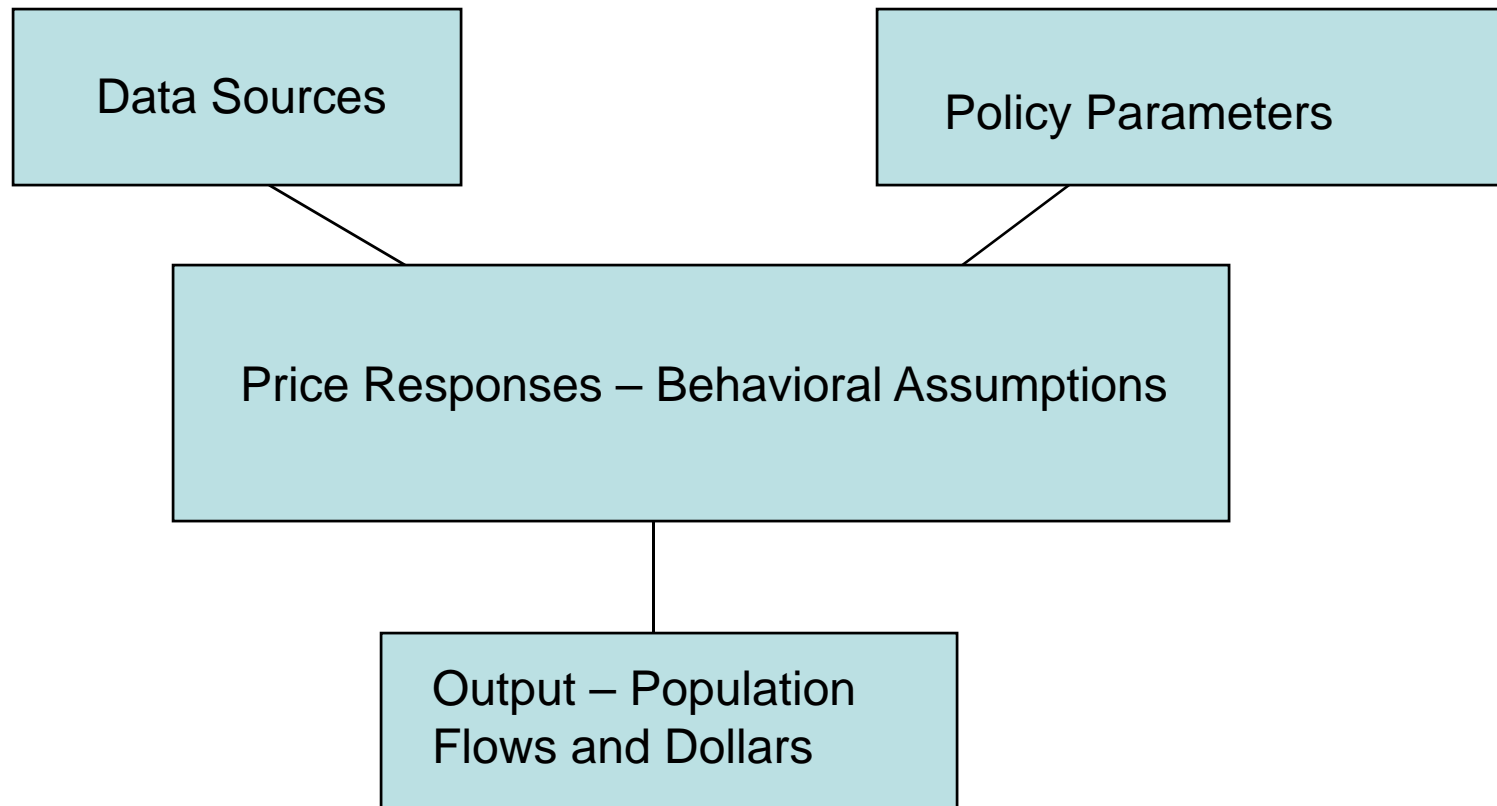


The Gruber MicroSimulation Model (GMSIM)

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Schematic of the Model



Data

- Current Population Survey
 - March, 2005 matched to February, 2005
 - Recalibrated to latest CPS (March, 2008)
- Data on employer premiums from MEPS-IC – nongroup premiums based on underlying health costs
- Tax rates imputed on using current tax law from TAXSIM
- Projected to \$2009

Computing Behavioral Impacts

- Core of model translates what we know about firms and individuals into policy responses
- Convert the proposal into a series of changes in prices in the insurance market
 - e.g. a \$1000 credit towards a \$10,000 policy is a price subsidy of 10%
- Draw on best available evidence to model how individuals and firms respond to those price changes

Example: Tax Subsidies to Non-Group Insurance

- To what extent will those with non-group insurance take up new entitlement?
- To what extent will uninsured buy subsidized insurance?
- To what extent will those with employer insurance move to subsidized non-group?
- To what extent will employers react by dropping insurance or raising employee contributions?

Fully Integrated Policy Analysis

- By converting policy changes to price changes, I am able to consider multiple policy changes in an integrated fashion
- Consider impact on all individuals and firms in the state
- No need to artificially “stack” policies and consider one before another – compute net effect of all policies on prices and model outcomes
- No “knife-edge” modeling where must draw arbitrary distinctions about whether changes are “large enough” to matter

Key: Modeling Firm Behavior

- Model relies on survey data on individuals
- Create “synthetic firms” which simulate the distribution of co-workers for a given individual
- Then evaluate impact of policies on average across all workers in a firm
- Base employer responses on that average

Important Caveats

- Garbage in, Garbage Out
 - Need to use best available evidence on behavioral responses
 - Where no direct evidence is available, tie as much as possible to related evidence
- Precision varies with magnitude of change
 - Should we use existing elasticities for out of the box changes (e.g. removing the tax exclusion?)
- Key: transparent modeling & process
 - Consider sensitivity as much as possible
 - Make key assumptions transparent