Excessive Financial Intermediation in a Model with Endogenous Liquidity

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Discussion:

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Objective

- Construct a model in which
  - financial frictions can be relaxed at a cost
  - this cost is interpreted as resources spent on financial intermediation
  - financial intermediation can be excessive
  - this results in optimal financial regulation

Sketch of model: setup

- Two periods
  - $t = 0$: endowment, asset trade, investment
  - $t = 1$: production, repayment, consumption
- Two types of agents, mass 1 of each
  - producers: endowment k and productivity A
  - capital suppliers: endowment k and productivity 0
- Producers
  - borrow from capital suppliers at $t = 0$
  - can pledge at most $l < A \cdot k$ units of $t = 1$ production

Sketch of model: equilibrium

- Capital suppliers supply k inelastically
- Producers demand capital
  - for $R = A$, demand up to $l\,/A$ units
  - for $R < A$, demand $l\,/R$ units (constraint binds)
- In equilibrium

$$R = l\,/k \quad \text{and} \quad C = A \cdot 2 \cdot k$$

- Financial frictions lead to low interest rates but do not affect total consumption

Sketch of model: financial intermediation

- Producers can now increase their borrowing beyond $l\,/R$
  - for every additional unit, spend δ units of capital

- Capital suppliers still supply k inelastically

- Producers demand capital
  - for $R = A$, demand up to $l\,/A$ units
  - for $R \in [(1-\delta)\cdot A, A]$, demand $l\,/R$ units (constraint binds)
  - for $R = (1-\delta)\cdot A$, demand any amount above $l\,/((1-\delta)\cdot A)$

- In equilibrium

$$R = (1-\delta)\cdot A \quad \text{and} \quad C < A \cdot 2 \cdot k$$

- Financial intermediation leads to higher interest rates but lowers output

Intuition

- Financial intermediation leads to inefficient rent dissipation
- As author emphasizes, this result depends crucially on the elasticity of supply of funds
- Consider a small open economy that faces $R^* \in ((1-\delta) \cdot A, A)$
  - financial intermediation leads to large capital inflows and much higher consumption
- Related to literature on financial development and capital flows
  - Gertler, Rogoff (1990), Matsuyama (2004), Caballero, Farhi, Gourinchas (2008), Broner, Ventura (2010), Martin, Taddei (2012)

The richer model

- Introduce dynamics, producer heterogeneity, and money
- Author explores effects of financial intermediation on *liquidity*, *nominal prices*, *financial crises*
- But the connection between the model and these concepts seems unclear
  - the author interprets R as the relative price of inputs instead of the interest rate
  - a financial crisis is a reduction in financial intermediation, taking R as fixed due to some *nominal rigidities*
  - financial intermediation only takes place within a single period (no intertemporal markets)
  - money transfers resources between periods
  - not clear how intratemporal intermediation interacts with money
- Overall, a very interesting exercise, but the connections between concepts in the model and concepts in reality need to be sharpened