Berlin Comments on "Central Bank Haircut Policy"

Disclaimer: All opinions are those of the author and are not necessarily those of the Federal Reserve Bank of Philadelphia or the Federal Reserve System



FEDERAL RESERVE BANK OF PHILADELPHIA

Object of the paper:

- Optimal haircut policy for a CB in a GE environment (Lagos/Wright, Berentsen/Monnet)
- This has recently become a particularly important issue, e.g.,
 - The Fed has expanded the range of facilities and the types of collateral accepted.
 - The ECB has been concerned about the costs of accepting too wide a range of acceptable collateral.
 - Not merely a technical issue

The key features of the model:

- Banks don't know whether they will be buyers or sellers of goods, but they receive a noisy signal.
- Banks make initial portfolio decision: illiquid assets v. money
- Illiquid assets have uncertain returns
- No aggregate credit risk or liquidity risk.
- Banks can take out collateralized loans from the CB.
- The loans don't pay interest and the CB imposes a uniform haircut.
- Banks default when their asset value is lower than the loan amount.



Main insights of the model

- Lower haircuts increase consumption by agents who bring illiquid assets to the goods market
- Lower haircuts lower consumption for agents who bring liquid assets (by reducing the return to holding liquid assets)
- The optimal haircut is lower if the CB is unable to exclude buyers from the lending facility.



Be clearer about what is the model intended to capture

- Not a model of optimal policy with a probability of crisis conditions, e.g. no aggregate uncertainty about payoffs, no aggregate liquidity shocks
- How well does the portfolio choice/strategic default decision capture the issues for steady state policy?
 - Strategic default is implausible. The important tradeoff is the haircut's effect on banks' initial portfolio choice; doesn't depend on strategic default
 - Simpler (and more plausible) to impose an exogenous probability of default, independent of the value of the collateral posted.
 - The basic tradeoff doesn't depend on the relationship between default behavior and the value of the collateral. General equilibrium effects that depend on this in tradeoff are suspect. (What if there were no default?)
- Can the size of the haircut be thought of as the size of menu of eligible assets?

Provide more empirical interpretation

- The model identifies the tradeoff between the gains to illiquid asset holders and losses for liquid asset holders
- Depend on the relatives sizes of these groups, e.g.,
 - Predictability of liquidity shocks. What does this mean? How would we measure it? Is it related to the industrial organization of the banking industry, e.g. more concentrated, more predictable? Is it related to the reserve policy of the central bank, i.e., interest on reserves, more predictable, less likely to be illiquid
- The volatility of asset prices
 - Would this be measured by the breadth of eligible assets, e.g. haircut should be high in ECB, low in the U.S. (pre-crisis)? Or do the authors intend this literally.



Thinking about optimal contracts

- The goal is to characterize optimal haircut policy taking the broad institutional framework of the Canadian LVPS as given.
- Can we do better given the stated informational assumptions and contracting frictions?
 - Payments contingent on investment returns would relax the feasibility constraints associated with liquidity injected into the system when defaulted assets are sold, e.g., nondefaulting banks could make higher payments to the CB.
 - Making borrowing policy contingent on measures of banks' (il)liquidity) would yield a better outcome, e.g., we might charge banks with more illiquid balance sheets a higher borrowing rate in the interbank market.
 - Might we limit buyers' access to liquidity facility, e.g., the bank's balance sheet would be informative about its signal information about its probability of being a buyer.