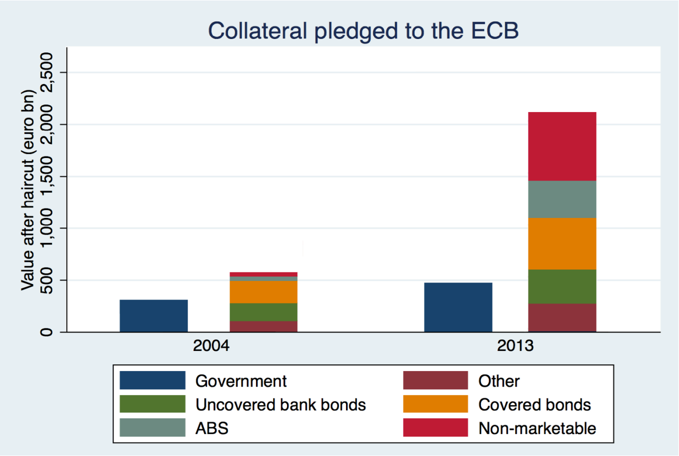
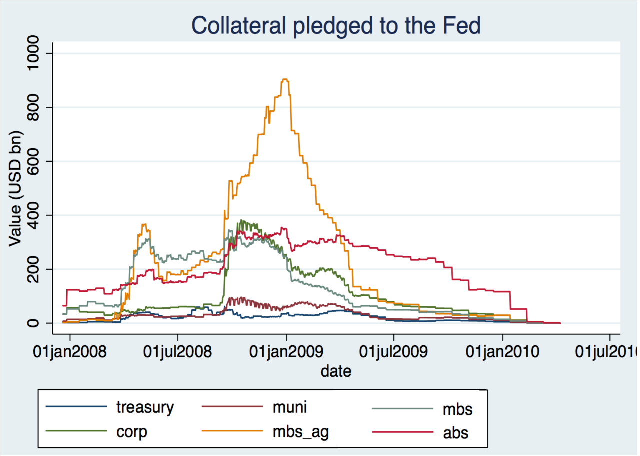
Central Bank Liquidity Provision and Collateral Quality

by François Koulischer (ULB) and Daan Struyven (MIT)

Facts





- Bagehot : Central banks should lend against high quality collateral
- During 2007-2013 crisis, major central banks lent against illiquid collateral
- Our paper explicitly characterizes efficient central bank collateral policy and rationalizes the stylized facts

Model

Bank

- Cashless but owns an investment opportunity and a collateral
- Imperfect collateral quality *v* (valuation wedge)
- Borrows from interbank market or central bank
- Faces moral hazard

Interbank Market

- Perfectly competitive
- Higher haircut boosts incentives but transfer assets to low valuation parties

Central Bank

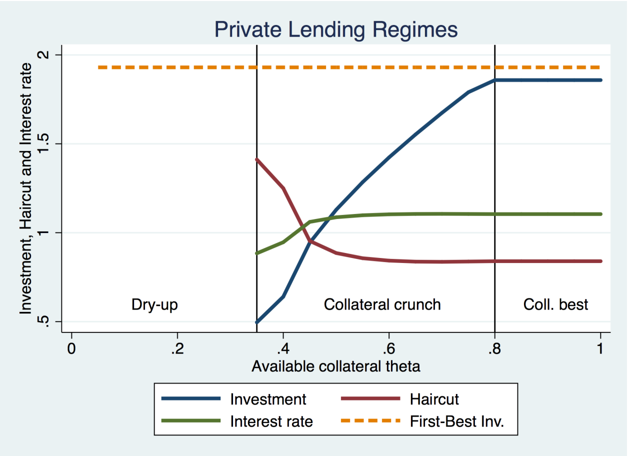
- Maximizes output while minimizing own expected losses

Results

- Shift to collateralized funding when investment prospects deteriorate
- 3 regimes with collateral
- Lack of collateral can increase economy rates for a given policy rate

→ Distorts the transmission of monetary policy

- A looser central bank collateral policy can reduce the spread and alleviate the credit crunch



- Risk of moral hazard in medium-term → Need regulation to ensure sufficient collateral holdings (e.g. Basel III Liquidity Coverage Ratio)