The Stimulus Check Planning Problem

The planner chooses the amount of stimulus checks for each group, where groups are defined by marital status, number of children, income, and age in 2019.

2019 Information Planning Problem

Given the expected outcomes we computed conditional on 2019 information, we can solve the planning problem. We have a number of different planning problems that we solve given different individual level constraints and what the planner can condition allocations on.

For FEASIBLE allocation, there are **970=5*2*97** types/cells of households:

- 5 children groups
- 2 spousal groups
- 97 income bins: the allocation planner sees approximately $2500 income bins between $0 and $238,800, and 1 bin after $238,800. There are 97 bins

for OPTIMAL G4 (4 age groups 18 to 64) allocation, there are **3880=5*2*97*4** types/cells of households:

- 5 children groups
- 2 spousal groups
- 4 age groups
- 97 income bins

for OPTIMAL G47 (47 age groups) allocation, there are **45590=5*2*97*47** types/cells of households:

- 5 children groups
- 2 spousal groups
- 47 age groups
- 97 income bins

Optimal G4 has a + 1 version where we allocate for a fifth age group of individuals older than 64 years of age. Optimal G47 has a + 35 version where optimal allocation for all age groups are determined.

Allocation Functions

Functions in the AllocateR/alloc_discrete_fun_R folder of the project repository page is responsible for feeding the dynamic programming results into the allocation functions. The functions in this folder call the ffp_snw_process_inputs function to solve the allocation problems and compute REV, and call the ffp_snw_graph_feasible function to generate allocation graphs. These two functions are a part of the PrjOptiAlloc package.