

Interbank Market Liquidity and Central Bank Intervention

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Discussion by

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February 19, 2009

Comments

- Main results
- Mechanism of the model
- Comment 1: Notion of **market freezes**?
 - Market freeze here is lack of trade when all banks have excess liquidity.
- Comment 2: **Central bank policy or fiscal policy**?
 - Central bank liquidity tools include lump sum taxes and rebates.
- Comment 3: Complete markets and their **absence**?
 - What explains the absence of opportunities to hedge liquidity shocks?
- Additional comments

Question and Model

- **Question**

- Role of central bank intervention in interbank markets

- **Model**

- Quite standard Diamond/Dybvig (1983) model of liquidity demand
- Short asset (return 1) and long asset (return $R > 1$); no liquidation
- Aggregate and idiosyncratic liquidity demand shocks (high or low)
- Assume deposits not state contingent and no default.

Main results

- **Findings**

- With incomplete liquidity hedging markets, price of long asset varies across states $P_0 = R > 1 > P_1$.
- **Central bank intervention** can stabilize price of long asset at $P = 1$ and attains **constrained efficient** allocation.
 - Constrained efficient allocation involves “**market freezes**” where banks don’t trade liquidity.
- Complete markets also attain constrained efficient allocation.

- **Focus of model is on liquidity**

- ... not solvency
- ... no role for bank capital
- ... no issues of default and enforcement

Mechanism of the Model

- When banks cannot hedge and the central bank does not intervene
 - ... banks carry enough liquidity to meet high liquidity demand (by assumption)
 - ... but banks have excess liquidity when demand is low implying ...

$$P_0 = R$$

that is, banks bid up the price of the long asset.

- To implement constrained efficient allocation,
 - ... central bank needs to **drain excess liquidity** when demand is low (by selling long asset “short”).
- Even in absence of aggregate risk, to keep $P = 1$ central banks needs to
 - ... collect lump-sum tax/rebate at date 0 and buy/sell short asset
 - ... buy/sell long asset for liquidity at date 1
 - ... grant lump-sum rebate/tax to late consumers at date 2

Comment 1: Notion of Market Freezes?

- **Market freeze** in the model
 - If aggregate uncertainty is sufficiently high, banks keep lots of liquidity.
 - When the realized aggregate liquidity demand is low, each bank can meet its own liquidity demand.
 - All the central bank does is drain excess liquidity.
 - No reallocation of liquidity in the interbank market is necessary.
- Market freezes are **constrained efficient**
 - ... not a market failure that requires intervention.
- Is this the **right notion** of a market freeze?
 - ... market freeze when there is excess liquidity
 - ... banks all have sufficient liquidity and hence don't trade

Or maybe this is the key policy implication: drain liquidity when market freezes.

Comment 2: Central Bank Policy or Fiscal Policy?

- Central bank **liquidity tools** (somewhat) **unconventional**
 - More than “open market operations”
 - Lump sum taxes/rebates
 - Time 2 taxes/rebates type contingent (only levied on late consumers)
 - Issuance of long term debt
- **Central bank vs. government (treasury)**
 - Optimal policy includes fiscal policy
 - This may be an important implication of the paper
 - Government has considerable enforcement power
- Alternative implementations of central bank policy? Or **unique?**
 - Tax (or rebate) at time 0 and purchase (or sale) of long asset?

Comment 3: Complete Markets and Their Absence?

- Analysis with complete markets
 - Markets in time 0 Arrow claims or dynamic trading of 1-period Arrow claims
 - ... implement constrained efficient allocation
 - Highlights key assumption
 - **Lack of opportunities to hedge liquidity needs**
- **Explanation** of absence of
 - “... involve a large number of securities being issued and traded. In practice, the **costs of issuance** and of the infrastructure for trading securities ... are likely prohibitive.”
 - “This is why the role of the central bank in implementing the constrained efficient allocation is so important.”

Comment 3: Complete Markets and Their Absence? (Cont'd)

- What about the **costs of policy intervention**?
 - Information costs
 - Effect on incentives ('moral hazard')
 - Time-consistency of government policy or political economy considerations
- Or do banks **choose not to hedge**?
 - Opportunity cost of hedging since conserving net worth is costly (Rampini and Viswanathan 2008)

Additional Comments

- Comment 4: What is **price of long asset with complete markets** at time 1?
 - Is it $P_\theta = 1$ as with government intervention?
- Comment 5: Alternative implementation of complete markets?
 - Would forward contracts on liquidity, i.e., **long-short swaps** work?
- Comment 6: Why **deposit contracts**?
 - Full insurance of consumers with liquidity needs violates risk sharing consideration!
 - Are we fostering an addiction to liquidity?

Conclusion

- Interesting paper on the **role of central bank intervention** in
 - ... providing and draining liquidity.

Paper displays authors' mastery of this type of liquidity demand model.

- Paper predicts
 - ... **unconventional central bank liquidity tools**
 - ... occasional lack of inter bank trade (“**market freezes?**”)
- Open issues:
 - Relative cost of central bank intervention vs. liquidity hedging markets
 - How much risk free liquidity can and/or should society provide?