Comments on “Grafting Macroprudential Policies in a Macroeconomic Framework: Choice of Optimal Instruments and Interaction with Monetary Policy”

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Conference on “Financial Stability: Towards a Macroprudential Approach”

5-6 July 2010

Hong Kong SAR

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General comments

- **Pioneering work in a promising and exciting area of research**
- **Several interesting results for policy debate**
- **Many papers will build on, or at least cite, this work in years to come**
- **Overall, a great contribution to economic sciences**

Key research questions

- **The role of macroprudential policy in a modern macroeconomic model with financial frictions**
- **The relative performances of a capital requirement rule versus an LTV rule**
- **Appropriate macro-financial indicator variable(s) for macroprudential policy rules**
- **The interaction between macroprudential policy and monetary policy under both cooperative and Nash equilibria**

The model at a glance

- A DSGE model with a monopolistically competitive banking sector that intermediates between depositors and borrowers, firms as well as households
- Banks face a quadratic adjustment cost of deviating from an exogenously imposed capital-to-asset ratio which is (partially?) transferred onto loan rates
- Monetary policy modeled via a Taylor rule with an interest rate smoothing term
- Macroprudential policy modeled as time-varying capital-to-asset or as time-varying loan-to-value ratios
- Two separate loss functions for monetary policy and macroproudential authorities

Main results (1)

- **For a given monetary policy rule, macroprudential policies help reduce variability of output and the loan-to-output ratio at the expense of increased inflation variability**

- **Capital rule more effective at stabilizing output while LTV rule more effective at stabilizing the loan-to-output ratio**

- **LTV rule works best when linked to loan growth while capital rule works best when linked to output growth or loan growth depending on the nature of shock**
  - **Rules linked to stock price are never best**

Main results (2)

- There is a tradeoff between the losses of monetary authority and macroprudential authority
- Monetary policy maker is better of in all cases, with the cooperation case delivering the lowest loss
  - The gain is however modest, even in the best case
- In a cooperative equilibrium, optimal macroprudential policy acts countercyclically
- In N.E. #1 (macroprudential policy maker has an upper hand), optimal macroprudential policy is procyclical, making optimal monetary policy highly countercyclical
- In N.E. #2 (monetary policy maker has an upper hand), optimal macroprudential policy is countercyclical

Specific comments (1)

- ✓ **The use of a large-scale DSGE model makes it difficult to sort through the driving forces behind the end results**

- ✓ **The fact that a policy of active management of LTV ratio for firms leads to unstable result (footnote 12) suggests that the model may have some inherent problems**

Specific comments (2)

- ✓ **In terms of bank modeling, I personally prefer Angeloni and Faia (2009) or Gertler and Kiyotaki (2009) which have better micro foundation**

- ✓ **Though ad hoc, I like the idea of a loss function for the macroprudential policy maker used in this paper**
  - **The existence of the loss function however implies the existence of an optimal policy rule which may take different form than the ones assumed in the paper**

Specific comments (3)

- ✓ **That optimal macroprudential policy in N.E. #1 (i.e., when the macroprudential authority has an upper hand) is procyclical does not seem to make economic sense**

- ✓ **Optimal monetary policy response to output gap is impractically high under the two non-cooperative equilibria**

- ✓ **A quick improvement of the paper would be the addition of a formal welfare analysis, again a la Angeloni and Faia (2009)**
  - **Alternatively, may want to look at the output-inflation volatility frontier**
  - **Allow assessment of the added value of macroprudential policy to the economy, particularly when the responsibility authority is not a central bank**