Money and Banking in a New Keynesian Model

by Monika Piazzesi, Ciaran Rogers, and Martin Schneider

Discussion by Shengxing Zhang (LSE)

- The role of money in a New Keynesian model
- Emphasize the complementarity between money and credit
- Breaks dichotomy between money and credit in standard NK
  - Under the dichotomy, money and credit works independently

    Money is irrelevant when velocity is high
- Offers more tools for monetary policy
  - Interest rate and real balance of money in a floor system
  - Interest rate or real balance of money in a corridor system
- Endogenous convenience yield has a stabilizing effect

Source of complementarity between money and credit

- Floor system: money as collateral for deposit

$$D \leq I(M + \rho A)$$

- Corridor system: money provides liquidity for interbank lending
- The complementarity can be understated!

Money as collateral

- Money could complement the value of other assets

$$D \leq \underbrace{I(M+\rho A)}_{\substack{\Downarrow \\ \overline{D}(M,\gamma A) \\ \text{with } \frac{\partial^2 \overline{D}}{\partial M \partial A} > 0}}$$

- safe asset supply $\nearrow$ $\Rightarrow$ risk aversion $\searrow$

  $\Rightarrow$ risk premium $\searrow$

- safe asset supply $\nearrow$ $\Rightarrow$ bank portfolio less info sensitive

  $\Rightarrow$ asset liquidity $\nearrow$

  (Ozdenoren, Yuan, and Zhang (2020))

Money as a Latent Medium of Exchange

- Depositors' outside option is to hold money
- Money disciplines bank's market power
- Monetary policy affects the "transaction cost" of using bank credit as a medium of exchange
- Money as a medium of exchange relevant at the cashless limit

(Lagos and Zhang (2020))

minor comments

Do we need to recalibrate a standard NK model?

- Does the estimate on price adjusting frequency depend on the rigidity in money supply?
- Could the role of money be even more important under the recalibrated model?