Slack-Dependent Marginal Propensity to Spend

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Marginal propensity to spend

Household i:

Purchases of services:

$$y_i = \sigma(x)\left[f(x)k_i + \frac{w_i}{p}\right]$$

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

Marginal propensity to save

Real wealth holdings (savings)

$$\frac{m_i}{p} = \underbrace{\left[1-\sigma(x)\right]}_{\in(0,1)}\left[f(x)k_i + \frac{w_i}{p}\right]$$

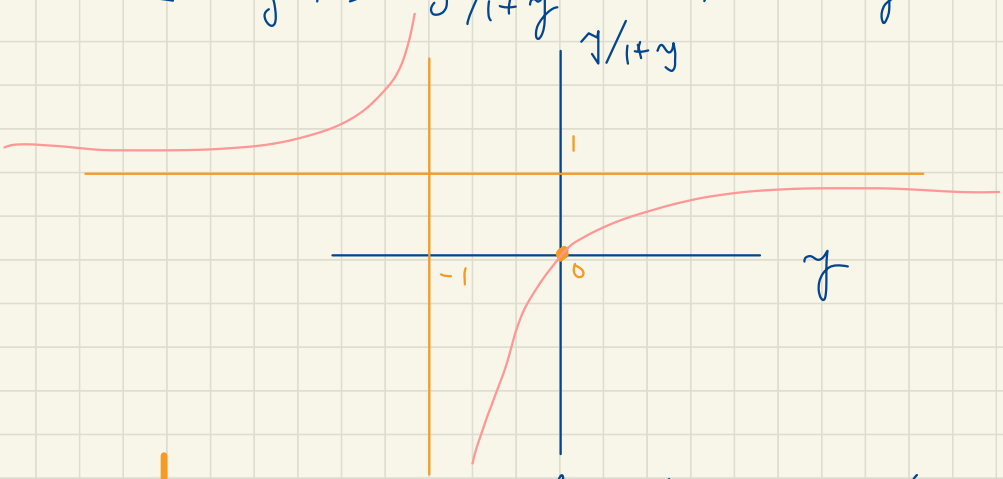
Consumption: $c_i = y_i / \left[1+\tau(x)\right]$

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

How do the marginal propensity to spend and save vary with scale / with the state of the economy?

What happens if tightness (x) is higher:

- Income ($f(x)$ ki) is higher
- What happens to $\sigma(x)$?
  - $\tau(x)$ is ↗ in x
  - $[1+\tau(x)]^{1-\varepsilon}$ is ↘ in x ($\varepsilon > 1$)
  - $y \mapsto y/(1+y)$ is ↗ in y



- $\sigma(x)$ is therefore ↘ in $x \in (0, x^m)$
- $\sigma(0) > 0$
- $\sigma(x^m) = 0$

- Share of income + initial wealth spent on services is lower ($\sigma(x)$)
- Share of income + initial wealth saved / stored as real wealth is higher ($1-\sigma(x)$)
- Share of purchases devoted to consumption is lower ($(1-\tau(x))$)
- Share of purchases devoted to matching is higher ($\tau(x)$)

- Marginal propensity to spend is lower in tighter economy → buying is more complicated, visits are less likely to be successful, larger share of spending devoted to matching
- Marginal propensity to save is higher in tighter economy

- $c = \frac{y}{1+\tau(x)} \approx [1-\tau(x)]\, y$

$\left(\frac{1}{1+x} \approx 1-x \text{ when } x \sim 0 \right)$

$\tau(x) \approx$ share of spending devoted to matching

→ Share of spending devoted to matching is higher in a tighter economy.

→ Share of spending devoted to consumption is lower in a tighter economy