Discussion of

Payments, Credit and Asset Prices

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This paper

- A very meaty paper!
- Detailed micro model of liquidity in the banking system:
  - $\longrightarrow$ macro implications for inflation and asset prices
  - $\longrightarrow$ aggregate liquidity management by government

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- Detailed micro model of liquidity in the banking system:

  $\longrightarrow$ macro implications for inflation and asset prices

  $\longrightarrow$ aggregate liquidity management by government
- Each partial equilibrium problem is simple and intuitive.
  Yet, this results in rich general equilibrium interactions

Structure of the model

- Endowment economy with three endogenous macro outcomes
  — consumption, inflation, asset prices

- Three types of agents
  — households, banks, government

- Multiple assets
  — deposits, reserves, short-term debt, bank equity, stock market

- Two types of frictions in the payment system:
  1. Liquidity constraints (cash-in-advance)
     — on *both* households and banks
  2. Costly leverage (collateral "requirements")
     — on *both* banks and government

- "Neoclassical" limit (or "Friedman rule"):
  — no constraint binds, collateral costs are zero

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3. Bank cost of leverage $c(\kappa_t)$, where *collateral ratio*:

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— Government sets: i_t^R, $g_t = \Delta M_t / M_t$ and $b_t = B_t^g / M_t$

Macro Outcomes

1. Consumption:

$$C_t = \bar{Y} - \text{Cost of Leverage}_t$$

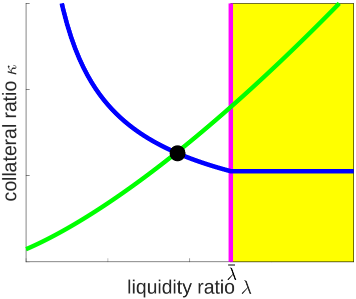
2. Price Inflation:

$$P_t = \frac{D_{t-1}}{C_t}$$

3. Asset prices

— All shaped by endogenous choices of liquidity and collateral ratios, λ_t and κ_t

Analysis



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  2. Capital structure: definition of the collateral ratio κ_t in GE

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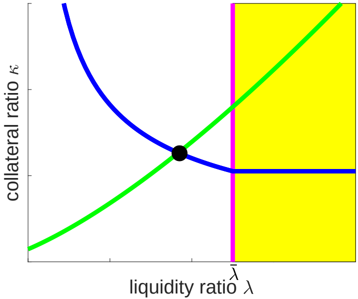

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- Continuous-time limit for tractability. What is cash-in-advance in continuous time?

$$P_t C_t \cdot \Delta \leq D_{t-1} \cdot \Delta$$

Comments 1

- Two tradeoffs for a model:

  1. detailed vs concise model of monetary transmission
     — when should we use which one?
     — is there a useful reduced form?

  2. ad hoc vs micro-founded modeling of leverage costs
     — ad hoc is fine in partial equilibrium, but is it innocuous in general equilibrium?
     — probably not prudent to carry out optimal policy analysis with ad hoc costs
     — what is the nature of $\tilde{\lambda}_t$ shock and why it cannot be minimized?

- the only welfare objective: minimize collateral costs
  — endogenous output due to sticky prices
  — endogenous output due to financial frictions

Comments 2

- the basic fact: $i_t^D < i_t$
  - is it a sign of binding liquidity constraints or market power in the banking sector?
  - would the new technologies reduce the liquidity frictions, market power, or both?

- return on bank equity is strictly above the return on stock market when liquidity constraints bind: $i_t^h > i_t^Q$

- cross sectional variation in government $c_g(\cdot)$ would shape country outcomes for liquidity and collateral ratios λ_t and κ_t, and hence the macro outcomes