

N. Kiyotaki and J. Moore

Liquidity, Business
Cycles and
Monetary Policy

May 2009

Discussion by Marianne A. Nessén



### Motivation

- How do aggregate production and asset prices fluctuate with shocks to productivity and liquidity?
- What can monetary policy do?
- Build a workhorse model of money and liquidity: RBC+ Limited Commitment



# Why Money?

- No intrinsic value
- Limited Commitment
- Money is more liquid than equity
- Money "lubricates" the transfers of resources from savers to investors in presence of liquidity constraints





- Each period only a randomly chosen fraction of entrepreneurs can invest.
- How do they finance their investments?
  - Raise the investment cost externally by selling at most a fraction  $\theta$  of their own equity (**Borrowing Constraint**)
  - Raise funds for the down-payment:
    - Sell at most a fraction  $\phi$  of other agents' equity (**Resaleability** Constraint)
    - Sell/use money
- Borrowing + Resaleability Constraint = Liquidity Constraint
- For low values of heta and average  $\phi$  money is essential because it's more liquid than equity



#### Main results

- Money has a low rate of return ⇒ Low risk-free rate puzzle
- RoR\_{Money} < RoR\_{Equity} < Rate of time preference ⇒ Stock market participation puzzle
- Feedback from asset markets to output:
  - Liquidity Shock ⇒ Amount of equity that can be used for down-payment ↓ ⇒ Equity price ↓ ⇒ Required down-payment per unit of new investment↑ ⇒ Investment ↓
- Government can (partly) stabilize the economy with open market operations



#### **Comments**

- Very insightful paper
- Extremely elegant, easy aggregation follows from linearity of individual policy rules, closed form solutions for the steady state
- Stock market participation puzzle: workers cannot borrow....
- Effects of news shock on stock prices with limited enforcement (Walentin (2008))



## Comments, cont'd

- Fiscal consequences of open market operations ≈ effects on aggregate demand of future taxes
- Expectations of future open market operations
- Microeconomic distortions: policy interference with informativeness of asset prices
- Compare these distortions with the welfare consequences of not intervening, study distributional issues; a fully fledged welfare analysis would be useful!



## Comments, final

- Monetary policy and liquidity an area which will be studied intensively in years to come
- One aspect the zero lower bound to policy rates may infact be > 0, due to liquidity concerns