esp., 311-321). Download the data `dat` from the course website. `readme` describes the included variables. (The NOW score is indicated by “nowtot”). Replicate selected analyses as requested below and write a report of about 2,500 words. In writing the report, please follow the below instructions.

- Double space, one inch margins, and 12 font-size.
- Summarize the selected sections succinctly using your own words. Try to be critical by raising possible additional counter-arguments.
- Structure.
 1. Introduction. Introduce the research question and theories.
 2. Data and Methods. Read part 1.A, discuss measurement error issues in data and how the authors defend the use of particular datasets. Read part 1.B-C, interpret equations (1) and (2).
 3. Results. Replicate Table 2 and Table 3 (First two rows only) and interpret the coefficients on number of daughters.
 4. Extensions. Based on equation (2), fit the following models (using AAUW) and interpret the coefficients on the focal independent variable. (1) Controlling for whether the first child is a girl. (2) Use whether ever having a female child instead of number of female children. (3) Use proportion of female children instead of number of female children. (4) Add an interaction term between “girls” and female representatives. (5) Add an interaction term between “girls” and political parties. Explain the rationals for fitting each model and interpret the results.
 5. Summary. Why child gender can be thought of as random or not random? What are possible sources of omitted variable bias? What other possible models/data that will allow you to draw a stronger causal inference regarding the effect of having female children?
- Attach your R code in the appendix. Each group (2 to 4 students) needs to submit only one report.

Reference

Ebonya L. Washington. 2008. “Female Socialization: How Daughters Affect Their Legislator Fathers’ Voting on Womens Issues.” *American Economic Review* 98:1, 311-332.