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CENTRAL BANKING AFTER THE GREAT RECESSION:  
LESSONS LEARNED AND CHALLENGES AHEAD

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*Part Two - Strengthening Financial Regulation: What's Done? What's Not?*

**Presenter:**

PAUL TUCKER  
Senior Fellow, Harvard Kennedy School of  
Government  
Former Deputy Governor, The Bank of England

**Discussant:**

H. RODGIN COHEN  
Senior Chairman, Sullivan & Cromwell, LLP  
Vice Chairman, Economic Studies Council, The  
Brookings Institution

**Moderator:**

DAVID WESSEL  
Director, The Hutchins Center on Fiscal and Monetary Policy  
Senior Fellow, Economic Studies

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MR. WESSEL: Let's turn to the second part of our program which is can we use financial regulation to prevent a repeat of this crisis, and if so, how far along are we on that path? And to talk about that we've invited Paul Tucker who until recently was a deputy governor of the Bank of England, is now at Harvard where he came to Boston because he says the weather was better than it is in the U.K. (laughter). Take it away, Paul.

MR. TUCKER: Thank you very much, and thanks for inviting me to be here. Well, as John said, while macroeconomic policy probably contributed to the conditions in which the crises occurred, the ultimate goal of the depth of the crisis was a deeply flawed regulatory and supervisory regime, deeply flawed in design, and deeply flawed in implementation on both sides of the Atlantic, and it would be hard not to do better.

The paper that Brookings have published covers a whole load of technical things because it's a technical subject, but I want really to pick out one or two things that are more in the realm of political economy. And there's good news as well as, I think, some challenging news.

The good news is something which, if I may say so, I think Ben Bernanke's Federal Reserve system has a great deal to be proud of which is stress testing. I think this can potentially revolutionize bank supervision over the coming quarter of a century. I think it will take some while to play out and mature, and I think it will be some while for its full effects to be seen, but it's revolutionary in two respects or perhaps even three.

First, and this is not trivial, it gets the macroeconomists and the

supervisors within not only the Federal Reserve but other central banks to work together. This is a necessary condition for central banks to have the broad mandate which they are now returning to.

Secondly, it makes regulators look at banks in a joined-up way rather than atomistically. If you like, this is part of the macro-Prudential label. But I think almost most importantly I think it can transform the accountability of the Federal Reserve and other central banks and regulators around the world to legislatures and the public.

Monetary policy is something where over the past ten, twenty years it's become increasingly transparent and what the public gets is what it can see on the (inaudible); the laws, the regimes, the models, the policy deliberations. Bank supervision has been opaque, mysterious, of interest to the public only when it goes wrong, but when it goes wrong suddenly it's of unrightly of enormous interest.

By having an annual stress test put in the degree of stress that is going to be applied to the institutions into the public domain and the results of the stress test with named institutions in the public domain, that gives members of Congress on behalf of the public an ability to ask the Federal Reserve and the OCC and others questions about supervision that they have never been able to ask before. I think that is a massive step forward, and I think it's very important for those of you that work on the hill, I think it's very important that Congress delivers on asking those questions on the stress test each year.

The other feature of it that is tremendously important goes to the whole business of central bank lender-of-last-resort policies and support operations, and that's been controversial in this country, especially over the past few years. And it's been

controversial crudely because people think the Federal Reserve may have lent to firms that were bust and may have lent to non-banks that were bust. And transparent stress testing, whether or not that's true or not, transparent stress testing makes this much less of a hazard in the future because if a firm that is in receipt of lender-of-last-resort systems isn't solvent, that is going to be revealed and revealed publicly by the subsequent stress test. This is potentially a very significant disciplining device on the Federal Reserve, the Bank of England, the CB, and one that I think is being underappreciated to date.

Let me make three other points quickly. The biggest issue on the banking side is can the too-big-to-fail problem be solved, and I believe it can be. I believe it's on the brink of being solved. It's not a question of will whether policy makers can bring it over the line.

It would be a good thing if there could be an international treaty, but there will not be an international treaty, and therefore for those people in this country especially, but elsewhere who advocate that when a vast institution is bust that it goes through the courts, they are ignoring the reality that courts can, in different countries, cannot cooperate ex-ante because you don't even know which judge is going to be sitting in London or New York on the day that the case is brought to the court. So, this is inevitably, whether one likes it or not, as a matter of political philosophy, it is inevitably a matter of interagency cooperation across boarder. And the solution -- and I won't get technical about it -- is essentially to push losses from subsidiaries out to holding companies, and for holding companies to issue sufficient bonded debt to the capital markets that when the equity is exhausted, the bonds can be converted under

administrative discretion into equity and the firm recapitalized, and this can make this problem largely go away. There's more about in the paper, and I don't doubt that Roger will pick it up, but let me come to things that concern me more.

If too-big-to-fail is the biggest problem confronting Western society in the financial reform arena, a close second is regulatory arbitrage. I believe the banking reforms are coherent and reasonably well conceived, but no one should kid themselves that tomorrow's problems are going to be located in banks. They may be in banks, but they're as likely to have traveled elsewhere.

Finance, more than any other part of modern economy, is a shape shifter. You think the problem is over there and you aim your instruments at it, and it instead will be over here. This is a tremendous challenge in terms of flexibility.

There's another one that John alluded to. Can monetary policy stimulate risk taking and bring about conditions of bubbles that have burst and collapsed? Yes, and as John rightly said, that requires the regulators to have a more dynamic approach to the regulation of institutions, raising capital requirements and liquidity requirements during the boom. But again that requires flexibility, and here's the rub. What societies typically like, what legislatures typically like, is rule-based regulation so that unelected agencies don't have untrammelled discretionary power, and that's a good principle. It is a hard principle to reconcile with effective regulation of the financial system in keeping it safe and sound, and this is almost not debated at all in this country because such is the devotion to rules here. In the United Kingdom it has been debated, and the solution in part in an expedited legislative procedure to enhance the tools of the regulators when needed. You need that debate, and the rest of the world needs you to have that

debate.

My fourth issue is this, and in some respects I think this is the biggest of all because the problems are never technical, or they shouldn't be technical. The problems are about building effective institutions, agencies, in the state sector.

Regulatory arbitrage means that a lot of the problems that threaten stability are as likely to come under the jurisdiction of securities regulators as they are under the jurisdiction of the bank regulators or the central bank. But the securities regulators, they do a great job. They do not have financial stability, and (inaudible) objectives here or in many other parts of the world. And if you look at Congressional testimony, rarely are they asked any questions about the stability or the threats to stability that could come from the parts of the financial system that they are responsible for keeping safe and sound. Either their statutory objectives need to be broadened, altered, which is a much more important issue than the question that gets raised occasionally here of whether the SEC and the CFTC should be merged or alternatively some other body, whether it be the F-SOF or the Federal Reserve or some new agency, needs to be given a power of override so that they can ensure that all parts of the financial system are sufficiently resilient to weather the next bubble. And if that doesn't happen, then the next crisis will be sooner than otherwise.

MR. WESSEL: Thank you. To respond we invited Rog Cohen at Sullivan and Cromwell who I think counts every bank in the United States at one time or another has sought his counsel, so we thought it was good enough for them, it's good enough for us, and we don't pay anywhere near your hourly rate, so we appreciate you coming.

MR. COHEN: Thank you, David, and for Brookings, it's truly a labor of

love. To even begin to scratch the surface of Paul's thoughtful, comprehensive, and provocative paper it would really take much more than my allotted seven minutes, so I'm just going to focus on two fundamental points.

First, it is undeniable that the risk of failure of a major bank must be sharply reduced from what it was in 2008 by reform of the regulatory system, and that the systemic consequences that could result from such a failure must be dealt with by a credible and effective resolution regime. But as Paul writes and I'll quote, "The banking package of reforms is coherent and well-conceived seeking to address the deep-seated flaws in our banks and regulatory system including the biggest of all, too-big-to-fail."

So, in other words, although there is still much to do, we are generally on the right track. Calls for more radical reform of not just the regulatory system but the basic structure of the banking system are both unnecessary and fraught with their own risk. As Paul later notes, narrow banking could not on its own make the world safe. Indeed, I would suggest that reducing bank geographic and business diversification, and to Paul's point this morning, pushing financial activities into the shadow-banking sector could have exactly the opposite effect.

Second and relatedly, Paul makes the crucial point, and I'll quote again, "Solving too-big-to-fail matters hugely because improvements in bank regulation and supervision alone will not confine the stress to the dustbin." There are two aspects of placing too-big-to-fail into its own dustbin. The first is moral hazard which is dealt with directly by Dodd-Frank in mandating that creditors as well as stockholders bear all losses in the event of a failure.

The second is a resolution regime that can minimize the risk of serious

systemic consequences. As Paul mentioned, essential to his approach for developing such a regime is a combination of long-term debt at the holding-company level and internal debt at the operating-subsubsidiary level, what is sometimes known as prepositioning. In the event of catastrophic losses, the banking organizations equity would absorb the losses, and the debt would become equity to provide a cushion for recapitalization.

Let me discuss three issues quickly. The first is how much? At the holding company level, I agree with Paul's view that the amount should generally be around 10 percent of risk-weighted assets for more complex institutions assuming an equivalent amount of equity. You can site historical examples of institutions that have encountered even greater losses, but the long-term debt requirement should be calibrated to a reasonable worst-case in today's regulatory environment rather than to the worst result ever.

I believe, however, that if there is to be prepositioning, the amount of internal debt required at the operating subsidiary level should be based on a lower percentage of RWA, perhaps 5 percent. The principle reason is flexibility. In the event that an operating subsidiary experiences losses greater than its equity, as unlikely as that might be, the holding company would then have a reserve of recapitalization assets to fill the hole after utilizing the prepositioned debt. In addition, I worry that a higher requirement will encourage ring fencing which is antithetical to the type of resolution structure that Paul supports.

The second issue related to the conditions for pulling the debt into equity trigger. In my view, triggers should not be hair triggers, and the regulators need



discretion, but it needs to be limited. I would recommend a typical insolvency test; inability to pay debts as they become due. If we have a specific capital-depletion trigger, it should be at a level where any private-sector recapitalization is improbable.

I recommend this approach because once the trigger is pulled, the life of the banking institution is likely to be measured in days if not hours. Funders and counterparties will flee, and once one host country pulls the trigger it will be difficult for others to resist, and if a major bank is prematurely placed in resolution proceeding, the world's financial system will be plunged into uncertainty. I accept the too-late concern, but this should be allayed by the substantial debt shield that Paul proposes.

There is a special issue relating to host-country discretion. Paul suggests that the host country must have a hand on the trigger because otherwise, he writes, "Host authorities would likely be worried that the home authorities might not, in fact, pull the trigger." I would suggest perhaps the option of adopting obligations for action at the parent level as opposed to placing too many hands on what is a truly nuclear trigger.

And the third and last issue created by Paul's proposal is how will the resolution regime, and he mentioned this this morning, be established and implemented on an international basis? As a general principle, the more binding the international arrangements are, the greater the certainty that the regime will be implemented as intended. This principle will, however, need to be applied in the context of political reality. It could be best effectuated, I believe, by binding treaties, but if that is not feasible, as Paul suggests, there should be a formal written document endorsed by the regulators, central banks, and ideally by the G20 heads of state or finance ministers.

One other possible approach is a series of understandings among the key

regulators. In my view this is an inferior option as the market may assume that it is not worth the paper it is not written on. (Laughter)

Let me close with Paul's summation and endorse it. Solving the TBTF problem is definitely within reach. It is now a matter of will, and to note that Chairman Bernanke so vividly demonstrated that where there is a will and courage of conviction, there is a way. Thank you.

MR. WESSEL: Thank you, Rog. Can I ask you a little bit broader question? The tone of Paul's paper is that we're pretty much on the way in renovating bank regulation. We have a little ways to go, and we have a long way to go in regulating the non-bank parts of the financial system. Do you think that there's a risk that this all sounds good, but we're basically (a) going too far in constraining credit, or (b) making something so complicated that there's no chance it will ever work?

MR. COHEN: I actually think the package of reforms today is a relative reasonable reform. What concerns me, and I wish someone -- maybe it's Brookings, but OFC, would actually study everything that is being done on a holistic basis before you can determine your very critical question of whether there's going to be a constraint on credit. I do worry that the interaction of so many of these could produce a constraint even though no one proposal or no one reform is doing so.

MR. WESSEL: What do you think of that?

MR. TUCKER: I basically agree with that. Something that may not have been studied very much in this country is the Liikanen Report about the restricting of the banks. Whatever one thinks about its conclusions on structure, the first two-thirds of the report is a pretty careful study of all the different regulatory measures in a joined-up

way.

I think the problem with non-banks or the market's part of it is the lack of conceptual framework. There's a chart towards the beginning of my paper. The banking policies, for good or ill, are clearly informed by a sense that the problems were excess leverage, excess opacity, excess interconnectedness, excess maturity mismatch, and too-big-to-fail, and behind each of those things lies a body of analysis and economic research. There is no equivalent framework for thinking about markets policy. The most important point I think I make for policy makers in the paper is that they badly need a framework for the markets policy, and I think it has to be something to do with where trying to identify which markets are systemically relevant because the economy or financial system depends so heavily on them, and then whether the liquidity of those markets is illusory or resilient.

What we saw in the Aserback securities market and in particular the associated secured money market was everyone behaved as though these asset-backed securities were information insensitive, completely safe. But actually they flipped to be highly information sensitive very quickly, almost as soon as something went wrong.

That could have been foreseen, I believe, if policy makers and analysts and economists had had a framework for thinking about the resilience of markets as well as a framework for thinking about the resilience of firms. And I do think this is on the way. People like Ben Thomstrom and Gary Dortman and others have been talking about precisely those things.

MR. WESSEL: John? Question or comment?

MR. WILLIAMS: I was struck by the discussion around convertible debt and Paul's paper talked a lot about that and addressing too-big-to-fail. I guess the concern I always have is with these trigger points, and you talked about nuclear options and things like this is once people start worrying that this trigger may occur, you get immediately -- financial markets don't wait around to find out. They're going to run, or potentially could run, and it's just whenever I hear a discussion about convertible debt I immediately think --

MR. TUCKER: This is a very Federal Reserve point of view.

MR. COHEN: Oh, wait a minute.

MR. WESSEL: Was that a compliment?

MR. WILLIAMS: Obviously, David, it's a compliment.

MR. TUCKER: The Federal Reserve thinks that all the problems are liquidity problems.

MR. COHEN: No, wait a minute. No.

MR. TUCKER: And the liquidity problems are curable if you can sort out the solvency of the institution.

MR. WILLIAMS: Okay, but my question was --

MR. TUCKER: I want to make this interesting.

MR. WILLIAMS: Wait till you hear what I say, Paul. What's wrong with just having more equity? And Ahamed and her co-authors who've basically been pleading for the last couple of years just hold more equity, don't make it complicated, don't make it too sophisticated, just more equity and --

MR. TUCKER: Well, I mean, that's a good point, but it hasn't happened,

and the Federal Reserve nor the Bank of England argued for more equity. So, you can take what I'm describing as second best if you like, but conditional on the policy on equity that we have. Then what's to be done? And it's not quite convertible. I know you know this, but just for the audience and for those watching, this isn't convertible equity in the sense of a convertible bond. This is regular senior bonded debt which, as Rog describes, could be flipped into being equity at the discretion of the authorities.

And I think Rog raises a profoundly important point about what's the trigger, and you have a bankruptcy trigger. Mine is very similar. It would essentially be the authorities should not have the power to do this unless the institution otherwise fulfilled the criteria for going into resolutional bankruptcy. So, that's pretty -- converge between us I think.

SPEAKER: I would say that there is a big difference between equity and potentially convertible debt in terms of the cost of the funds to the bank and therefore ultimately to its customers, and so I've always been attracted to the idea of having this extra class of security which is debt that can be converted to equity when there is a critical moment where more equity is needed rather than having straight out higher equity ratios.

SPEAKER: Because why?

SPEAKER: Because of the relative costs of the --

SPEAKER: Cheaper to do the bonds than the --

SPEAKER: Cheaper to do the bonds which have a certain probability of turning into equity, but are not full-scale equity.

MR. WESSEL: A question here? Why don't you stand up so they can --

the mike --

SPEAKER: (inaudible) Clearing House --

MR. WESSEL: Wait for the - oh, The Clearing House. We didn't get to that part. (Laughter)

MR. SALTZMAN: Hi. I'm Paul Saltzman, president of The Clearing House. I'd like to follow up on Paul's comments regarding stress testing and ask both for the macroeconomists and the more regulatory-oriented folks. Is there a tension between the integrity associated with stress testing and at least some concerns that stress testing, at least as it's currently envisioned, is a little opaque, the modeling is opaque and not transparent, and the assumptions are somewhat subjective? How do you reconcile those tensions with the effectiveness of stress testing?

MR. WILLIAMS: Well, I actually agree with everything Paul said about this. I think stress testing is the most important transformative change in our supervisor approach. Is it opaque? I think actually we've tried pretty hard to make it more transparent. Is it subject -- (inaudible) subjective assumptions? Well, yes, they're subjective assumptions. I mean, you're going to do that. You're going to come up with scenarios that are based on some analysis of things, but it's awfully hard, at least today, to formally say this is the appropriate way exactly to model that.

I do think one of the very important cultural changes that we've seen in the Federal Reserve, and I'm assuming at other institutions is economists and regulators and supervisors actually talk to each other and work together and think about these issues, and we're now in the Federal Reserve using our economists to do risk modeling and analysis that's used in a supervisory process, and the economists have learned the

importance of the supervisory approach too. So, I think that yes, there's issues about the subjective and things. There's a lot of research going on at the Federal which is quite intriguing about how to properly actually frame the question of how to do stress testing and how to analyze this and think about that, so it's an area of a lot of research, but to my mind it's been a fundamental change and a positive change.

MR. FELDSTEIN: So the stress testing is a very good thing. On the other hand, when you think how complex large financial institutions are, and you think what would happen in case of economic weakness or a replay of the events of 2007, very, very hard to have any confidence in the outcome of those stress tests. So, it's important. It's got to get better over time, but it's a little frightening in terms of depending upon it. And then if you think about the application of this in the Eurozone, there are lots and lots of doubts about whether that's being done in a fair and honest and open way with respect to all of the countries.

MR. WILLIAMS: Yes, I thought that -- Rodgin -- I thought that the issue was that the banks want tell us what we need to do and we'll do those things.

SPEAKER: That's right.

MR. WILLIAMS: And the Fed is saying we don't want to do it that way because you'll just game the system like --

SPEAKER: Are the stress tests being done well, any of you?

MR. COHEN: I think in the United States they are definitely being done well. If you can just imagine how much time boards of directors alone are spending on reviewing those stress tests, yes, I think they are being done well.

But I must say to Marty's point that it is very difficult for us to sit here and

criticize the European stress tests as too weak, not sufficiently rigorous, and they are too opaque when the models the Fed is using are opaque, and if there's not a willingness to reveal the models beforehand and worry about gaming, there is a value I think in ex-post basis so there can at least be legitimacy of the models that are being used.

MR. WESSEL: Over here? Doug?

MR. ELLIOTT: I'm Doug Elliott from Brookings. And Paul, I thought you had a lot of excellent remarks. Thank you for those. One comment I do have is you expressed perhaps a preference for an accelerated legislative response rather than being so rules-based. I think that's much harder to do when you're not in a parliamentary system. With our separation of powers it's just a lot harder. But a question for you --

MR. TUCKER: I said either that or change the statutory objectives of the securities regulators so that they at least have a mandate and are held accountable for the stability of those things that fall within their jurisdiction.

MR. ELLIOTT: I think actually I was harkening back to earlier remarks you were making about rules-based versus discretion, but a question I have for you, one of the biggest concerns about this single point of entry approach that you're describing is the cross-border aspects, and some jurisdictions aren't designed with holding companies at the top. I just wonder if you could talk a little bit about how to deal with that.

MR. TUCKER: So, it's a great question, Doug. So, first of all, by an accident of history, the McFadden Act that banned interstate banking, nearly all big U.S.



banking groups, I defer to Rog, have peer holding companies. Out of bad law has come a good structure (laughter) in terms of resolution.

MR. ELLIOTT: An exception to the usual opposite direction, right?

MR. TUCKER: That is not the case elsewhere in the world. Most of the big banks in Europe and Asia don't have peer holding companies. I believe they'll need to restructure. I think this -- as I say in the paper and I said when I was in office, I think those structural reforms are at least one order of magnitude more significant than Volker, Vickers, or Liikanen, each of which can be subplots, local subplots.

The reason this matters is that what Rodgin and I are describing can sidestep an awful lot of the cross-border difficulty because say a subsidiary in Frankfurt of a U.S. bank gets into difficulty. The subsidiary doesn't need to go into resolution or liquidation in Frankfurt. Instead, the intergroup debt can be triggered so that the subsidiary gets recapitalized. There is no default. There is no event of default in the subsidiary that is ailing. Instead, all the losses are pushed to the top of the group, and the group as a whole can be dealt with by one authority.

Now this requires host authorities to then step out of the way and allow the home authority to do that. But one of the things I like about that is for the first time in living memory, this will make home and host authorities have a concrete discussion about cooperation. This isn't to do with goodwill. They will be able to find out in black and white terms whether they are prepared to enter into agreements that will allow this structure to work, and if they don't make those agreements then they will vocalize and this will play out over the next year or two, and so a debate that has bedeviled banking supervision for 30 or 40 years I believe will come to an end.

MR. WESSEL: I want to thank the panel, and I'm sorry that we don't have time for more questions, but this is the kind of conversation we want to continue with.

(Applause)