Ex Ante Policy Evaluation: Simulation Results

Introduction

This notebook contains code and model output for a simulation model of U.S. insurance markets.

Baseline Data

Here, we want to define and estimate ex ante occupancy vectors and transition matrices.

State Value Attributes

We want to define a set of state values (e.g., gross cost of Medicaid, cost of uncompensated care, etc.) that will help determine various model outputs.

Modeling Policy Changes

This section will provide well-identified evidence on key parameters for modeling coverage take-up decisions under futher Medicaid expansion, or based on private subsidies for health insurance.

Medicaid Expansions

This section will draw on difference-in-difference evidence on coverage take-up probabilities as a function of state expansion status and state "dose."

group	treated	control	Employer - Own Policy	Employer - Dependent	Private - Non-Employer
Employer - Own Policy	0.354	0.341	-0.0182	0.0315	0.0011
NA	NA	NA	(p= 0.34)	(p= 0.07)	(p= 0.92)
Employer - Dependent	0.227	0.217	-0.0101	0.0241	-0.0162
NA	NA	NA	(p= 0.62)	(p= 0.31)	(p= 0.11)
Private - Non-Employer	0.053	0.053	-0.0232	-0.0865	0.0128
NA	NA	NA	(p= 0.65)	(p= 0.09)	(p= 0.88)
Public	0.150	0.130	0.0138	-0.0313	-0.0032
NA	NA	NA	(p= 0.37)	(p< 0.01)	(p= 0.85)
Uninsured	0.217	0.260	-0.0346	0.0065	-0.0218
NA	NA	NA	(p= 0.06)	(p= 0.77)	(p= 0.38)

Private Insurance Subsidies

This section will draw on coverage take-up probability estimates derived from the regression-discontinuity estimates in Finkelstein, Hendren and Shepard (2018).

Results

We will next output model results in terms of various welfare-relevant outputs

- Coverage
- Government costs

Comparative Welfare Analysis

We next turn to comparative welfare analysis based on the marginal value of public funds. Need to separately estimate both the benefits and costs of Medicaid expansions and private insurance subsidies.

Uncertainty and the Value of Information

We'll now turn to probablistic sensitivity anlayses and VOI analyses based on the MVPF measures.

PSA

- Can provide some scatterplots of coverage vs. mechanical costs, and costs/benefits with hypothetical λ lines thrown in.

VOI

- Show VOI of model parameters based on a fn of λ.