Unequal Consumption and Savings in the Heterogeneous-Agent Model

Pascal Michaillat
https://pascalmichaillat.org/c2/

Household i:

Purchases of services:

$$y_i = \boxed{\sigma(x)} \left[f(x) k_i + \frac{\mu_i}{P} \right]$$

Marginal propensity to spend (MPS)

where $\quad \sigma(x) = \dfrac{x^{\varepsilon} \left[1 + \tau(x)\right]^{1-\varepsilon}}{1 + x^{\varepsilon} \left[1 + \tau(x)\right]^{1-\varepsilon}}$, $\quad \underline{\sigma(x) \in (0,1)}$

Real wealth holdings (savings)

Marginal propensity to save

$$\frac{M_i}{P} = \boxed{\left[1 - \sigma(x)\right]} \left[f(x) k_i + \frac{\mu_i}{P} \right]$$

$\left(\in (0,1) \right.$

Consumption: $\quad c_i = y_i / \left[1 + \tau(x)\right]$

Visits: $\quad v_i = y_i / q(x)$

Household i with more initial wealth (μ_i)

- More consumption (c_i)
- More purchases / expenditure $\overset{\text{of services}}{}$ (y_i)
- More visits (v_i)
- More final real wealth / savings (M_i/P)

Same results for household i with higher income (k_i)