Comments on “Marrying Monetary Policy with Macroprudential Regulation: Exploring the Issues” by Nakornthab and Rungcharoenkitkul

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* The views are those of the author and do not necessarily represent those of the Bank for International Settlements

Introduction

Paper offers “new” thinking (2 models) for central banks about how to incorporate regulatory reforms in a monetary policy framework. How do rule-based prudential regulatory measures impact the monetary transmission mechanism?

Key take-aways for me:

1) Capital requirements can be substitutes for policy rates
2) Provides a foundation for monetary authorities having a bigger role in designing financial stability measures
3) R may not be an effective macroprudential tool
Informing The Macroprudential Debate

- Turning the tables on the “lean” versus “clean” debate
- Conventional lean view: use R to influence financial cycle
- A “new” view: using macroprudential for demand management; ie are macroprudential tools really substitutes for R in monetary policy?

**Importance of paper**: a rigorous modeling method with focus squarely on policy implications

How important is this macroprudential perspective?

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Model 1: Countercyclical Capital And MP

- “Standard” monetary policy model (IS and PC equations) augmented with a “banking” sector
- Bank lending driven by reduced-form relationship between deposit and bank capital [deeper microfoundations?]
- Countercyclical capital regulation constraint:

\[
N_t \geq \left( c + \frac{1}{\gamma_1} \left( \frac{Y_t}{Y} \right)^{\gamma_2} \right) B_t
\]

Min capital ratio+capital conservation buffer  Counter-cyclical capital buffer
Macroprudential Tools: Complements or Substitutes?

- The theory says…they can both!

- Results from paper:
  - Countercyclical capital buffers restrain activity
  - Capital constraint tends to weaken the MTM
  - They help with demand management when there are demand shocks but not supply shocks

**Key result:** if policymakers care sufficiently about output stabilization, the central bank could choose an optimal "counter-cyclical capital requirement" that yields higher welfare than the unconstrained alternative

How Powerful Is This Channel?

Asian banks already have ample capital buffers
Empirical Evidence – Weak Channel?
From Macroeconomic Assessment Group Report (2010)

Impact of a 1% increase in capital ratio

Impact of a 1% increase in capital ratio
$\Rightarrow .1\%-0.2\%$

Impact of a 1% increase in fed funds $\Rightarrow .5\%$

Impact of a 1% increase in $G/Y \Rightarrow .9\%$ (in first year)

This capital charge channel appears very weak!
Quibbles About Assumptions

Benefits of the countercyclical capital ratio in model depend too heavily on 2 assumptions:

1) Bank capital drives lending behavior in model. In practice, loan supply is not so inelastically supplied

✓ Cyclically, banks can shed non-loan assets to adjust capital ratios

✓ Non-bank capital markets and retained earnings allow for alternative funding when capital ratios change

Two Birds With One Stone?

2) Model assumes bank capital proportional to output gap

(eq 2.6) \[ n_t = n_x \text{output gap}_t \]  

✓ Business, financial and asset price cycles not perfectly correlated – they can be quite out of synch
Business, Credit And Asset Price Cycles

Cycles are not synchronized!

Two Birds With One Stone?

2) Model assumes bank capital proportional to output gap

(eq 2.6) \[ n_t = n_x \times \text{output gap}_t \]

- Bank capital

✓ Business, financial and asset price cycles not perfectly correlated – they can be quite out of synch

✓ If cycles sufficiently asynchronous, traditional assignment problem (ie 1 tool, 1 goal) reduces the scope for policy tool substitutability
**Final Comments On Model 1 – Levels Matter!**

- Linearizing around the steady state complicates conclusions – capital levels matter in welfare calculations!
- Why do capital requirements matter in practice?
  - Message from int’l financial crisis – capital prevents incentives to gamble with ‘other people’s money’
  - Model doesn’t really distinguish between capital ratios binding at 2% or 13%. What is missing?
  - Capital ratios also influence the variance of the demand and supply shocks

  All these influence the welfare calculations!

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**Model 2: Thinking About Financial Instability**

The authors extend the research of Adrian and Shin (2010) and Shleifer and Vishny (2010) – linking balance sheet expansion to mark-to-market risks and hence time-varying financial fragility

- In other words, they build in a *risk-taking channel* where banks take on excessive risks when R low
- Should the monetary policy toolbox to be expanded to include regulatory policies? Good question!
- They cast the problem in terms of “nimble” and “clumsy” policymakers – i.e. time dimension frictions
What’s Missing? Future Research

**Top 3 List on Structure of Economy**

1) Stronger microfoundations – eg bankruptcies that help motivate the existence of banks, spreads and a financial stability nexus (Goodhart, 2008); firm balance sheet and financing friction (Gertler et al) along with zombie firms and evergreening?
2) Risk appetite and non-bank funding
3) The international spillover dimension

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What’s Missing? Future Research

**Top 3 List on the Policy Side**

1) How do fiscal and FX policies figure in?
2) How do central bank balance sheets figure in?
3) Vis-a-vis capital flows, what about capital controls?
State Dependence And Policy Tool Analytics

In my own work on boom-bust behavior, state dependence is key when calculating hypothetical losses and gains.

Conjecture: the greater the differences between boom and bust periods, the greater the complementarity of monetary policy and macroprudential tools – ie less substitutability.

In other words, macroprudential for boom/bust dimensions (low frequency); macro tools for demand management (high frequency).

Leaves open the question of what to do if macroprudential authorities get it wrong.

Lessons From Crises

Output variance

Inflation variance

Macroprudential is about the shift; MP is about tradeoff.
Conclusions

- Research-wise: important paper – I agree with authors that we need to integrate conventional monetary policy models with new thinking about financial instability learnt in the crisis
- Better microfoundations are called for
- Need to consider a full range of policy tools when assessing the value-added of macroprudential tools – taking account of high versus low frequency settings

We can’t return to business as usual but not quite sure what the “new normal” will be either

Thank you