Discussion of Optimal Taxation in a Limited Commitment Economy

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Main focus

- Re-examines pervasiveness of Chamley-Judd
- Very explicit, detailed characterization
  - extension of Werning (2007) method to dynamic uncertainty
  - nice application of Marcet-Marimon techniques
  - may be a good paper to teach from

Summary

- Main setup feature: "externality" from HH capital accumulation
  - enforcement constraint: bounded below by U^{AUT}
  - crucial force: $\frac{\partial U^{AUT}}{\partial K}$ (via $F_{LK} > 0$)
  - $\tau_{k,ss} > 0$
- Several ways to see that is indeed the main force
  - $F_{LK} = 0$: $\tau_{k,ss} = 0$
  - lump-sum transfers, except in U^{AUT}: $\tau_{k,ss} > 0$ (in fact $\tau_{k,t}$)
- Capital externality can be interpreted as altered effective interest rates?
  - one way to think of it: Aiyagari (1995) with "endogenized incompleteness"

Pervasiveness of Chamley-Judd?

Recall two prominent environments of No-Chamley-Judd:

- OLG (Erosa, Gervais 2002, Conesa, Kitao, Krueger 2009)
- Uninsurable idiosyncratic risk (Aiyagari 1995, Davila et al 2012)

Intuitive to recall Aiyagari (1995)

- Aggregate: capital is undistorted

$$\left(1 + F_K\left(K_{ss}, L_{ss}\right) - \delta\right) \equiv R_{ss} = \frac{1}{\beta}$$

(optimal gov't expenditure $\longrightarrow$ gov't expenditure EE $\longrightarrow$ planner wants pre-tax return to capital $=$ time discounting)

- HH: market incompleteness

$$\frac{1}{\beta} > R_{ss}^{NET} \equiv \left(1 + \tau_{k,ss}\right)\left(1 + F_K\left(K_{ss}, L_{ss}\right) - \delta\right)$$

(uninsurable idiosyncratic risk $\longrightarrow$ HH wants precautionary saving $\longrightarrow$ capital over-accumuation)

- Hence $\tau_{k,ss} > 0$

Intuition: effective interest rates

- Loosely: HH faces different effective $\tilde{R}$ than planner
  - steady state: aggregates (and prices) constant, individual quantities not
  - can be corrected by lump-sum transfers
- Enforcement constraint: HH's effective $\tilde{R}$ is driven by U^{AUT}
  - looks like incompleteness, but..
  - of course can't be corrected by lump-sum transfers

From theory toward policy

- Empirically based quantitative analysis
  - much more developed in OLG
  - general understanding of magnitudes (if not exact levels)
- Transition matters?
  - indications in OLG (Krueger Ludwig 2013, Fehr Kinderman 2013)
  - choice of welfare weights crucial
- Understanding needed with uninsurable idiosyncratic risks