The Experts Forum

Too Big to Fail – Central Counterparties

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Dr. Craig Lewis: Good afternoon and welcome to today's The Experts Forum broadcast on www.sechistorical.org. I am Dr. Craig Lewis, Madison S. Wigginton Professor of Finance at Vanderbilt University's Owen Graduate School of Management and moderator for today's program.

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Today's broadcast is the third in a series discussing cutting edge issues at the intersection of finance, economics and regulation. I was privileged to moderate both previous broadcasts, in 2014, examining Dodd-Frank, derivatives and structured finance, and last year, discussing the impact of falling oil prices on financial reporting. Both of these programs are permanently available in The Experts Forum section under Programs in the virtual museum and archive and I recommend accessing them after this afternoon's broadcast.

Today's program will look at too big to fail, as it relates to central counterparties for derivatives. I am joined today by Christopher Culp, Patrick Parkinson and Peter Wallison.

Christopher Culp is a Senior Advisor with Compass Lexecon and an expert in structured finance, derivatives, structured insurance, credit risk and credit markets and risk management. He was a presenter in the inaugural The Experts Forum broadcast on Dodd-Frank, derivatives and structured finance.

Patrick Parkinson is a Managing Director of Promontory Financial Group and a former director of the Division of Banking Supervision and Regulation for the Federal Reserve Board. He also served as principal staff advisor to Federal Reserve Chairmen Alan Greenspan and Ben Bernanke on issues considered by the President's Working Group on Financial Markets.

Peter Wallison is the Arthur F. Burns Fellow for Financial Policy Studies at the American Enterprise Institute. He previously served as General Counsel for the U.S. Treasury Department, as White House Counsel to President Ronald Reagan and as Counsel to Vice-President Nelson Rockefeller. Welcome.

Before we begin our discussion of whether central counterparties, or CCPs, are too big to fail, I want to step into the "way back machine" and revisit the over-the-counter derivatives market as it existed at the time of the 2007-08 financial crisis.

At that time, OTC derivatives were traded in a bilateral market where participants interacted directly with one another. Counterparties set contractual terms and used a confirmation mechanism to establish that they had a legally binding contract. Because they were traded over the counter, contract clearing was not available and counterparties had to manage both the economic risk associated with the position and the credit risk of each other. The management of counterparty risk, the risk that the person or firm on the other side of the transaction fails to live up to what is contractually agreed, has two components, collateral and bilateral netting. Dealers limit counterparty risk by requiring the daily posting of variation margin or collateral that reflects mark-to-market changes in the value of the contracts. Collateral agreements typically reflect the dealer's assessment of both types of risk. Bilateral netting agreements recognize that counterparties may hold positions that offset their aggregate exposures to each other. When offsetting contracts mitigate both economic and counterparty exposure, collateral requirements can be reduced.

To put these risks into perspective, consider that in December 2008 it was reported that the credit default swap market had approximately $42 trillion in gross notional exposure, which was down from its peak of almost $60 trillion in December 2007. This $42 trillion gross notional figure reflected an aggregate net notional exposure of only $5 trillion. Taken together, the $5 trillion can be viewed as a measure of economic risk and the $42 trillion as a measure of possible counterparty risk.

Briefly, a credit default swap is a contract that transfers credit exposure from a specific reference entity or entities across market participants and in very general terms, the buyer of a CDS makes periodic payments in exchange for a positive payoff when a credit event is deemed to have occurred. This bilateral trading environment produced a highly inter-connected market that was opaque to both market participants and financial regulators. The inherent opacity allowed a number of institutions to build significant exposures to their counterparties because it was unfeasible to monitor the buildup of aggregate counterparty credit risk.

The leading example that illustrates some of these concerns with inter-connectedness is the American Insurance Group. AIG manage to sell $446 billion of credit protection at the time of the crisis. It essentially had taken unhedged long positions in the credit quality of the underlying firms through CDS contracts. When many of these firms defaulted on their bonds, AIG encountered substantial losses that not only threatened its existence but put its counterparties under significant strain as well.

Given the imminent systemic threat, AIG was bailed out to the tune of about $180 billion and prudential regulators took over the management of its operations. Based on these events, one of the primary regulatory concerns was that the failure of a large swap dealer or swap market participant could result in sequential counterparty defaults that send shockwaves through the swap market to such a degree that the ensuing contagion can become systemically important. The systemic implications of the 2007-08 financial crisis resulted in a coordinated policy response in the United States and abroad. In 2009 the G20 agreed that the standardized OTC derivatives contracts should be traded on exchanges or electronic trading platforms known as swap execution facilities, clear to central counterparties and reported to trade repositories.

To coordinate this global response, the Financial Stability Oversight Council was tasked with monitoring the progress of the implementation of these reforms. In July 2010, the U.S. Congress passed the Dodd-Frank Wall Street Reform and Consumer Protection Act, known as Dodd-Frank.

Dodd-Frank envisioned a series of reforms that would, among other things, promote the financial stability of the United States by improving accountability and transparency in the financial system. Among its requirements was Title VII, which mandates the central clearing of certain contracts that in the aggregate are deemed to have the potential to create system risk. Central clearing is a market practice that may result in significant system risk mitigation. Its function is to transfer counterparty risk previously borne by each party to the swap transaction to CCPs. CCPs are designed to reduce the likelihood that default of a large swap market participant will result in sequential counterparty defaults, and to ultimately eliminate systemic risk transmission through the swap market.

That gives us an opportunity to now kick off our panel and I'd like to begin with Chris. Could you give us a brief overview of how a CCP actually functions?

Christopher Culp: Sure, thanks for all those comments and setting the stage. I'll take a step back. If you can, imagine the central counterparty interspersing itself between what would have been otherwise two bilateral counterparties exposed to each other. If you're going to have a central counterparty that's doing that for a large amount of transactions, it had better be trustworthy and it had better be creditworthy.

For many years, central counterparties in the derivatives industry have been regarded as the gold standard or the platinum standard for risk management. Just to set the stage with some terminology, how exactly do central counterparties maintain their financial integrity, the trust of market participants and play the role that they do, and have done for so long? And, by the way, there have been numerous tests of central counterparties over the years: Drexel Burnham Lambert, Lehman, and some of this I'm sure we'll talk about AIG. The CCP system is tried and true. So, what is that system?

First, the central counterparty makes sure that it only has direct relationships and exposures to what are called clearing members. If you execute an over the counter transaction that's cleared, anything that goes into the clearinghouse has to be guaranteed by a clearing member. If a firm is not a clearing member, they have to establish a relationship with a firm that is a clearing member, and, in the event that that the non-clearing member fails to perform on a trade or fails to make a required payment, the clearing member is on the hook. So from the central counterparty standpoint, the only credit exposures that it sees are the direct exposures it has to the different clearing members.

Now of course as you'd expect, there's all sorts of requirements to be a clearing member: requirements about capital, requirements about surveillance, compliance with different types of market and clearing operational standards, risk management requirements and risk management protocols, and the list goes on and on and on. Pretty much a very conservative way of saying we're not going to have a credit relationship with you as a CCP unless we trust that you know what you're doing and you have a lot of money.

Now in addition to that, one of the most important aspects of central counterparties is the margining process. As Craig was talking about, in the early days of the swap market, the use of margin was a lot less common. It used to be back in the 90s that you had collateral and it didn't flow very much.It was really marked to market and it looked like a performance bond but it didn't look like what we call futures-style margining. The over the counter market has actually essentially picked up a lot of the market practices from futures central counterparties over the years.

So what is the margining system? First off is an initial margin requirement. That's a performance bond requirement that says you, as a clearing member, essentially have to post a bond with the central counterparty that covers, say, 99.9% of the potential simulated estimated price movements in the underlying product that you're clearing. Of course if you're doing a customer transaction, that clearing member is going to turn around and make a margin requirement demand on its non-clearing customers, and that will be at least as high if not higher – and it's usually higher – than their own corresponding margin requirement with the CCP.

That's the performance bond, but, in addition to that, we have what's called variation margin, sometimes called pay/collect. And just as pay/collect suggests, that means that at least once a day and usually twice a day all current positions in the clearinghouse are marked to their current market prices, and if you've lost money then you have to pay up that loss immediately. This has the economic effect of renegotiating the price of the transaction at least once a day and sometimes twice a day and by moving this cash around you're constantly limiting the CCP's credit exposure. Basically the CCP is only really exposed to the risk that any given clearing member can't perform on its next variation margin payment since it's collected all the way up to the last one.

The rest of the tried and true risk management system has to do with: what happens if that's not enough? There's two ways that you want to think about CCPs in the context of default. One is how default is managed, and the other is where the resources come from to cover any cost associated with default.

Default management is itself very important, and again we've seen that in excellent examples of the way CCPs have handled some of the previous large firm failures. There are a number of rules that the CCP has put in place as well as regulations, dealing with customer asset protection and customer segregated funds requirements. Default resolution and management may include identifying clearing member firms that are willing to accept the positions of customers of a failing or defaulting clearing member. If you've got a process in place in advance, you don't have to wander around and ask "Does anybody want to take these customers?" the day after a huge financial firm has failed. That would be bad, and so CCPs don't do that. They have very elaborate monitoring, surveillance, risk and default management protocols.

In addition, there's the question of the cost and the financial resources and this goes to the heart of the other aspect of the financial integrity of CCPs in addition to margin and that is capital and other financial resources. We use the term waterfall to describe the order in which certain types of losses are covered by the remaining funds of the CCP. Let's assume that you have a failure of a large bank clearing member of a large CCP and that the amount of money that they owe at the time of their failure exceeds the amount of initial margin. They get a variation margin call; they can't pay it. I won't go into the details of whether it's a customer or a proprietary account loss. Let's just assume it's not a customer problem and that the losses are on the firm's proprietary accounts.

In that case, the first thing that happens is the CCP basically takes all of the other assets of the clearing member, liquidates those and applies those to cover the remaining hole. If in that situation the clearing member still owes money, then the CCP looks to other resources. First of all, as a relatively recent change and as a result of regulation, they have to commit some of their own resources. This is a relatively small amount but it's sort of a deductible. It's like having a low deductible on an insurance policy. If it's low it has some mitigating effect from an incentive standpoint but maybe not a huge amount. Nevertheless they do have "skin in the game" and that's why sometimes people call it the "skin in the game" layer.

Now what happens if you're still in a situation where the clearing member owes money and can't pay it and now the CCPs own resources have been exhausted? And by the way just to state the obvious which maybe isn't obvious, the reason it's important that the CCP collects this money is because whatever the clearing member owed to the CCP, the CCP owed to other clearing members. And so let's remember that dollar/in dollar out, and so there are other clearing members waiting for this money, and that will be the subject of a lot of the inner-connectedness discussion we're going to have.

In any case, the last line of defense is the clearing default guarantee fund, essentially like a mutualized insurance fund where clearing members are required to prepay and prefund a certain commitment to this fund that is then available on a mutualized basis to cover any remaining losses. I should indicate when I said that the clearing member's own assets are first used to cover the loss, that includes the defaulting clearing member's own contribution to the default fund, so that's used before any mutualized losses occur.

Some central counterparties have what we call a post-loss-funded clearing default set of resources which is essentially an assessment power where the CCP has the capacity to go back to its clearing members and say, believe it or not, after all the margin and after our resources that we're required to commit, and after the whole guarantee fund has been spent, we still have unpaid bills to other clearing members. So everybody, guess what, you've got to step up and pay some more.

This system is pretty conservative, but obviously how well it works depends on a lot of variables, not just the quality of the CCP itself and the management and the risk supervisors and controllers, but also things like capital adequacy, the size of the guarantee fund and the level of the margins. But that in a nutshell is an introduction to the mechanics of how CCPs work.

Dr. Craig Lewis: Thank you Chris. Pat, could you tell us a little bit about how central clearing is designed to mitigate system risk?

Patrick Parkinson: Sure, I think it's really implicit in what Chris has just been discussing and I think the question always is, mitigates risk relative to what alternative? I think in talking about Dodd-Frank as you mentioned at the outset, it had a number of key provisions not just central counterparty claims but other very important provisions. In particular it subjected OTC derivatives dealers and also other major participants in the OTC derivatives markets to registration requirements and, among other things, capital requirements and margin requirements.

I think the real question is what is the incremental benefit in terms of system risk reduction from central counterparty clearing beyond what's already been achieved by those requirements, because clearly if you're asking are we safer or are we better off than we were in 2008 in a centrally cleared world, the answer to that is pretty clearly yes. But if you ask are we better off than in a world in which there are these requirements that all bilateral relationships be margined, that's a tougher issue.

How could it? I think the main thing again it's implicit in what Chris has been saying, and was illustrated by experience with another firm, LTCM. If you asked me what happened there I think LTCM had many counterparties, basically 15-16 global banks. They were aware obviously what their positions were with LTCM and that those positions were relatively large but they were still comfortable with those positions. What they weren't aware of or at least they claimed not to be aware of was that LTCM had similarly large positions with all the other large dealers, and then the aggregate of those positions were so large that if LTCM had been allowed to fail and they had to go out and replace those positions that would have been very costly, and I'm not sure whether that impos threat to their solvency, but it certainly would have been a very, very expensive event that might have caused a loss of confidence in those major dealers.

I think that's where a CCP can really play an important role,at least in principle and subject to lots of qualifications. Let's suppose there's a CCP and all trades are actually cleared through the CCP. It sees the aggregate positions of these individual participants, and importantly it then could take that into account in its margining procedures.

One of the disappointing things about discussions of CCP margining procedures is they really talk about the generally applicable margin requirements that are applicable to small positions in a CCP. CCPs understand that the real danger is concentrated positions because then the market is going to move against you as you try to close those up. So they have addons to those general margins and that's not very transparent. Transparent to the regulators I assume, it may or may not be transparent to the clearing members of the CCP, but if they properly structure those margin methodologies to discourage or prevent the buildup of these large aggregate positions, I think that's a very important contribution, and arguably that would be the biggest argument for why a CCP could reduce systemic risk.

The flipside of that is suppose they fail to do that, suppose they do allow a large position to build up. Now again Chris described what happens then when the margin is inadequate, their loss in excess of the amount of margin that's been posted by a particular member. They're going to have to cover those losses, because as mentioned there's a thin layer of skin in the game provided by the CCP itself, but beyond that it looks basically to its clearing members to either tap the prepaid resources in the clearing fund or even to go out and ask for additional resources. What's the problem with that? Who are those clearing members? Those clearing members of the CCPs are basically the same relatively small group of major global banks, all of whom are globally systemically important banks.

Even though we say that CCP clearing ought to reduce interconnectedness well, it's not so clear if in fact the way the losses are being met is just going back to that same small group of global banks who all are themselves systemically important. I think that's what's worrying people. I think a lot more work needs to be done studying what are the actual effects of CCP clearing as opposed to the hypothetical benefits, and interestingly and importantly, you mentioned the Financial Stability Board. They have brought together an umbrella group, a virtual alphabet soup of all the major international regulatory bodies which about a year ago created a study group that's been asked to identify, quantify and analyze interdependencies between CCPs and major financial institutions and any resulting systemic implications. I think they're essentially acknowledging there's a potentially serious fly in the ointment here and deciding belatedly, but better late than never, to take a careful look at this. That inquiry is underway and I at least look forward to hearing what they find out.

Peter Wallison: I might as well jump in at this point and talk a little bit about my view of the CCP and the mandatory clearing process. I am very skeptical about it. I actually think and for reasons I'll outline a little bit that mandatory clearing increases the possibility of systemic risk and it's something that will not be effectively mitigated by regulation, which is one of the ways I think that the question of system risk is thought to be mitigated.

I think we have to go back to why we have a mandatory clearing system. In the financial crisis in 2008 there was a lot of concern after the failure of Lehman Brothers, that there was a great deal of interconnections between these very large firms and one of the ways, in fact probably the principal way that these interconnections occurred, was people thought through credit default swaps and other kinds of contractual relationships that we're talking about here. The mandatory system was put into place in order to make sure that those interconnections were eliminated. The irony here is that after Lehman failed no one else failed as a result of being interconnected with Lehman. And so what we learned from Lehman is that these interconnections are basically a fallacy. So we did not really need to do mandatory clearing. So now we are, we're in a mandatory clearing system, is this good or is this bad?

I was interested when Chris was talking that he said that before the financial crisis, before mandatory clearing, clearinghouses were very strong financially. They had to be strong financially because that was the only way they could attract people to clear transactions through them. So they were very sure to be strong financially. When Congress was adopting the mandatory clearing system, someone alerted them to the fact that we're creating a lot of interconnections here and there's a real danger with all of these banks and others clearing through these central clearing parties that there could be a failure and a lot of other institutions that are connected to the same or even another clearing party of some kind could get into trouble and be unable to make its own payments which would be the definition of a system risk.

So what Congress did is they authorized the Financial Stability Oversight Council here in the United States to give these central clearing parties access to the Fed's discount window. Now is that good or bad? My view is that's bad because what it does is it gives clearing parties a sense that they are safer in a CCP, that is to say the CCP is ultimately protected by the government, and so we don't really have to worry about how financial stable this institution is and how strong it is. On the other hand it does something else and that is it allows, because the individual clearing parties are no longer incented to worry about the financial condition of the CCP, it gives the CCP the opportunity to waive many of the very items that were intended to make it a safe repository. For one thing they might decline to take as much initial margin as Chris was talking about, and they might not ask for the updating of margin requirements, in the case of where they might otherwise be necessary.

Why would they do that? They do that because they are competitive, they're competing with one another and one of the ways to attract more business is to reduce the costs that you are placing on the members who are clearing with you. So what we have here is a situation not unlike many situations where the government has gotten involved, and I've done a lot of work with Fannie Mae and Freddie Mac and these government-backed institutions. What happens is they are allowed because the creditors are really not worried about any institution that they see as government-backed, they're really not worried about its own capital position or the risks that it's taking. We could be in a position down the road, I'm not saying immediately, where many of these safeguards that Chris talked about are relaxed over time. The regulators either are not competent to see that they're being relaxed or they don't mind because regulating and putting these transactions through a

CCP is an attractive thing in Congress or maybe among some people in the public who are pressing to have more things put through the CCPs. It might even be the CCPs themselves that are insisting on that because it makes them more profitable.

So we get to a position where a lot of risk is in the CCPs, one of them suffers a serious loss that causes it to be unable to meet its obligations to some of the people who are expecting payments, when the payments don't arrive those institutions cannot make the payments to others that they owe, and that is the very definition of systemic risk. I'm afraid we are putting ourselves in a position where sometime in the future we are going to face the possibility of systemic risk because we set up these mandatory central clearing parties.

Christopher Culp: May I jump in, and I'm sure Pat, you are going too also about the question. I agree with a lot of what you said, and I certainly was quite opposed to and skeptical of the clearing mandate in part because the market was already well on its way towards moving toward cleared over the counter derivatives. I don't think a lot of people remember, but the first cleared swap was actually done in 1998 by, I believe, OM Group in Stockholm. Way before a mandate, you had the market already moving towards certain products being cleared. I think what you said is mandated clearing is here and so there's no point in debating that, and I realize that's not why you brought it up. You brought it up to talk about the incentive effects.

The counterpoint that I would make, while being sympathetic to some of your points, especially for certain CCPs that might perceive the mandate as an opportunity to become a new entrant in, I'll call it a "marginal jurisdiction." We'll come back to that because the issue of which CCPs are recognized in the U.S. as being good enough to deal with U.S. institutions is an important caveat to the fact that we have this clearing mandate essentially worldwide.

I've done a lot of work with the CCPs over the years, and, even though there aren't that many of them, I'll list the big ones – we've got CME Group, we've got ICE and ICE has several different clearing operations I think, and then we've got Deutsche Boerse and we've got LCH, and then we've got some in Asia. Am I forgetting any of the big ones? Those are just for derivatives. There's DTTC for securities. But just to take CME and ICE as an example, they're fierce competitors.

The fact that there's a mandate doesn't mean there's a mandate to go to one or the other, and I think that in the current environment there's a huge amount of competition that is a very important disciplining mechanism regarding things like incentives. The Fed did a study years ago and said we don't think that futures margins should be regulated – assuming you have to have them, but, unlike stocks where there's an actual regulation that dictates the level of stock margins, the Fed basically said there's a different purpose for initial margin on futures.

The essential business of the CCP is to set margin low enough that it doesn't drive business to a competing entity or over the counter product where it has to pay non-cleared margin, but high enough that it doesn't cause a loss of confidence among market participants. This I believe is one of the main arguments against having a super CCP. There was a report, I think in '90 or so that the BIS did that basically warned that although there are lots of benefits of central clearing there's all sorts of risks it imposes for clearing members, so whatever we do let's make sure we don't have just one of them.

To my knowledge, no one has proposed one CCP in the world, but if you think about it in a limiting case, there you really have no competition and it's clearly not a natural monopoly, and so that plays out all the bad stuff you were just talking about, and that's scary to me. But at the moment, although I think the regulation is creating some dangerous incentives, I agree with you that on the whole it's probably exacerbated systemic risk, but I'm not sure it's going to be because of diminished incentives to do prudential risk management the right way.

Patrick Parkinson: A couple of points, one just a factual point. There actually is one instance in which regulation has mandated a monopoly clearing house and that's in the U.S. options markets where the Options Clearing Corporation clears for all of the U.S. options markets. I won't say any more than that just that that's historical and an ongoing fact.

The second thing, I think the regulators answer to the potential race to the bottom is that CCPs have to be subject to uniform comprehensive regulation and to that end a body that I worked with for a lot of years, the Committee on Financial Market Infrastructures (CPMI) is working with IOSCO. It used to be the Committee on Payment and Settlement Systems, they've changed their name and CPMI=IOSCO sets international standards for CCPs. The purpose of that is to stop this race to the bottom, but that is not a finished product. They have issued extensive guidance, basically about how CCPs diminish their risk but they have a lot of work to do yet with respect to recovery and resolution. I think they still some work on resilience, but they clearly understand the danger of a race to the bottom in the margin process.

Last, I'd like to say something about the Fed's authority under Title VIII of Dodd-Frank to provide emergency liquidity assistance to a CCP. I think the key thing there is that should be just liquidity assistance and a member of a CCP that is counting on the Fed to absorb losses and shield them from losses is fooling itself. That shouldn't happen. Basically the Fed only lends against liquid collateral provided by the CCP, and if they don't repay it they'll seize the collateral, but the notion is basically for example you have Treasury securities and it takes you a couple of days to actually turn those Treasury securities into cash, so the Fed would basically give you this bridge liquidity loan until you are able to sell those and then repay the loan.

Christopher Culp: By the way, it surely would take a couple of days because in a scenario where that money is needed by the CCP, some huge financial institution has just failed and so it isn't going to be roses and champagne liquidating even a Treasury bill.

Patrick Parkinson: So, in any event, I think the danger is that they may perceive it that way and I think you can't rule out that risk that they think the government is going to give them more protection than they're actually going to or are actually willing to and in fact actually authorized to do. And nonetheless that they relax their vigilance and then you're relying solely on regulation to make sure that they're managed, CCPs are managed prudently, and I think we're always better off not trusting either regulation or market discipline, because after all both failed in the financial crisis, but trying to get both to be working in the same direction to help address those concerns about systemic risk.

Peter Wallison: Let me respond because these were very interesting comments. Chris mentioned that we have mandatory clearing so there's really no reason to talk about it, but we are in the midst of the beginning of a new, I might say it, Republican administration and there are a lot of people in the Republican party who don't believe and did not vote for mandatory clearing when it came through Congress.

Christopher Culp: Good point.

Peter Wallison: So we're at a beginning stage right now, it's not so settled into place that no one can imagine any other way of doing things, but I think there will be a significant number of people in Congress and elsewhere in the commentary who say it would be good idea to reevaluate this mandatory clearing idea, especially because the Fed has some obligation through the discount window to protect the CCPs, that's the real problem because as soon as people believe that the government is somehow standing behind these institutions, things change completely because then people are not so worried about making sure that the CCPs are in good financial condition.

Before the financial crisis, when it was bilateral clearing, I think Chris, you will admit that people looked very carefully and monitored the clearinghouses that they were dealing with and the clearinghouses would not take on things that they thought were too risky. All of those things to protect their own reputation – well now it's much harder for the monitoring to occur. Why would you monitor something that the Federal Reserve is backing anyway, and why would you care about where you actually clear something and if a CCP comes up with a clearing for a very risky transaction, who's going to care about that because after all you can make that deal, send it to the clearinghouse. You are no longer responsible for the obligation on that deal, the clearinghouse will pick it up as a competitive measure against other clearinghouses and that will continue because of this government backing. I think we learned through Fannie Mae and Freddie Mac and through how many bank failures that once the Federal government gets involved in something and guarantees its success in some way, we have a completely different situation, and market discipline stops.

Christopher Culp: That's the real source of the systemic risk – the race to the bottom. That's where literally only prudential regulation can stop entities from just cutting cost, because if there is a credible perception [of this occurring then] this takes us into to the title – if they're viewed as too big to fail of if they're viewed as backed by more than a liquidity facility.

I agree with Pat on the pure secured lending facility. It's critically important that the CCPs be able to make those twice-daily variation margin payments and actually do it twice daily. For no other reason it could be considered an event of default if they don't and trigger a bunch of cross-default clauses, so I'm fine with the discount window as long as it's fully collateralized with conservative haircuts and a pretty rapid repayment. But everything you just said now about the combination of the perception that discount window access creates either a bailout mechanism or a safety mechanism, whatever you want to call it. If there's a *perception* that the CCPs will be rescued, we have a real problem in that case. I think you [said it] as frighteningly as you should have. That's what the too big to fail issue is all about. I mean right now we're looking at several huge banks and people are worried that they are too big to fail. There isn't any protection in the law against what happens dealing with these banks if they do fail. The clearinghouses have now been brought into the same category. There isn't any specific agreement anywhere and no kind of mechanism for making sure that these things are protected when they fail.

Patrick Parkinson: I think the actual thrust of Dodd-Frank is they shouldn't be protected, that you have liquidity facilities both in the case of banks and the CCPs, but those are not supposed to be solvency facilities. I admit that some could get confused but in a particular case CCPs could in principle reduce risk. I think we need to be asking and studying a little bit more carefully whether in fact they're having that effect in practice because there are a lot of assumptions there that may not be met.

I think a very unfortunate thing about Dodd-Frank Title VII, the whole thing is we're stuck in this awful world at the moment (or have been stuck for the last eight years or since it's been passed) where one group in Congress says repeal it, the other says it's perfect, don't change a certain single comma, and obviously the truth lies somewhere in between. Even if I would agree we're better off with Dodd-Frank than we were being in the wild west of 2008, that doesn't mean that various important modifications to Dodd-Frank might put us in even better positions, safer position where there's economical loss to achieving safety. I could be accused of being wildly optimistic if I said that there was a hope that that kind of debate might occur in the Congress next year, but we'll see.

Christopher Culp: There is one other thing about this that's also worth keeping in mind in this historical context. We talked about Lehman. Lehman was also a success story in terms of its own relationship with central counterparties. It had a lot of voluntarily cleared swaps through LCH SwapClear, that as I understand were resolved in a very orderly manner without any loss of even anything above margin.

Patrick Parkinson: Margin more than covered it.

Christopher Culp: At the clearing membership of the other major CCPs, like the futures exchanges, customer funds were moved within two or three days. Again a textbook case. The interesting thing about this is that was before the clearing mandate and they were voluntarily submitting swaps for clearing. Now take the contrast to AIG, which is what you talked about earlier, Craig. Those were not just credit default swaps in AIG FP; they were credit default swaps on asset backed securities or ABCDSs, but what Congress chose to focus on and talk about a lot was just CDSs, credit default swaps.

Now it's not like corporate credit default swaps or single name credit default swaps or index products were off the radar. Nevertheless it's pretty much universally agreed upon. We just did this lengthy detailed with two of my colleagues (Andria van der Merwe and Bettina Stärkle)…we did this literature survey on the single name credit default swap market. There's hundreds of articles that have been written empirically studying it and virtually none of them argue that single name CDSs are an inherent source of instability or risk. Nevertheless the products that are right now subject to the clearing mandate are primarily swaps and similar products and credit default indexes.

The stuff that *didn't* get us in trouble is what's currently been forced into the clearinghouses. Why aren't ABCDSs being cleared? Well there are two reasons: one, nobody does them anymore; and, , two really I can't imagine a CCP would be comfortable assuming that risk. The margin modeling would be very technical and very difficult. The liquidity aspects if you had to actually liquidate and close out a position would be monstrous. So, I doubt any CCP would be clamoring to clear those. That's a further perversity of this whole thing – that the stuff that didn't really get us into trouble is what's subject to this clearing mandate.

Peter Wallison: All those points are really very good, Chris, but there are two things I'd like to mention here. First we have regulators involved and regulators frequently of political pressures, maybe even something called lobbying, require various things to be done when they have the power, and the regulators have the power to require things to be cleared through the CCPs that the CCPs would not take on themselves, and that's a real danger over time because if we were in a completely voluntary system, the CCPs wouldn't do it. That would have be done outside these institutions, but we're not in that anymore.

We're in a system that is controlled by the government in many important ways and they respond to political pressures of various kinds. So that would worry me quite a bit.

Other than that, the idea that before the financial crisis and before the Dodd-Frank Act clearinghouses were really strong and there was no problem after Lehman failed because the margin was there to take care of all of the counterparties. It's an argument that I've been making and that is when you have a bilateral clearing system and the clearinghouses are trying to attract business because of their financial strength that's when it would work and it did in the Lehman obligation.

Christopher Culp: I agree, there's a lot of grey area, stuff we haven't dealt with yet in Dodd-Frank. One of them is, I don't remember the exact wording but there's a provision that says regulators can dictate what must be cleared and that is implications for how it's traded too, we're not here to talk about that in detail. But technically CCPs have the right to say "that's too risky." There is the little out that gives the CCP the right to say "that's too risky; we're not comfortable with that." That leads to two questions. One is in some of the bad scenarios you're describing, would they? Are they so clambering for business that that's no longer in their vocabulary? The second one, which I think actually worries me a little bit more, is, as I recall, there's not a lot of definition about the case they have to make to the regulators or to the CFTC, to say "Well, how can we demonstrate to you that we don't like our own margin model and that's why we don't want to clear it?" To me that takes us into a scary part of regulation which is where you now have regulators regulating algorithms. And, by the way, that's exactly what the CFTC just proposed in a different context a couple of weeks ago. So, what I just described is a battle of the regulatory economists and the CCP economists debating a theoretical margin model in an uncleared, untested product, ooh – heebie jeebies.

Patrick Parkinson: To be fair, the regulators haven't been terribly aggressive in applying the clearing mandate. It is a risk in some environments, you're right. Sometimes they respond to pressures in ways that are suboptimal, but they have been very cautious thus far, and in fact for a variety of reasons including how stiff the margins are on uncleared products, there are a lot of trades that are not subject to a clearing mandate that are being cleared through the CCPs.

I think another aspect to that is that the CCPs actually, in terms of operational risk, are extremely efficient. The bilateral relationships tend to be not so much and so market participants see benefits to sort of professionalizing the whole back office operation by having it managed by a CCP.

Christopher Culp: Straight through processing, you've got documentation advantages. There definitely are some big economies of scope and scale. One thing to take us back to the too big to fail issue– we didn't talk about this, but there's a bidirectional causality it seems between if you view a big bank as too big to fail and if you view a big CCP as too big to fail. I mean it's kind one or both. I'm sorry, let me say that differently, it's kind of none or both, right.

If you believe a big bank that's a clearing member at a bunch of CCPs would itself get destroyed and taken under by the failure of a single CCP, you've already concluded that that big bank is too big to fail, it's almost a transitivity property. I didn't say that very well but you all know what I meant.

Patrick Parkinson: There are two risks, one that you might bail out a bank to avoid its failure being destabilizing one or more CCPs and you might bail out a CCP to avoid its failure being destabilizing one or more global banks, and that's where – I think I'm just saying what you said earlier.

I think there is some truth, that's just interconnectedness. Again I think that needs to be thought about more and, as I said, the FSB (better late than never) does seem to be thinking serious about it and collecting data for the first time. But that's why I think when that data comes in they have got to follow the analysis to where it logically lead to in terms of possible tweaks to the model.

Peter Wallison: We should recognize I think that if we had a problem with the big bank and we really have no mechanism now for resolving big banks, the FDIC doesn't have enough money to do it even if it had the skills. If a major bank fails we're in big trouble, but the likelihood is that if a major bank is in trouble, others are also in trouble and so the CCPs may be facing fails by a whole lot of financial institutions. That again, that is the way systemic risk is propagated, and so we have to be very careful about putting ourselves in a position where we make these interconnections legally required. That worries me quite a bit, we ought to look at this much more carefully than we have been.

Patrick Parkinson: I read some of the guidance on CCP risk management and resolution planning in particular, it's as if the CCP should be an island and it should be able to survive the collapse of the entire global banking system. I just don't think that's feasible. Obviously that just shows how important the efforts are to make sure that the banking system is resilient and that banks can fail in an orderly manner. One important aspect of which is their interconnections with CCPs and other financial market utilities in making sure that as resolving a large bank it doesn't jeopardize those key utilities and thereby jeopardize quite a few more institutions. I think they understand all these issues, they're working on them, but it remains I think still a work in progress.

Christopher Culp: One of my least favorite acronyms to come out of this FSOC world is the SIFMU: Systemically Important Financial Marketing Utility. The reason I don't like it is because of the last word, utility. There is a belief among some that they should essentially be like the old power companies– sort of a rate-regulated, we watch everything you do, and you're one step away from being a government sponsored enterprise in order to sort of make them into an island. There haven't been any real formal proposals to do that in part because not very many people think that's a good idea, because at least at the moment with the competition aspect of it. You do have to follow sort of the financial innovation benefits, the non-risk related benefits, but there's a risk that for reasons that you described Peter, that it moves in that direction which makes me even more convinced that they will exacerbate the two.

Patrick Parkinson: What you said is true of derivatives generally setting aside options and securities generally, but in the securities world the DTCC entities, the fixed income clearing corporation is the only one, at least in the United States, that's a central counterparty for government securities. National Securities Clearing Corporation is the only one for the equity and bond markets. As a practical matter if the NSCC were to get in trouble the equity markets could no longer function, because those are central limit order books, and a central limit order book can only function with a central counterparty. If for whatever reason NSCC had a serious problem, the equity markets wouldn't open and believe you me some people would think at that point something had to be done to rectify that and get that CCP up and running again. So I think you're right, once it becomes a monopoly that's a real problem that really calls for very, very conservative approaches to the regulations of those CCPs at that point.

Peter Wallison: My question unfortunately goes back to what I said at the beginning and that is it's not clear that we really had a problem to begin with. We may have created a worse problem than we had because what we know about how the market functioned before Dodd-Frank was adopted, was that it functioned pretty well. People didn't go to CCPs unless they were very confident in the financial stability of the CCPs and in the bilateral clearing system it all worked out pretty well, and when it had the biggest test that it had ever had which was Lehman Brothers, it worked.

Christopher Culp: Again the industry– when I say industry I'm talking futures, really – has had a long list of some pretty big failures. We could go down the list, [but] we don't need to because the same thing was true in each case and that is the successful resolution and the system did not blow up.

I very much agree that there's a risk that some of these mandated clearing regulations could shift us the wrong way, and especially if it creates these too big to fail perceptions that translate into muted risk management incentives. That's the essential moral hazard argument against too big to fail in the first place. Even if the top person may lose their job after the bailout, too many people are going to say "you know what, I'm not going to worry about it because Uncle Sam will come to the rescue. I have my dream of a white knight and you can't talk me out of it." It was the Fannie and Freddie issue.

Peter Wallison: Exactly. Fannie and Freddie is the poster child for exactly what happens in those situations.

Christopher Culp: The entire S&L crisis. I mean it's not like we don't know that these moral hazard issues are real.,Tthat's why I think the kind of fears you're talking about, Peter, are fears because they could happen. We do have a system of regulations that can induce (and has historically) bad risk management behavior as a result of moral hazard arising from a government guarantee. We sit around and keep our fingers crossed that doesn't happen. When Pat was at the Fed, I was a lot more comfortable, and that's not a comment on the person who's there now, but it really does depend on the bank supervision and regulation and how the supervision and regulation under these new laws and regs are being implemented down to the level of an examiner. That's a lot to rest the hopes of no moral hazard on.

Peter Wallison: That's right and it would be probably less of a concern if the system had shown itself to have failed before we put all this into effect, and that as I say didn't happen.

Patrick Parkinson: I think in terms of bilateral risk management prior to 2008, for one thing there's abundant evidence that the market infrastructure for clearing and settling OTC derivatives trades lagged far behind the growth of trading for many years and had we had a problem back then it would have been a disaster indeed. One thing I don't think it gets enough credit for is Tim Geithner really did fix a lot of those problems while he was the President of the New York Fed.

If we are going to go back and look at Title VII, I find it much easier to support the provisions relating to bilateral risk management in terms of registration, capital, margin requirements, as I think I've said again and again. I think the case for marginal benefits exceedingly cross the CCP, that's when you need to compare it relative to the post Dodd-Frank world with respect to bilateral management. That's a question that deserves some further examination but I hope that in the political climate we're in there's not just a repeal Title VII. I think that would be a mistake but I think a critical reexamination of the individual provisions of Title-VII is entirely appropriate.

Christopher Culp: One thing I'll say also that it's not just the regulations. It's the way they're written; it's the implementation. Like you mentioned earlier that I think we all thought there was a case to be made even if it wasn't completely obvious that there was room for non-cleared margin. I think very few people are of a mind that unless you're deliberately trying to force everything into a CCP that the current non-cleared margin requirements are crazy high. The law isn't the problem. It's the implementing regulation and also I think we can't forget that. The same could be said about the proposed capital charge on the clearing default guarantee contribution of banks, which puts non-banks at a nice advantage.

Patrick Parkinson: Even a point made earlier about the concentration of clearing, the fact that the clearing membership is a relatively small number of banks. Some of the things that's being done on the bank regulation side, particularly the so-called supplemental leverage ratio, are causing a number of banks to reconsider whether they want to be in the clearing business which is making it that much more concentrated and therefore it's the problem that's making the problem worse.

Dr. Craig Lewis: Great. Gentlemen, thank you so much for very insightful discussion this afternoon. We're at the end of our discussion so I want to thank Chris, Pat and Peter for the insights you've shared. The audio of today's broadcast will be available soon in the virtual museum and archive, both under Programs and in The Experts Forum section. An edited transcript will be added later.

On behalf of the SEC Historical Society, I'd like to thank FTI Consulting and Compass Lexecon for their assistance in making today's broadcast possible, and for their generous sponsorship of The Experts Forum series.

Thank you for joining us today and good afternoon.