

Structural Constraint Simulation: Merit vs Variance

This paper presents a Monte Carlo agent-based simulation designed to test whether individual merit and effort can overcome structural constraints under finite resources. Agents behave rationally under scarcity. A subset of agents is assigned permanent stability to test whether aggregate outcomes materially change.

Key Results

Scenario	Evictions (%)	Food Insecure Weeks (%)
0% Stable	96.80	3.13
5% Stable	94.85	3.01
10% Stable	92.85	2.98

Results demonstrate that increasing the proportion of non-constrained agents produces only modest improvements in eviction and food insecurity outcomes. Structural parameters dominate system behavior.

Figure 1: Eviction outcomes by stability share.