Beliefs and Settlement Risk

- Original (static) model (KMR, 2003) showed:
  - Increase in liquidity helps reaching an equilibrium with settlement
  - In some cases net settlement would ensure settlement where RTGS (Non-DvP) could result in gridlock
    - RTGS-mechanisms could be enhanced by introducing collateral or by making incoming payments attachable
  - Ignore credit risk associated with (deferred) net settlement
    - But highlight the liquidity risks inherent in RTGS

Beliefs and Settlement Risk

- In comparison the dynamic model introduces:
  - "Beliefs" (uncertainty in banks' behavior)
    - Base beliefs on their experience
    - Trust increase likelihood of settlement
  - "Reach" (no. of outgoing/incoming links)
    - Reach reduces effect of liquidity injections in resolving gridlocks (?)
  - "Variance" in initial money holdings
    - Increase probability of settlement (given reach)
    - "Rich" banks have greater incentive to pay and the "poor" banks know that (?)

Beliefs and Settlement Risk

- What policy implications could you derive from this analysis?
  - Improvements in system design of RTGS
  - Requirements for participants
  - Other