Discussant comments on
Financial intermediation, risk taking and monetary policy
Simona Cociuba, Malik Shukayev and Alexander Ueberfeldt

Prepared for the 2nd BIS CCA Conference on
“Monetary policy, financial stability and the business cycle”
Ottawa, 12–13 May 2011

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* These comments reflect the views of the author and not necessarily those of the BIS or of central banks participating in the meeting.
Discussion of
Financial intermediation, risk taking and monetary policy
by Cociuba, Shukayev and Ueberfeldt

Benoit Mojon (Banque de France)

Monetary Policy, Financial Stability and the Business Cycle
BIS, Bank of Canada, Ottawa, 12 May 2011
Outline

- Thanks to the organisers
- Thanks to the authors
- My take on the model
Thanks to the authors

- Very rich model (Wall Mart)
  - 4 assets, 2 types intermediaries, 2 states at each period, 2 labor markets, ...
  - Calibrations
  - Simulations
The model set up

**Time zero:** the banker knows it will be revealed his type at the next stage

<table>
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<tr>
<th>proba</th>
<th>return</th>
<th>Risky bank</th>
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<td>p</td>
<td>q(risk,good)</td>
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About asset returns: \( q(\text{risk,good}) > q(\text{safe, good}) > q(\text{safe, bad}) > q(\text{risk, bad}) \)

About Basel K R: \( z > k^* \) Cooke ratio

All bankers, who are ex ante "identical"
They collect capital and deposits to invest into the risky asset and treasury bonds.
The model set up

**Time 1**: the banker is revealed his type

And Risky bankers want to use repo to expand their exposure to the risky asset.

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About asset returns: $q(risk,good) > q(safe, good) > q(safe, bad) > q(risk, bad)$

About Basel K R: $z > k \cdot$ Cooke ratio

Collateral constraint: Repo < b

Monetary policy sets the repo rate $r_{mp}$
Issues / the set up

- Why can risky bankers increase investment in the risky asset at period 1?
- How does the Repo loan affects the balance sheet of the safe bankers? Where is the cash of these loans coming from?
- Why grant or authorize Repo at all?
The policy questions

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about asset returns: \( q(risk, good) > q(safe, good) > q(safe, bad) > q(risk, bad) \)
about Basel K R: \( z > k^* \) Cooke ratio
Collateral constraint: Repo < b
Monetary policy sets the repo rate \( r_{mp} \)

How to set \( r_{mp} \), the Cooke ratio (and a haircut on repos) optimally?
Monetary policy and (excess) risk taking
bank’s owners over-invest in the risky asset

Expected profits of the risky bank without risk shifting (planner's pbm)

\[ rz 
\]

Expected profits of the risky bank with risk shifting

\[ rz 
\]
Monetary policy and (excess) risk taking

- What is the convexity that limits the scale of risk shifting?
- Without convexity, risky banks maximise repos, Repo=b, and the monetary interest rate has no impact on risk incentives.
- Alternative: have an valuation effect of interest rate that changes risks pay-offs
  - Adrian and Shin
  - Dubecq, Mojon and Ragot
  - Challe, Mojon and Ragot
Monetary policy and (excess) risk taking
Monetary policy and (excess) risk taking

- $P = \frac{\beta \pi R}{\Delta + r B \pi (1 - \Delta)} = \frac{\beta \pi^{up} R}{\Delta^{up} + r B \pi^{up} (1 - \Delta^{up})}$

- Lower levels of interest rates
  - increase the value of the risky asset in the good state
  - and the « endogenous » optimism of investors who lend to Fin. Intermediaries (Dubecq et al.)
Conclusions

- Highly sophisticated model
- To address a very relevant challenge for economic policy
- Potential improvements:
  - include description of the pay-offs
  - separate « auxillary » characteristics of the model
  - Get an empirical sense of mechanism at play for and against a « risk taking » channel of mon pol

- Carry on !
Fig 1: Spread between 10Y US T-Bonds and 10Y Bonds of US AAA Financial Companies