

## COMMENTARY

**Macroprudential Policies in Open Emerging Economies**

Anil K Kashyap

I would like to thank the organizers for giving me the chance to comment on this excellent paper by Hahm, Mishkin, Shin, and Shin (HMSS). I warned the organizers that, given my past collaboration with Rick and Hyun, my world view is highly aligned with theirs, so I was likely to be quite favorably disposed to the work. And I am. So I am not going to bother to repeat all the points of complete agreement. Instead let me focus on three areas where I would shift the emphasis or interpret things somewhat differently.

**Modeling Macroprudential Regulation**

Let me start by pulling out three points they make in building up to their main argument that I believe should inform future modeling work related to macroprudential regulation. They don't directly connect these observations, but I found them interesting and powerful. First, they observe (in footnote 3) the nine principles that guided policy prior to the crisis. The last of those principles was "financial frictions play an important role in business cycles." Second, they argue that financial regulation should fix market failures. Third, they point to several studies that find that low interest rates seem to trigger increased risk-taking.

Why am I intrigued by these observations? On the first, I suppose it might be true that many policymakers believed that financial frictions mattered, but the reigning models used by central banks did not reflect that belief. Think back to the many presentations we all sat through at conferences like this one that relied on reasoning based on a three-equation model for output, inflation, and interest rates. More specifically, we would have had a dynamic IS curve, a Phillips curve, and a central bank reaction function, often represented by a Taylor-type rule (see for example, Woodford 2003). Financial frictions were typically ignored. Moreover, for many people looking to add financial frictions,

---

**Author's note:** *These views are entirely my own and should not be interpreted as reflecting any of the organizations with which I am affiliated. For disclosure on my outside activities see <http://faculty.chicagobooth.edu/anil.kashyap/>*

the natural path to doing it would have started with the Bernanke, Gertler, and Gilchrist framework (1999).

During the crisis, this way of looking at the world was completely unhelpful. It gave no guidance about how to think about many competing policy choices (for example, buy toxic assets vs. recapitalize banks). The crisis revealed that we needed models of financial frictions where the frictions arose from problems with credit supply. We had no workhorse model of this type, and really still do not.

If we follow their second dictum, that regulation should attend to market failures, then the absence of a model is a major problem. How do we assess policies if we can't model the problem that they are going to fix?

Fortunately, their third observation about the risk-taking channel of monetary policy, provides some guidance on where we should go. But what exactly is the failure of the Modigliani-Miller propositions that lead agents in the economy to shift behavior when interest rates are very low? The paper mentions a bunch of hypotheses, such as investors searching for yield or valuation effects for financial institutions, without really committing to any particular view. I think that is appropriate given our ignorance about this issue.

Sorting this out is a high priority for future work. Notice even for the purpose of interpreting some of the HMSS evidence, sorting this out matters. For example, the correlation between U.S. rates and noncore liabilities must reflect another deep contracting friction that violates the Modigliani-Miller assumptions. It would be very helpful to have a unified theory that brings all these observations together and fits with the view of the world that says the credit supply matters.

## **Interactions between Monetary Policy and Macroprudential Policies**

A second underdeveloped observation is the potential tension between monetary policy and macroprudential policymaking. HMSS observe that the two are, in their words, "intrinsically linked." They go on to say that coordination is required if the objectives of price stability, output stability, and financial stability are to be pursued. I completely agree with this.

But I would go further. I think that without a doubt in the United States we have set up our institutional structure so that this coordination is unlikely to happen. An important part of the way we should insure that coordination is achieved is through forcing policymakers to be accountable. As the events in Europe show, the financial crisis is still not over. But the framework we have settled upon, at least in the United States and Europe, has come up woefully short in terms of improving the macroprudential outcomes.

The key deficiency is the emphasis on a committee structure, the Financial Stability Oversight Council (FSOC) in the United States and the European Systemic Risk Board (ESRB) in Europe. For Europe it has been entirely obvious that the weak capital positions of the major banks was a significant source of systemic risk; at this point, the sovereign funding problems are also critical, but for over a year European banks have been blatantly undercapitalized. Yet, no one felt obliged to do anything about it. The lack of accountability still suggests to me that it is not clear which group would even be blamed for this failure.

Likewise, in the United States it has been clear for four years that money market mutual funds pose a major threat to U.S. financial stability. The fact that monetary policy considerations imply low interest rates are now relatively certain to prevail for at least another 18 months directly raises the odds that these institutions might do something reckless. Yet, here they sit essentially unchanged, and we cannot be sure that an unexpected failure would not lead to the same terrible choices for the regulators as when the Primary Reserve Fund broke the buck. This lack of action seems to me to be only explicable because the FSOC structure is too weak to force changes on the system. If we can't address the risks that are blindingly obvious, what faith can we have that the hidden risks are being attended to?

We ought to scrap these committee arrangements and charge a single entity with systemic risk management. For the reasons laid out in French et al. (2010), I favor making the central bank that agency, but if that is not politically acceptable, then some other institution should be given this charge.

## **Regulatory Options for Managing Systemic Risk**

This brings me to the last point that they highlight, the limited toolkit being considered for managing macroprudential problems. One of the nicest parts of the paper is their review of the many policy levers that have been deployed in emerging market economies. It would be a welcome development if margining rules, loan-to-value regulation, and provisioning requirements were added to the Basel discussions about capital and liquidity.

I share their view that the threat of runs by short-term debt is a core feature in most crises. Their emphasis on noncore liabilities is appropriate, since that designation is a good way to capture the many channels through which runs can happen. So I would like to go one step further and ask, exactly how does the deleveraging that they identify spill over to infect the real economy?

Here I want to call attention to some recent work that I have done with Charles Goodhart, Dimitrios Tsomocos, and Alex Vardoulakis (2012), which

naturally complements the HMSS analysis. In our research we study an economy that is at risk for an occasional asset price collapse. Banks and shadow banks in our economy play a valuable role by extending credit to help consumers smooth their consumption. But if asset prices collapse, the consumers default and the financial system amplifies the effects.

As conjectured by HMSS the “lean versus clean” tension is present in our framework. What we find is that it is actually helpful to group tools according to the channels through which they combat market inefficiencies, rather than according to the market or institutions which they directly impinge upon. What does this mean? Let me give an example. In our framework, loan-to-value restrictions on bank lending and margin requirements on shadow bank repurchase agreements are substitute tools. Why? Because both regulations limit the amount of ex ante risk that the financial system can take on by limiting leverage. Conversely, a provisioning rule that mandates building reserves whenever lending growth is high works to partially slow a lending boom. Interestingly, capital rules are not very effective for this purpose. The problem is that when asset prices are very high then all levered financial institutions are going to look well-capitalized; this reminds me of the assessment that most of us had about large global financial institutions in early 2007. I don’t recall people claiming that U.S. or European banks were thinly capitalized then, yet 18 months later that was obviously the case.

A third regulatory approach in our economy is a kind of clean-up strategy that forces banks to rebuild capital after a default. This regulation operates differently than the other two channels I have mentioned.

We are early in this research program, but even with our very simplified model one can see that managing financial instability will take multiple tools because the instability operates through multiple mechanisms. In particular, an asset price collapse not only leads to defaults and a possible credit crunch, but also can generate a fire sale in which impaired banks dump assets to cover deposit outflows. So these three externalities cry out for regulatory tools that operate through each of the channels I have mentioned (Kashyap, Berner, and Goodhart 2011).

Finally, let me highlight one last consideration that is mentioned by HMSS but I think deserves extra attention. My concern is that, especially if the global regulatory process proceeds in its current direction, we are creating massive incentives to engage in regulatory arbitrage. I have explained elsewhere that there is little reason to worry about raising capital regulations substantially (say even 10 percentage points) on the interest rates charged to borrowers. But what I do worry about with large capital charges are the incentives they set up

for creating nonbank banks to engage in maturity transformation while avoiding capital regulations.

HMSS mention the example of regulating loan-to-deposit ratios as another way to make the financial system less fragile. But they note that, in Korea, branches of foreign banks are exempt from complying. I am not sure why that is the case, but it seems to reflect the generic difficulty in taking a holistic approach to regulation and closing down all the loopholes that appear once we start intervening. I think this interacts with my second point about accountability. Unless there is some institution that is vigilantly looking across the entire financial system, watching as it morphs, we are likely to be way behind.

Let me close with a tweak on a nice analogy they proposed. They mentioned that a levy on noncore liabilities is a good way to align incentives, much like the charge for driving into central London to reduce congestion. I just want to us to think about all the extra traffic we got on Marylebone Road, Euston Road, and the rest of the perimeter once the surcharge went into effect. Thanks for your attention.

## REFERENCES

- Bernanke, Ben S., Mark Gertler, and Simon Gilchrist. 1999. "The Financial Accelerator in a Quantitative Business Cycle Framework." Chapter 21 in *Handbook of Macroeconomics* Volume 1, eds. John B. Taylor and Michael Woodford. Amsterdam: Elsevier, pp. 1341–1393.
- French, Kenneth R., Martin N. Baily, John Y. Campbell, John H. Cochrane, Douglas W. Diamond, Darrell Duffie, Anil K Kashyap, Frederic S. Mishkin, Raghuram G. Rajan, David S. Scharfstein, Robert J. Shiller, Hyun Song Shin, Matthew J. Slaughter, Jeremy C. Stein, and Rene M. Stulz. 2010. *The Squam Lake Report: Fixing the Financial System*. Princeton, NJ: Princeton University Press.
- Goodhart, Charles A.E., Anil K Kashyap, Dimitrios Tsomocos, and Alexandros P. Vardoulakis. 2012. "Financial Regulation in General Equilibrium." National Bureau of Economic Research Working Paper 17909.
- Kashyap, Anil K, Richard B. Berner, and Charles A.E. Goodhart. 2011. "The Macroprudential Toolkit." *IMF Economic Review* 59(2), pp. 145–161.
- Woodford, Michael W. 2003. *Interest and Prices: Foundations of a Theory of Monetary Policy*. Princeton, NJ: Princeton University Press.