

Assignment (Rust): Dynamic Discrete-Choice Single-Agent Models.

Due by the beginning of class on the first day of the Spring semester. Please send me an e-mail with your assignment at miravete@eco.utexas.edu. This is an individual assignment. Please provide your own code and results.

Please write your assignment as a section of a paper being submitted for publication.

You should use the two-step approach of Hotz-Miller to estimate the model considered by Rust's bus engine paper. The data and documentation can be found at <https://editorialexpress.com/jrust/nfxp.html>.

You should fix the discount factor to a standard value, such as 0.97.

Do the estimates change if you allow for a quadratic specification in costs?

Compare your estimates to those produced by Rust.

Once you are done with all this, use Aguirregabiria-Mira's approach rather than Hotz-Miller. Check Victor's website http://individual.utoronto.ca/vaguirre/wpapers/program_code_survey_joe_2008.html for code. Comment on result differences, time to compute the model *et cetera*.