Open Questions for Monetary and Financial Stability Policy¹

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I want to thank Bill for inviting me to be part of this session. My assignment was to reflect on the events that have occurred since Chairman Bernanke took his post and come up with some ideas about questions that we would like answered to improve monetary policy making and the design of financial stability policy. I am going to do this by laying out 4 topics/questions that are currently unsettled that I believe should be high on the future research agenda. I am not suggesting that answering any of them will be easy, but that should not stop us from aiming high.

First, we should decide on whether one lesson that some have taken from the crisis is right. In particular, many people have argued that the reason that the crisis was so destructive was because of the leverage that built up in the financial system that made it vulnerable to a shock that could easily impair the capital of key institutions in the system. I think this diagnosis about the last crisis is clearly correct. But there is a corollary to this view that is sometimes expressed that I do not think is nearly so obvious, or that necessarily follows.

The corollary holds that risks to financial stability necessarily involve leverage and that if we are diligent about spotting leverage buildups we can guard against another crisis. The last crisis teaches us that a leverage build is a sufficient condition for creating vulnerability. But, I don't think it is necessary condition. One great counter-example is Hyun Shin's (2013) recent paper on the potentially destabilizing role that asset managers can play in propagating shocks across the global economy. In Shin's framework there is no leverage or maturity mismatch, yet he shows you can still get pro-cyclical risk-taking in the financial system that amplifies shocks. I am working on another project with Hyun Jan Hatzius, and Kim Schoenholtz that uses a slightly different model that also gets this kind of amplification without any leverage. I think more of these models need to be analyzed and tested to decide if the consensus about leverage is misguided.

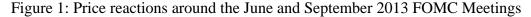
A second, closely related, issue is whether we can separate the settings of monetary policy from the conduct of macroprudential regulation. Lars Svensson is perhaps the most vocal and articulate proponent of this view. Lars has argued that monetary policy decisions on interest rates should be set almost solely on the basis of inflation and output/employment conditions. His preferred phrase seems to be that "monetary policy should be the last line of defence of financial stability, not the first line" (Svensson (2013)). I believe many central bankers share Lars' view

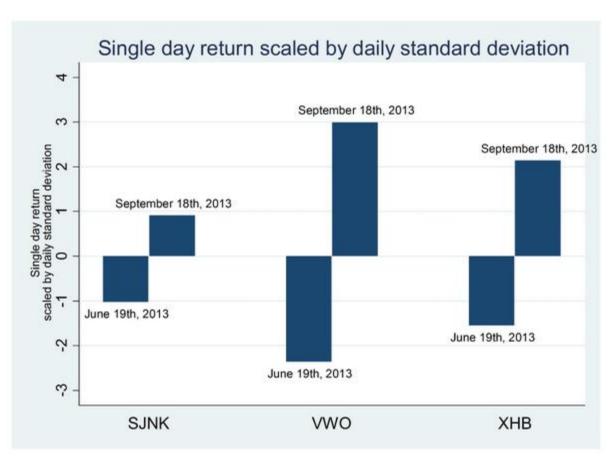
¹ Remarks at the 2014 American Economic Association meeting session on the "Chairman Bernanke Presentation". I thank Hyun Song Shin for helpful conversations on these issues. These views are purely my own and do not reflect those of any of the institutions which with I am affiliated.

that financial stability is best pursued by using financial stability tools and not adding another consideration to the setting of interest rates.

But in models such as the one I cited by Shin, in which risk-taking behavior is being driven by the stance of monetary policy, and perhaps exacerbated by the use of forward guidance, then the separation between monetary policy and financial stability becomes massively more difficult. This is much easier to see in models where the financial instability does not come from the actions of banks or other intermediaries because in that case the regulatory tools that deal with intermediaries are also going to be second-best tools for combating instability. So we need to decide if the so-called separation principle is really helpful or not?

This brings me to my third topic which is understanding the events of last summer. Recall that from the time that the Chairman first mentioned the possibility of tapering bond purchases in May through the FOMC meeting in June there was a surge in interest rates and an outflow of funding to various asset classes. Then there was a huge reversal in September when the Fed opted to delay tapering. Figure 1, courtesy of Amir Sufi, shows this nicely.





Under the Fed's standard explanation for the transmission mechanism of bond purchases to the economy, this is all very hard to make sense. Recall that Fed officials have typically argued that the stock of assets in its portfolio is what governs the impact on the economy. By any reasonable calculation at the time of the June FOMC Press conference we could bound the effects that any tapering was going to have on the eventual stock of assets which the Fed would wind up holding. The differences implied by alternative tapering strategies should not nearly have altered financial conditions by as much as they did.

I think we should admit this inconsistency and try to reconcile the competing views for why this happened. One view is that this was just botched communications and the market could not separate the discussion from tapering from beliefs about the expected path of future short term interest rates.

But that is not the only interpretation. Another explanation is especially in times like right now financial market participants are somewhat uncertain about the future path of monetary policy actions. So the market equilibrium reflects trading between many people with potentially very different beliefs. As such Fed announcements can serve as a coordinating device which can lead to very abrupt decisions to rebalance portfolios. I like to call the June FOMC Press conference a Geanokoplos moment (Kashyap (2013)). This view implies that we need to take heterogeneity of beliefs much more seriously in thinking about the effects of policy. Models where there is just a single representative agent do not seem like a very promising way to understand any of this.

A second dimension of heterogeneity regards the preferences of the policymakers themselves. One cannot think of the Fed as operating with a stable objective function. The turnover in the composition of the FOMC means that the weights on the various objectives are ever-changing. It is instructive to realize that we could have half the governors turn over in a given year and we have been living in this situation for years. The heterogeneity complicates all communication policies and attempts by market participants to understand where the central bank is headed. A corollary to this observation is that any policy analysis that involves asking the FOMC to "commit" to future actions in several years strike me as institutionally infeasible.

My fourth final topic relates to the social value of liquidity. Dodd Frank includes a laundry list of requirements, many of which have nothing to do with guarding against systemic collapses. But Dodd Frank implementation is way behind and the Basle Committee's proposed changes are way off. Despite all this I still think we are in a situation where have reached a position of regulating ahead of theory.

I say this because the most radical proposed changes call for a whole new apparatus for regulating banks that focuses on their liquidity positions -- there are even two different indicators that are being discussed, one having to do with the asset side of the balance sheet and the extent to which banks have assets that can be sold to pay off creditors without triggering a fire sale and a second having to do with limits on the use of short-term funding. But liquidity

provision is one of the central contributions of the banking system and we want to be careful to not inadvertently crush this activity (Debelle (2013)).

The problem that we face is that there is no analog to the Modigliani Miller theorem with respect to liquidity creation (or maturity transformation). The MM propositions rightly got a Nobel prize because they laid out exactly the conditions under which the funding arrangements for a business were irrelevant. This spawned the whole field of corporate finance. Intelligent discussions over bank capital regulation always start with MM as a benchmark and then ask which of the necessary assumptions for capital levels to be irrelevant might fail.

We are in the wilderness in terms of liquidity regulation. We have no idea if the financial system, left to itself, or right now when it operates subject to many other constraints is producing too much or too little liquidity (or maturity transformation). We also have no clear way of thinking about whether the social and private costs of such activities diverge or not and whether the costs of any divergences are large or not. We have not even isolated the frictions that govern the exact way in which liquidity transformation takes place, say through markets or intermediaries. So it is pretty hard to see how we are going to intelligently enact liquidity regulation given these open questions.

I am willing to stick my neck out and say just like MM got a Nobel Prize, I expect whoever comes up with closest analog for liquidity creation will get one too.

But before stopping I want to briefly pay tribute to Chairman Bernanke. I have routinely been at gatherings of economists where the strong consensus is that his actions and leadership during the global financial crisis were pivotal in avoiding another Great Depression. My joke is that he did not want the first sentence of his Wikipedia page to be "Ben Bernanke, he studied the Great Depression and then caused the next one" and so he made sure that was not the case. So here is my lighted hearted tribute:³

Ben Bernanke the Central Banker (to the tune of Rudolph the Red Nose Reindeer)

You know Greenspan and Volcker and Martin and Miller, and Fischer, and Raskin and Plosser and Yellen, but do you recall? the most famous central banker of them all?

Ben Bernanke the central banker Had a very shiny dome, And if you ever saw it,

² One recent interesting take on this issue is by Acharya and Tuckman (2013) who focus on how the presence lender of last resort operations encourages liquidity transformation.

³ You can find a musical rendition of the song with animation at http://www.igmchicago.org/?p=2885.

You might even say it glows.

Ron Paul and all the other gold bugs, Used to laugh and call him names. They never let the poor Chairman, Play in any policy games.

But then in the fog of Lehman week, Hank and Nancy came to say, Ben with your dome so bright, Won't you save the world tonight?

Then all the economists loved him And they shouted out with glee, Ben Bernanke the central banker, You will go down in history!

It is a shame that we can't offer more for your tremendous public service, and it disappoints me and I am sure many others in the room that this is not more widely appreciated. I am afraid about all I can offer is Cubs tix once you are out of office and not subject to any gift limits.

With that I will stop, thanks for your attention.

References

Acharya, Viral V. and Bruce Tuckman, 2013, "Unintended Consequences of LOLR Facilities: The Case of Illiquid Leverage", National Bureau of Economic Research Working Paper 19773.

Debelle, Guy, 2013, "Remarks on liquidity", Speech to the Australasian Finance and Banking Conference, Sydney, 17 December 2013. https://www.bis.org/review/r131217d.pdf?ql=1

Kashyap, Anil, 2013, "Comments on the Ins and Outs of LSAPs", forthcoming in 2013 Federal Reserve Bank of Kansas City Symposium on the Global Dimensions of Unconventional Monetary Policy.

http://faculty.chicagobooth.edu/anil.kashyap/research/papers/Comments_on_The_Ins_and_Outs_of_LSAPs.pdf

Shin, Hyun Song, 2013, "The Second Phase of Global Liquidity and Its Impact on Emerging Economies", Keynote address at the Federal Reserve Bank of San Francisco Asia Economic Policy Conference, November 3-5, 2013.

Svensson, Lars, E. O., 2013, "Some Lessons from Six Years of Practical Inflation Targeting", *Sveriges Riksbank Economic Review*, 2013:3, pp. 29-80.