Jeremy C Stein: Lean, clean, and in-between

Speech by Mr Jeremy C Stein, Member of the Board of Governors of the Federal Reserve System, at the National Bureau of Economic Research Conference "Lessons from the financial crisis for monetary policy", Boston, Massachusetts, 18 October 2013.

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The thoughts that follow are my own, and are not necessarily shared by my colleagues on the Federal Open Market Committee. I am grateful to Tim Clark, Andreas Lehnert, Nellie Liang, Ben McDonough, and Lisa Ryu for their input.

Thank you. The theme of this conference is, "Lessons from the Financial Crisis for Monetary Policy." Given the opportunity to speak about this topic, my first thought was that I should organize my remarks around the familiar "lean versus clean" debate. The traditional, pre-crisis framing of the question went something like this: Should policymakers rely on ex ante measures to lean against potential financial imbalances as they build up, and thereby lower the probability of a bad event ever happening, or should they do most of their work ex post, focusing on the clean-up?

Post-crisis, the emphasis in the debate has shifted. I think it's safe to assume that nobody in this room would now argue that we should be putting all our eggs in the "clean" basket. Discussion these days tends to focus instead on *which* ex ante measures are best suited to safeguard financial stability. Among these, there seems to be widespread support for unconditional, (i.e., time-invariant) tools that increase the overall resiliency of the financial system to shocks. These tools include more robust capital and liquidity requirements, as well as an enhanced capability to resolve a large financial institution that finds itself on the brink of failure. They might also include universal margin requirements on securities financing transactions, as a way of mitigating fire-sales risks. We might argue about various aspects of calibration and implementation, but I don't think there is too much controversy about the basic proposition that strong, comprehensive regulation aimed at enhancing resiliency is essential.

There is considerably less agreement about the desirability and effectiveness of ex ante measures that seek to lean against the wind in an explicitly time-varying fashion – that is, measures that can be adapted in response to changing economic or financial conditions. At the risk of caricature, one can distinguish three schools of thought. The first school is generally suspicious of any kind of time-varying lean, be it with macroprudential tools such as time-varying, countercyclical capital buffers or margin requirements, or with monetary policy. This school emphasizes the difficulty of identifying emerging financial imbalances in real time. It also points to the political-economy and regulatory-arbitrage impediments that can frustrate the implementation of discretionary time-varying regulation.[1]

The second school is more comfortable with the idea of time-varying leans, but invokes what amounts to a separation principle: It takes the view that any financial-stability-motivated leans should come largely, if not entirely, from time-variation in the application of regulatory and supervisory tools, while monetary policy should stick to its traditional dual-mandate objectives of fostering full employment and maintaining price stability.

The third school is more heterodox. Like the first, it acknowledges that there are a variety of practical limitations associated with discretionary time-varying regulation, though the severity of these limitations may vary considerably across different countries, markets, and

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[1] For a forceful exposition of this view, see John Cochrane (2013), "The Danger of an All-Powerful Federal Reserve," *Wall Street Journal*, August 26, http://online.wsj.com/article/SB10001424127887323906804579036571835323800.html.

institutional arrangements.[2] In cases where regulation can be effectively adjusted over time, doing so remains the preferred approach. But in other situations, and especially when the imbalances in question are relatively pronounced or widespread across a range of markets, this school of thought is more open to working on multiple fronts and to formulating monetary policy with one eye on its potential implications for these imbalances.[3]

The debate between these three schools gets a lot of attention at venues like this one – and with good reason. It touches on issues that are not only of policy interest, but also connect to deeper and strongly held views about how the world works. In other words, this is paradigm-versus-paradigm stuff, which always helps to liven up an academic exchange.

But precisely for these reasons, the whole lean-versus-clean debate runs the risk of drawing attention away from other crisis-derived lessons that do not make as good fodder for academic discussion, but that are no less relevant from a practical policy perspective. Let me focus the remainder of my remarks on one of these: the importance of the in-between. The lean-versus-clean framing suggests a simple model in which there are just two dates: (1) an initial ex ante date that is prior to when a shock is realized – and when we may not even have much of a clue as to the form the shock will take – and (2) an ex post date when the shock has hit, its full effects have been felt, and policymakers are dealing with the aftermath. But this before-and-after dichotomy is misleading. Many financial crises unfold over months or even years, and the choices made during this in-between period can be among the most crucial to the eventual outcome.

Recall that problems with subprime mortgages were already surfacing in late 2006. The first serious tremors associated with the crisis were felt in August 2007, with BNP Paribas suspending redemptions on its money funds and investor runs on multiple asset-backed commercial paper programs. At this point, there was no longer any real doubt about the nature of the shock confronting us – even if its precise magnitude was yet to be determined. And yet it was more than a full year until the failure of Lehman Brothers in September of 2008, which ignited the most intense part of the crisis. Moreover, during the interval from the start of 2007 through the third quarter of 2008, the largest U.S. financial firms – which, collectively, would go on to charge off $375 billion of loans over the next 12 quarters – paid out almost $125 billion in cash to their shareholders via common dividends and share repurchases, while raising only $41 billion in new common equity. This all happened while there was a clear and growing market awareness of the solvency challenges they were facing. Indeed, the collective market cap of these firms fell by approximately 50 percent from the start of 2007 through the end of June 2008.

There are two points here worth emphasizing. First, it seems indisputable that the severity of the crisis would have been mitigated if policymakers had clamped down on these payouts earlier, and had compelled substantial new equity raises. Second, the conflict between the interests of the firms, acting on behalf of their shareholders, and those of the broader public became particularly acute once the crisis got underway, because of the debt overhang

[2] For a fuller discussion of both the potential and limits of time-varying regulation, see Daniel K. Tarullo (2013), "Macroprudential Regulation," speech delivered at the Yale Law School Conference on Challenges in Global Financial Services, New Haven, Conn., September 20.

[3] To be clear: Taking account of financial-stability considerations when formulating monetary policy can be fully consistent with the dual-mandate objectives of fostering full employment and price stability. Consider a traditional setting where the policymaker has a quadratic loss function over deviations of unemployment and inflation from their target levels. Suppose further that high financial-sector leverage or very buoyant credit conditions today increase the probability of a sharp upward spike in credit spreads at some later date, and the latter prospect in turn raises the conditional variance of economic activity. Then the policymaker's risk aversion over unemployment outcomes may make her willing to try to tighten credit conditions, even at the cost of some employment today, so as to reduce the variance of future employment. In other words, financial-stability factors can weigh significantly in the decisionmaking process, without being an end objective in and of themselves.

problem. Cutting back on dividends and issuing new shares might have been strong positives for the banks' overall set of stakeholders, as well as for society more broadly, but were clearly negatives for shareholders, given that such actions would have entailed large transfers to underwater creditors.

This conflict of interest can make it hard for even the best-intentioned regulators to muster the conviction to take full advantage of either the appropriate legal tools or the resources available under the existing institutional framework. Under what circumstances does one tell a firm that is still well above its regulatory capital requirement that it must do a share issue that will be helpful for the economy as a whole, but highly dilutive to its existing equity holders?

This discussion brings us to the role of the now ongoing stress-testing framework for large financial institutions. As you may know, the Federal Reserve has been conducting annual stress tests and capital-planning reviews of the 18 largest banks under the auspices of its Comprehensive Capital Analysis and Review (CCAR) program, and is adding 12 more firms this year, consistent with requirements of the Dodd-Frank Wall Street Reform and Consumer Protection Act.[4]

During normal times, when banks are relatively healthy, the CCAR process functions as an important complement to more conventional capital regulation and, like capital regulation, it can be thought of as an ex ante instrument to increase the general resilience of the banking system to as-yet-unknown shocks.[5] I believe that it has been a very valuable addition to our toolkit in this regard, and will continue to be so.

However, I also believe that much of the promise of the CCAR framework lies in its potential to help us achieve a better outcome not just in normal times, but also in the important in-between times, in the early stages of a crisis. In other words, when thinking about the design of CCAR, one of the questions I keep coming back to is this: Suppose we were granted a do-over, and it was late 2007. If we had the CCAR process in place, how would things have turned out differently? Would we have seen significantly more equity issuance at this earlier date by the big firms, and hence a better outcome for the real economy?

On the one hand, there is some reason for optimism on this score. After all, the original stress tests – the Supervisory Capital Assessment Program (SCAP) in May 2009 – provided the impetus for a significant recapitalization of the banking system. More than $100 billion of new common equity was raised from the private sector in the six months after the SCAP, and in many ways it was a watershed event in the course of the crisis.

Moreover, the current CCAR framework gives the Federal Reserve both the authority and the independent analytical basis to require external equity issues in the event that, under the stress scenario, a firm's post-stress, tier 1 common equity ratio is below 5 percent, and the

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[4] The Federal Reserve conducts the CCAR annually to help ensure that companies have forward-looking capital planning processes that account for their unique risks and that result in sufficient capital to enable the institutions to continue lending to households and businesses during times of economic and financial stress. As part of the CCAR, the Federal Reserve evaluates institutions' capital adequacy, internal capital adequacy assessment processes, and their plans to make capital distributions, such as dividend payments or stock repurchases. The CCAR includes a supervisory stress test to support the Federal Reserve's analysis of the adequacy of the firms' capital. Boards of directors of the institutions are required each year to review and approve capital plans before submitting them to the Federal Reserve. The fourth CCAR will begin soon, with the release of instructions and economic scenarios. For more information, see the Board's website at www.federalreserve.gov/bankinforeg/ccar.htm.

[5] For a more detailed discussion of CCAR design, and of the calibration of stress scenarios, see Nellie Liang (2013), "Implementing Macroprudential Policies (PDF)," speech delivered at the "Conference on Financial Stability Analysis: Using the Tools, Finding the Data," sponsored by the Federal Reserve Bank of Cleveland and Office of Financial Research, held in Washington, DC, May 31.

ratio cannot be restored simply by suspending dividends and share repurchases.[6] In my view, these features of the program are among its most crucial.

At the same time, having the authority to do something is necessary, but not sufficient – there also needs to be the institutional will. And this will is likely to be especially critical in a time of crisis, again because of the increased prominence of the debt-overhang problem.[7] A firm that is told that it needs to improve its capital position will, given the interests of its shareholders, strongly prefer to do so by reducing assets rather than by engaging in a dilutive share issue, even though the latter is more desirable from the perspective of aggregate credit provision. And it can be expected to make its case forcefully.

So if we are serious about taking a macroprudential approach to regulation – one which aims to protect not just the solvency of individual firms, but the health of the financial system as a whole and its ability to continue to perform its intermediation role in times of stress – it is incumbent on us as regulators to do all that we can to develop both the intellectual case, and the institutional resolve, to be able to push back with equal force when the time comes.

Thank you. I look forward to the rest of our discussion.

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6 More precisely, the rule underpinning the CCAR states that if the Federal Reserve objects to a firm's capital plan, the firm must resubmit, showing how it will address the causes of the objection. So, in the case where the capital plan is objected to because the firm misses the post-stress target of 5 percent common equity (and assuming this cannot be addressed by simply turning off all planned dividends and share buybacks), the firm's resubmission would have to show how it will get back above this target. This plan might include a mix of asset sales, equity issues, and other measures, but the Federal Reserve, in principle and under appropriate circumstances, has the authority to object to a plan that is overly reliant on asset sales and other measures and withhold its non-objection to a plan unless the firm addresses all the shortfall-via-equity issues, over some defined time frame.

7 Another complicating factor that may make regulators shy away from pushing for new equity issues in the midst of a crisis is the lack of a government backstop. A number of observers have argued that the availability of a backstop in the form of TARP capital played a key role in the original SCAP stress tests.