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S. HRG. 111–802

OVER THE COUNTER DERIVATIVES REFORM AND ADDRESSING SYSTEMIC RISK

HEARING

BEFORE THE

COMMITTEE ON AGRICULTURE, NUTRITION, AND FORESTRY UNITED STATES SENATE

ONE HUNDRED ELEVENTH CONGRESS

FIRST SESSION

DECEMBER 2, 2009

Printed for the use of the
Committee on Agriculture, Nutrition, and Forestry

Available via the World Wide Web: http://www.agriculture.senate.gov

U.S. GOVERNMENT PRINTING OFFICE

62–722 PDF WASHINGTON : 2011

For sale by the Superintendent of Documents, U.S. Government Printing Office
Internet: bookstore.gpo.gov Phone: toll free (866) 512–1800; DC area (202) 512–1800
Fax: (202) 512–2104 Mail: Stop IDCC, Washington, DC 20402–0001

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OVER THE COUNTER DERIVATIVES REFORM AND ADDRESSING SYSTEMIC RISK

Wednesday, December 2, 2009

UNITED STATES SENATE,
COMMITTEE ON AGRICULTURE, NUTRITION, AND FORESTRY,
Washington, DC

The Committee met, pursuant to notice, at 9:35 a.m., in room SH–216, Hart Senate Office Building, Hon. Blanche L. Lincoln, Chairman of the Committee, presiding.

Present: Senators Lincoln, Harkin, Conrad, Stabenow, Nelson, Brown, Klobuchar, Bennet, Gillibrand, Chambliss, Lugar, Cochran, Johanns, Grassley, and Thune.

STATEMENT OF HON. BLANCHE L. LINCOLN, U.S. SENATOR FROM THE STATE OF ARKANSAS, CHAIRMAN, COMMITTEE ON AGRICULTURE, NUTRITION, AND FORESTRY

Chairman LINCOLN. The Senate Committee on Agriculture, Nutrition, and Forestry will now come to order.

As always, I want to add a special thanks to Senator Chambliss and all of my colleagues on the Committee for coming together once again in the space of 2 weeks to address issues of financial market regulatory reform. The timing of this hearing is indicative of the high priority that I and others place on the matters that we are going to address today, and it also is reflective of what I perceive as the need to resolve these issues as promptly as possible.

I welcome Secretary Geithner and our other panelists, and l look forward to hearing all of your testimonies this morning.

Since the financial crisis last fall, I have spent a considerable amount of time talking to folks in Arkansas and I have heard from people from all walks of life about how the economic downturn has impacted them. I have talked with farmers and small business owners, wage earners, people from the city and the country, single parents, people who have lost their jobs and are looking for work, and people who still have their jobs but who have been stung by the rising prices of commodities and have had to make choices about putting food on the table or gas in their tank.

What I took away from all of these conversations was that business as usual is simply not acceptable anymore. People are hurting, and we need to find answers. We also have got to rebuild the confidence of the American people and the investors out there who are our constituents.

The financial crisis has struck at the very fiber of our national identity. We are not a Nation of spendthrifts or fraudsters or sharp dealers. We did not build our reputation as the premier leader in

global financial markets by cutting corners, engaging in risky behaviors, or developing business strategies that are intended in large part to avoid the positive restraints of regulatory oversight. That is not, to put it simply, the American way.

Yet somehow, somewhere along the way, we lost our compass. In the name of financial innovation and rampant deregulation, we lost sight of the clear, certain path of hard work, honesty, and faith, as well as fair dealing upon which this Nation and our national character was built. At some point, we were pulled off track by the lure of too-good-to-be-true financial schemes and scams and the myth of too-big-to-fail financial behemoths.

We are all well aware of where this approach has gotten us. I believe it is time that we return to those fundamental characteristics of our true national identity of hard work, honesty, and fair dealing and look to them as guideposts as we go about building a new architecture for financial market regulatory reform in this country.

As I see it, our problems with the financial market meltdown of last fall stemmed primarily from two problems: inadequate Federal oversight of significant sectors of our financial system, particularly our OTC derivatives trading, combined with a failure to use existing authorities to their fullest extent. We now have the responsibility to ensure that market regulators have all the tools that they need and to charge them with the mandate to use these tools.

Let me reiterate comments I have made previously. I am not about stifling market growth, market innovation, or legitimate business activity in any way, shape, or form. Nor do I have any interest in shipping this important economic engine overseas. I have the greatest respect for the financial market engineers and participants who work in and utilize the Nation's commodities and securities markets.

That being said, I want to be very clear that a certain amount of market reengineering will be in order as a result of changes in financial market oversight. To address systemic risk and ensure fully transparent markets, we will have to speak to issues relating to the scope of mandatory clearing, the definition of "standardization," segregation of collateral, open access, enhanced capital and margin requirements, resolution authority, and conflicts of interest, just to name a few.

Some of the legislative solutions to these matters will and should result in certain changes in the way business is done. We need to expect that. The way we were doing business before took us to the edge of the cliff. Now we need to find a better way to oversee these markets so that does not happen again—to us, to our children, or to our grandchildren.

Let me also be clear on one last point, and I want to hear from every interested party on this issue. I have talked extensively about banks and hedge funds, indexers, energy companies, utilities, exchanges, clearing organizations and agencies, and all manner of commodity market participants. Their input is vital to this process. In addition, I am working with my colleagues in Congress, particularly here on this Committee, and my friend and colleague Senator Chambliss, as well as with regulators at the Fed, the Treasury, the

SEC, and the CFTC to ensure that we are coordinating these complex issues as we should.

We need to remember our overarching goal, which is increasing transparency and accountability in the Nation's financial markets. We must be mindful as we move forward with this new architecture not to create duplicative or unnecessary levels of prudential regulation. We need to strengthen our financial market oversight bodies—the SEC and the CFTC—to give them needed authority over currently opaque OTC markets, and we need to find the right balance of powers between Federal financial oversight authorities to ensure that both markets and regulators operate efficiently.

Senator Chambliss and I will be working together to produce comprehensive legislation on this issue, and we will coordinate with our colleagues on the Senate Banking Committee in the context of the larger regulatory reform legislation as we address issues that affect matters within the jurisdiction of the Agriculture Committee.

In the end, there will be no doubt in anyone's mind that all have had a fair opportunity to be heard. I recognize that is a tall order, but we will all get there. As a wise man once said, in matters of great importance such as this, failure is not an option.

Our timetable is aggressive because, as I have noted, there is an urgency to act. The American people need and deserve financial market regulatory reform. We need to ensure that we have the most open, honest, and efficient markets in the world, and we are going to settle for nothing less.

The scope of our hearing today focuses on systemic risk, particularly on clearing issues and concerns related to clearing. I look forward to hearing from our witnesses as they present their particular points of view and expertise on these matters, and I thank all of you for your participation today, both our witnesses as well as my colleagues here in the Committee.

Now I will turn to my colleague Senator Chambliss.

STATEMENT OF HON. SAXBY CHAMBLISS, U.S. SENATOR FROM THE STATE OF GEORGIA

Senator CHAMBLISS. Thank you very much, Madam Chairman, and with all the critical issues that are swirling around Capitol Hill today, I think it is safe to say that there is no more important issue than the one that we are going to be addressing. Because of the collapse of the financial markets last year, it is imperative that we take the right kind of action—which I emphasize "the right kind"—to make sure that we put tools in the hands of our regulators to allow them to be able to do the job of making sure that what did happen last year simply does not happen again. You have provided the right kind of leadership in making sure that this Committee gets all the facts that we need to try to come up with the right solution.

Secretary Geithner, it is not often that the Secretary of the Treasury is called before the Ag Committee, but you have played an integral role thus far in dealing with this issue from a reform standpoint, and from a personal perspective, I appreciate the dialogue that we have had over the last several months, and we ap-

preciate your expertise and participation in the development of the proposed legislation.

It is imperative in my mind that the Senate Ag Committee should be engaged in the development of any legislation addressing financial regulation and, more specifically, derivatives. This Committee has a responsibility to ensure that the CFTC continues to effectively carry out its duties, including any new authorities and responsibilities Congress requires in the proposed financial regulatory reform legislation.

To that end, the Department of Treasury recognized the important role of the CFTC in the proposal they submitted to Congress last August. I look forward to hearing from Secretary Geithner today as to how exactly he envisions applying these new authorities.

In our last hearing, we heard from a number of entities that use derivatives to manage risks in their everyday course of business. They were somewhat critical of Treasury's proposal requiring them to clear standardized transactions, and, Mr. Secretary, you and I have talked about that as recently as yesterday, and as I told you, we want to have a dialogue on that this morning.

Many end users have told me that this would add considerable costs that would likely be passed along to consumers or perhaps prevent their businesses from using swaps as a risk management tool altogether. These same entities were supportive of changes in increased transparency for the public, which is certainly our number one goal. They seemed perfectly willing to endure any additional administrative burden that may be presented by such reporting and recordkeeping.

Clearly, the recent past has taught us that the regulator needs more data in order to view and police the entire marketplace. But I am not sure the lesson of the recent market meltdown warrants increased cost to businesses that had little, if anything, to do with creating this situation.

It is my hope today that we will hear Secretary Geithner's rationale for requiring clearing of standardized swaps as well as how he envisions making the market more transparent. I am pleased that we will have an opportunity also to hear from a group of witnesses that help facilitate and service derivative trading, both on-exchange as well as over-the-counter transactions.

It is essential that we understand how all of you will respond to any changes Congress makes to the regulation of these markets. The last thing we want to do is lessen access to risk management or facilitators of the necessary tools.

Again, Madam Chairman, thank you for holding this hearing. The Senate and, more specifically, the Ag Committee and the Banking Committee have a difficult job to do. We have to weigh the merits of all competing viewpoints on a very complex matter and develop a solution that will allow risk management to continue while at the same time ensuring that our regulators have the authorities needed to police these markets for abuses.

I look forward to the testimony this morning.

Chairman LINCOLN. Thank you, Senator Chambliss. Welcome, Secretary Geithner.

For those who do not know, Treasury Secretary Timothy Geithner has a vast experience in the public sector. He first joined the Treasury Department in 1988, eventually leaving to spend some time as an attache at the U.S. Embassy in Tokyo, and during the Clinton years, he went back to the Treasury to focus on international affairs. In October of 2003, he was appointed President of the Federal Reserve Bank of New York at only 42 years of age—no small feat. President Obama appointed him Secretary of the U.S. Treasury in January of this year, and he has played a key role in developing the administration's financial reform proposal.

Secretary Geithner, thank you very much for appearing before the Committee today, and we welcome your testimony as well as your help and cooperation as we move forward.

STATEMENT OF HON. TIMOTHY GEITHNER, SECRETARY, U.S. DEPARTMENT OF THE TREASURY, WASHINGTON, DC

Secretary GEITHNER. Thank you, Chairman Lincoln, Ranking Member Chambliss, and members of the Committee. Thanks for giving me the chance to come before you today. I am going to focus my remarks today on a critical component of comprehensive financial reform, which is the challenge in designing a framework of oversight for the derivatives markets.

This is a $600 trillion market. These markets grew up largely on the financial frontier, without the basic protections and oversight that existed in much of the rest of the financial system. Market participants were in many ways allowed to set their own rules. The SEC and the CFTC had limited ability to police fraud and manipulation. Firms were able to write massive amounts of credit protection without capital to back up those commitments, making huge bets they were unable to cover when the recession hit. These markets operated largely in the dark, with little or no transparency.

Now, these problems did not cause the crisis, but they made the crisis much more severe, much harder to manage.

Now, in designing a set of reforms to these markets, we have attempted to achieve three broad objectives. The first is to prevent these markets from posing risk to the stability of the financial system. The second is to bring transparency to these markets. The third is to prevent manipulation, fraud, and other abuses, with greater protections for consumers and investors.

Now, the legislation we have proposed provides a comprehensive approach, and any effective reform has to include the following key elements. I want to list these briefly.

First, we need to require standardized derivatives to be cleared through well-regulated clearinghouses. Exceptions for customized derivatives should be carefully limited, with protections against evasion and with higher capital and margin requirements reflecting the greater risk.

Second, all OTC derivatives dealers and other major market participants need to be subject to tough prudential supervision and regulation, including conservative capital requirements. This is necessary to ensure that these major market participants have the resources they need to back up the commitments they make.

Third, these derivatives markets need to be made fully transparent. Standardized derivatives should be essentially cleared and

traded on exchanges or on appropriate alternative trading facilities. Derivatives that cannot be centrally cleared should be reported to a regulated trade repository on a timely basis so that supervisors and regulators have access to the information they need to do their jobs.

The fourth key element, the CFTC and the SEC need to have strong authority to police fraud, manipulation, and other abuses.

Now, it is very important to recognize that any effective framework for U.S. markets requires a level playing field internationally, so we are working very hard with our international counterparts to help ensure that a comprehensive regime in place in the U.S. is matched by similarly tough standards in other countries.

I want to emphasize also that these changes are prospective. We need to preserve legal certainty around the hundreds of thousands of contracts that now exist in this $600 trillion market.

Now, these reforms, if enacted, will force very consequential changes in these markets, so it is no surprise that you are going to hear some market participants fighting to weaken these reforms. They will work to create loopholes that will help or enable them to evade these basic protections, and I hope you will resist these pressures.

I believe, though, that because of the work of you and your colleagues, work underway in the Banking Committee, in the House Committee on Agriculture, and in the House Financial Services Committee, we now can see—we see in prospect, I think, a very good chance of a comprehensive set of sweeping reforms of these markets for the first time ever. I think we have the chance of creating more transparent, more fair, more stable markets, and I look forward to working with you in support of that objective in the coming weeks.

I just want to close by emphasizing, Chairman, what you have said. We have seen a catastrophic loss of basic faith and confidence in our financial system. It caused enormous damage to our credibility internationally and to the confidence of Americans in the basic fairness and justice of our system. It is very important that we move quickly to fix what was broken in our system.

We have a lot at stake. Much of what is good in the U.S. economy, much of what makes us still among the most resilient, most productive economies in the world, is that we had a financial system that was remarkably good at taking the savings of Americans and matching them to the ideas of someone who wanted to build a growing company and made it possible for firms to innovate and compete, to hedge complicated risks. We were in many ways among the best in the world at doing that. But we have systematic failures in our system of regulation, and we have to work very hard to fix those. We have a huge obligation to do that, and I think we need to do it quickly.

I do not think time is with us. I think the longer we wait, the harder it is going to be. The forces who will always fight reform will have better capacity to fight it because the memory of the damage caused will fade. So we need to do this carefully, and it is a complicated challenge, but I think we need to move to try to get it done.

[The prepared statement of Mr. Geithner can be found on page 91 in the appendix.]

Chairman LINCOLN. Thank you, Mr. Secretary. I would certainly reiterate those concerns that you have mentioned. I think last year the American taxpayers propped up the global economy and footed the bill for Wall Street's poor choices and the failure of Government oversight. But they still have not gotten the regulatory reform, and I have to tell you, it has not faded—not in States like Arkansas, where people have a real sense of how difficult this economy is. I would just say to you that your leadership is pivotal in helping us fix this problem, and as we move through legislation in this Committee, I would just ask that you work with us together so we can pass some strong financial regulatory reform and make sure that we can get our markets back in action and certainly our people back to work. I think that is going to be really important.

With that said, I just have a few specific questions about the administration's reform proposal.

With regard specifically to the foreign exchange transactions in the CFTC, the CFTC has commented that it has serious concerns about the exclusion for the foreign exchange swaps or the foreign exchange forwards in the administration's proposal, and that those exclusions will simply be used to evade regulation.

Frankly, given how we have seen sharp operators in derivative markets use just this kind of loophole to get around Federal regulation, I can certainly understand their concern.

I would like for you to try and explain why we should not close this loophole and simply limit or more narrowly tailor the exclusion.

Secretary GEITHNER. Well, a very important issue, and you have made the central key point, which is that there are aspects of these markets where, for very important reasons, we are going to have to have a slightly different approach. But the important thing is not to allow those carefully crafted exceptions to undermine the basic protections, to be exploited, to undermine, to become the device for evading those protections. That is the core thing. I am confident we will work this out and come to a place where the CFTC and the Fed and the Treasury together believe we have found the right balance. We are not quite there yet, but we will get there.

The FX markets are different from these, and they are not really derivatives in this sense, and they do not present the same set of risks, and there is an elaborate framework in place already, put in place starting 20 years ago, to limit settlement risk and the other sets of risk that occur. These markets have actually worked quite well.

So, like in anything, we have got a basic obligation to do no harm, to make sure as we reform we do not make things worse, and our judgment is that because of the protections that already exist in these foreign exchange markets and because they are different from derivatives, have different risks, require different solutions, we will have to have a slightly different approach. But the basic commitment I will make to you is that we are not going to allow, we would not support exceptions that would allow the potential to evade the basic protections we have put in place for the rest of the market as a whole. Again, we are working very closely with

Gary Gensler. He is doing an excellent job in this area, and I am confident that Treasury, the Fed, and the SEC will work through this problem. We will try to come to you sooner with a solution that meets all of our interests.

Chairman LINCOLN. Well, maintaining loopholes is definitely not the objective we want here, and I think we look forward to working with you.

In the context of the broader regulatory reform proposals, specifically looking at Title II with regard to the financial holding companies, and then also Title VIII, with regard to payment clearing and settlement supervision, I have questions about the terms such as "the systemically relevant institutions." Is it the intent that entities such as CME and the New York Stock Exchange, certainly systemically relevant institutions, be covered under these titles? If so, particularly with regard to the reach of Title VIII, isn't there an issue of duplicative prudential regulation? I mean, the CME and the New York Stock Exchange already have prudential regulators that oversee their clearinghouses. Do you intend that the Feds take the place of those regulators?

Secretary GEITHNER. A very important issue and thanks for giving me a chance to clarify. Let me describe the basic objective.

There are a set of institutions in our markets that today and in the future will pose unique risks to the stability of the system. We need to make sure that those institutions—these are banks, investment banks, and a limited number of other types of entities we saw, like AIG. They need to have a consolidated supervisor who is accountable for constraining risk. That is vitally important. That will help make crises less likely in the future and make it more likely the system can withstand failures that might happen when these firms screw up.

But you also have to make sure that in the markets where firms come together—in derivatives markets, in the secured lending markets, in the repo markets, we need to make sure that in those markets, where there is central clearing, where there is a change, and where there is not, we need to make sure there is a set of standards and protections in place to prevent contagion.

Now, in our system, we had two basic huge gaps that were devastating in effect. One is we let large firms operate with no effective constraints, outside the basic protections we put in place for banks, and we cannot let that happen going forward. But we also had nobody in charge and accountable with authority for making sure in those markets where firms come together which can spread contagion, make the fire spread with brutal force, there needs to be somebody in charge of setting basic standards, level playing field protections, margin, capital, the basic cushions against shocks.

So what we have proposed is to make sure that retaining the authority of the SEC and the CFTC have now over exchanges and clearinghouses, that there is level playing field, that they do not compete to lower standards to get more business away from each other. So we have proposed this to make sure that there is one entity in charge for making sure that those standards are strong enough and there is a level playing field. That is the balance we are trying to achieve. We think we can do that without creating duplicative regulation, and, again, the basic protection, if you have a

system, which we are going to preserve, where you have multiple agencies with multiple responsibilities, there needs to be a basic level playing field in place.

Chairman LINCOLN. Well, I know that those titles, particularly Title VIII and Title II, do come under some of our jurisdiction, and I still remain concerned that we do not overregulate. So, hopefully, we will work with you, and there may be some reevaluation there in terms of how we go. I just think it is important for those entities to know who their regulators are and that there is no confusion or, again, overregulation or duplicative regulation, regulatory regimes there.

Secretary GEITHNER. I completely agree, and, again, the basic objective is you do not want to have a situation where the standards are different so that the risk all migrates to where the standards are lower. There needs to be some protection against risk that regulators compete to lower standards, race to the bottom. You saw that in thrifts. You saw that in parts of the banking system, nonbanks competing with banks. You see some risk of that in these other markets, too, and so that is the thing we want to prevent. So we want to have some basic level proliferation floor on things, for example, that prevent that race to the bottom.

Chairman LINCOLN. Well, we will be glad to work with you. I am sure we can find a meeting of the minds, so thank you very much, Mr. Secretary.

Senator Chambliss.

Senator CHAMBLISS. Thank you, Madam Chairman.

Let me drill down on that issue a little bit more. You have proposed moving more transactions into a clearinghouse in order to reduce systemic risk. While this may make sense for systemically risky institutions, you are certainly aware that many end users of derivatives who are not contributing to the systemic risk do not wish to endure the expense of clearing and have asked for an exemption from any such mandate.

I recognize that oftentimes a counterparty to an end user is, in fact, a large financial institution who may be systemically risky. But these transactions are a very small percentage of the overall swaps market when compared to the swaps business occurring among large financial dealers.

Now, I understand transactions involving true end users may only account for 15 percent of the swaps market. Do we really need to force these transactions into a clearinghouse when we would already be capturing the bulk of OTC swaps currently on the books of large systemically risky institutions? If so, how does this reduce systemic risks?

Secretary GEITHNER. Senator, your colleagues in the Senate and your colleagues in the House have been working to design a carefully crafted exception for a certain class of end users that would protect their ability to hedge particular risks they face, again, without undermining the basic protection we are trying to put in place for the entire system. I am not sure we have got that balance right yet, but I think there is probably going to be a good case for some carefully crafted limited exception for non-financial end users for the reasons you said. So we would like to work with you to design that, but, again, the thing we all need to be worried about a little

bit is to make sure that those carefully designed limited exceptions for good economic reasons do not end up gutting the rest of the framework.

But I think you are right. Our focus should be on trying to make sure we are fixing the things that cause deep risk of systemic instability of collapse and still preserving the hugely economically important value of innovation in hedging. That is the balance we are trying to strike.

Senator CHAMBLISS. Yes. Well, I think we agree with you on that point, and I am curious about your thoughts on the language that is in the House bill that is currently out there. Does that in any way infringe or seek to, as you say, gut the basic bill from the standpoint of systemic risk?

Secretary GEITHNER. Senator, I think that it is going to be very important that when that bill comes out of committees—the House Financial Services or House Agriculture Committee—we need to step back a little bit and look at it in its full scope, look very carefully at these provisions, because this is enormously complicated. It is very hard to know until you look at the full thing. But, you know, we may need to tighten it up a bit. It is possible we need to tighten up a bit, because, again, the basic balance we have to strike is, you know, we protect the legitimate justification for an exception without undermining it.

I cannot tell you yet, though—and I think we cannot really tell until we have it come. We need to let the dust settle a little bit and take a look at it.

Senator CHAMBLISS. You and I have previously discussed the fact that whatever we do from an additional regulatory standpoint, we have to be very careful because if we are not careful, then what we are going to do is overregulate the U.S. markets and drive U.S. customers as well as foreign customers of U.S. institutions offshore. While you made a comment in your statement and we have talked before about the fact that there is going to be a collateral effort to secure additional regulations that are comparable from international markets, where are we there? Because I am not encouraged by some of the statements I have heard from some of our international partners on this.

Secretary GEITHNER. You are right to be concerned about seeing the details, because it is all about the details. But at the basic level of objectives and core elements of the framework, I actually think there is very broad consensus among the relevant authorities for the critical major markets. But it is all going to be in the details, and we are going to work very hard to make sure that what we do here is complemented by equally tough things internationally, because, otherwise, if we do not do that, then, you know, this stuff will just shift to where the standards are lower, and that is not something we can afford to take.

Now, just in support of your basic premise, which I completely share, at the New York Fed I helped lead a global effort that brought together, starting in 2004, the 14 largest dealers in derivatives from around the world—the United States, U.K., continental Europe, Switzerland, Japan—and their primary supervisors to get them around the table to try to begin the process of cleaning up what was a remarkably antiquated set of basic controls and protec-

tions in these markets. That process had a huge impact in getting the basic infrastructure stronger, better, more automated. It went from pen and paper and pencils and faxes for confirmation to a much more automated process for confirmation, and that is what has allowed us to be in a position now where we can basically compel the standardized part of these markets onto central clearing. That worked only because we have got the primary supervisor around the world with us setting the basic same constraints, objectives, targets on their firms, too, so that U.S. firms were not put at a disadvantage and our markets were not put at a disadvantage.

So I deeply believe in the importance of that approach, and I think we are actually in a pretty good place to achieve that. But it is all going to be in the details.

Senator CHAMBLISS. Lastly, swaps and derivatives have been around for a while, but there were new products that were created over the last several years that at least participated to a great extent in the meltdown that we saw last year. As we move forward, we want to make sure that we are putting the right kind of regulations in place to ensure that our regulators have the ability to make sure that we do not have additional products that are developed that will cause other issues down the road. It may be a little unfair to be asking you this right now, but just know that that issue is in the back of our minds and that we want to make sure that we have a level of comfort from you, from CFTC, from SEC, every other entity that has the potential to regulate these markets, that we do not overstep our bounds, but yet we do make sure that we are giving you the authority to regulate future products that may cause problems down the road.

Secretary GEITHNER. I could not agree with you more, and this is, you know—to borrow the security metaphor that the generals use in war, you cannot just make this about fighting the last war. You have to make sure you go back and close the things that were critical weaknesses in our current system, but you have to do that in a way that gives us all confidence we are going to do a better job of preventing the next crisis.

Now, it will never be perfect. No system will be perfect, and it needs to be able to adapt more quickly so it does not lag so far behind the growth in these markets. Our system lagged way behind the basic fundamental changes in the structure of these markets in derivatives and elsewhere, and the system has got to make sure it can adapt more quickly. But the basic theory, philosophy, approach underpinning our approach is to make sure that the basic shock absorbers in the system—capital and margin—are much more conservatively designed, provide much thicker cushions, shock absorbers against risk, and that the people we look at to police these markets have authority and accountability to do their jobs.

Those are two simple principles. Transparency can play a big role—it is not just about transparency, though—and I think it will give us a better chance to worry about the next crises, not just make sure we are fighting the last war.

Senator CHAMBLISS. Yes. You know, one thing that has developed in recent years is online trading. Do you see online trading as any factor in the crisis that we had last year?

Secretary GEITHNER. I do not. But that is an issue I know that Chairman Schapiro at the SEC is looking carefully at, and, again, this is a time where we have to look at everything and look at it with a skeptical eye, all the basic aspects of protection in our markets, to make sure that we are doing a better job of fixing the weaknesses. But I think she is doing an excellent job, and I am sure she would be happy to talk to you more about those risks. But I do not think they were central to this crisis.

Senator CHAMBLISS. Thank you very much.

Chairman LINCOLN. Senator Nelson.

Senator NELSON. Thank you, Madam Chairman. My compliments to you and Ranking Member Chambliss for holding these hearings and my appreciation to Secretary Geithner for your being here.

I come from an insurance background, and as a former insurance regulator and insurance commissioner, capital insolvency regulation is second nature. In the insurance business, if you make a promise, an insurance regulator is going to be standing right behind you to make sure that you can have the resources to back up that promise, particularly if an occurrence that you have insured against in fact occurs.

Recognizing that there are differences in the two markets, there are also a lot of similarities, and I look forward to working with my colleagues to get an adequate amount of capital behind derivatives contracts to control the risk the market poses to the financial system and, as we have unfortunately learned, the American taxpayer. It is one thing if the shareholder is interested in taking a risk. It is another matter altogether if that risk fails and the risk then is transferred as a cost to the taxpayer.

So I think we should do this while recognizing and preserving the benefits of the derivatives market. We should have regulation without strangulation. We need to be mindful of and work to address the input and concerns of the companies who have used the over-the-counter market as a successful hedging tool for years. We must not regulate in a vacuum. We need to consider the economic impact and the global nature of these markets as well.

It seems to me that increasing transparency, as you have indicated, in the market will help, but also getting capital behind the obligations is critical as well.

I have a question on a matter that I believe to be an area where clarity in the law is absolutely essential, and you and I have spoken about this: the issue of how reform legislation will affect existing contracts. We understand that it will be prospective for sure with future contracts, but existing contracts. I know that we need the tighter regulation to control systemic risks, but I am concerned that any uncertainty over the prospective or retroactive application would have negative consequences.

So my question is: What is the administration's view on how the various OTC derivatives reform proposals you mentioned should affect existing contracts?

Secretary GEITHNER. A critically important issue, and as I said in my opening statement, the law needs to be crystal clear that it leaves in place existing contracts, does not change their legal nature, does not add to uncertainty about the legal nature of those claims.

One exception to this is that we are proposing that for that existing stock of contracts that they be reported to trade repository, but that information reporting, recordkeeping obligation we think creates no risk to legal certainty to these contracts, but without exception, our view is that these reforms should be prospective.

Senator, can I just go into one qualification on this? We are working very hard—and I think are making a lot of progress—to try to move that existing stock of contracts onto central counterparties, and if we can do that, also, again, without taking any risk that we are going to add legal uncertainty to existing contracts. So I think we can do a lot to reduce the risks in the current stock of contracts without impinging on any legal certainty. That is our commitment. The law needs to do that carefully.

Senator NELSON. I am relieved to hear that. I think we all understand that going back and taking exception with existing contracts or trying to reform existing contracts has all kinds of both intended and unintended consequences, and I think that should definitely be avoided.

In your testimony, you mentioned the administration's proposal to extend the scope of prudential regulation to cover all financial firms whose failure could pose a threat to financial stability. Of course, we are talking about the bright-line test for systemically significant firms.

What will be the impact of this proposal on those firms that are already well managed, non-bank companies that did not contribute to the financial crisis? Can we establish this bright-line statutory test that would set forth high standards that a firm could meet to clearly demonstrate that it does not pose a systemic risk? I am more concerned about the bureaucracy taking over and applying things on a one-size-fits-all approach, which simply does not make sense. We want fairness and equity, but we also want to be able to distinguish between those situations that pose risk and those that do not pose risk as well as a level of risk that they pose.

Secretary GEITHNER. This is one of the hardest things to get right, and you described the challenge very well. We have to have a system that allows us to tell the American people, tell investors around the world, that if there is a firm that develops to the point where it has got that level of potential risk to the system because it is too leveraged or it is funded too vulnerably, does not have enough capital, vulnerable to a run, then we need to make sure that somebody is accountable for putting limits on risk taking by that firm. We will not know with certainty in advance what firms may pose that potential risk.

But, of course, it is hard to define this with a bright-line test. It is hard to know with perfect confidence in advance what type of firms might pose that risk. But our sense it is going to be a relatively limited number of firms. They are going to be financial institutions that do things we call basics of banking, and that is what we are going to focus our efforts. But this is a challenging thing. We are happy to work with you on how to do it in a way that provides the right balance of confidence to us and to the American people that we are going to have a system that is more stable without too much uncertainty from market participants about whether

they are going to be swept unfairly into the system of more conservative constraints. That is the difficulty.

If you look back, with the benefit of hindsight, you would have wanted the system to capture the major investment banks—AIG——

Senator NELSON. Absolutely.

Secretary GEITHNER. A limited number of other non-financial but financial entities. So you can go back with hindsight and say should have covered these. The challenge is to do it looking forward in a way that does not create too much uncertainty.

Senator NELSON. Isn't the most interesting point about AIG that the financial problems that it incurred were not downstream within their insurance operations, which were required to carry capital, have surplus to be able to respond to their obligations, but because of the extraordinary situation of creating within that holding company system at the top the opportunity for unleashing derivative obligations without capital to back them up?

Secretary GEITHNER. Exactly. Yes, Senator, exactly right, and it was not just AIG. It was a set of monoline insurance companies that did exactly the same thing, and the basic protections that the insurance regime is supposed to provide did not ensure that they held enough capital against those commitments. That is an important thing to fix, and that is something we can fix. I mean, this is not beyond the capacity of the U.S. Congress and your regulators to fix.

Chairman LINCOLN. Senator Harkin.

Senator HARKIN. Well, there seems to be a common theme coming through here now, and I think it is focused on those entities that would somehow be off of central trading. If we are on central trading, we have got margins. That is fine. We have the transparency and everything. You said in your written testimony, "We should also require that regulators carefully police any attempts by market participants to use spurious customization to avoid central clearing." That has been a sticking point for me for a long time. I introduced a bill last year, as you know, that would put all of this on central trading.

Well, now, we had subsequent hearings on that, and people said, well, there are certain customs, swaps that do not lend themselves to the trading floor. So I got to thinking about this, and then just hearing the questions that the two previous Senators were questioning about, it kind of comes down to this—doesn't it?—that if you are going to have some custom swaps out there that are not centrally traded, there is going to have to be regimes set up on which there are margins required, because you just said the problem with AIG is they did not have enough capital to cover the thousands and thousands of swaps that they were dealing in.

So if you are going to have a custom situation, how do you know how much capital they are going to need unless you do have a margin requirement? Is that where you are headed?

Secretary GEITHNER. Yes, so let me try it this way.

Senator HARKIN. Okay.

Secretary GEITHNER. The firms that make these commitments, whether they are for standardized products that can be centrally cleared or traded on exchanges, or whether they are for customized

products that cannot be centrally cleared or traded on exchanges, they need to hold capital, be forced to post margin against those commitments.

Now, central clearing has this great benefit because you can set margin requirements in a way to give you confidence that by concentrating risk you are not increasing risk, you are going to reduce it. But we are proposing to make sure that there are higher margin requirements and capital requirements held against positions that cannot be centrally cleared.

So if you are going to do a customized swap—and there would be very good economic reasons for doing that—they often have more complexity, harder-to-manage risk and measure the risk in that, they have to have higher-margin capital requirements against that.

If you do those two things, you will increase the incentives to centrally clear the standardized stuff, and you will reduce the systemic risk to the system of having some customized things that cannot be centrally cleared.

Now, regulators need to have the information that they can police that. You need to make sure the standards are clear so that people can evade that requirement through, as we said, spurious customization. That is the challenge.

Senator HARKIN. Yes. Mr. Secretary, I was just thinking, when you were talking about that, you talked about capital and margins. Margins, I think by their very nature, are liquid in form. Capital may be or may not be. It seems to me that AIG may have said they had a lot of capital, but it was tied up in insurance contracts and every other thing. They did not have it in liquid form to be readily available in case there was a downturn. So tell me again, how do we provide that requirement in a more liquid form rather than just saying, well, we have enough capital and our balance books show that we have capital? I mean, it may not be readily available.

Secretary GEITHNER. I agree with you. There is capital, there are reserves, and there is margin. They are not perfect substitutes for each other. You need to have all of them in place. Initial margin and the margin regime has to be more conservative. It has to capture more of the risk in extreme events than it did in our system. We did not generally have people with authorities to really police margin or to set margin across the system in that case, and we are proposing to change that.

But you are right. It is not just about capital. Capital central—I am a capital hawk in these areas. But it is about margin and the full scope of cushions we have against risk. But the principle is they need to be thick enough to capture risk, and they have to be more conservative for the more risky products, particularly for the customized.

Senator HARKIN. So are you saying that for these custom swaps that there will be margin requirements and in back of that also some capital requirements? Is that what you are saying?

Secretary GEITHNER. Yes.

Senator HARKIN. Ah. I like what I hear. Thank you very much.

Chairman LINCOLN. Senator Bennet.

Senator BENNET. Thank you, Madam Chairman. Thank you, Mr. Secretary, for being here and for your service.

We have all learned the hard way how our derivatives market has spun out of control over the last decade. It is my understanding that between 2000 and 2008 the number of outstanding over-the-counter derivatives contracts rose by 522 percent, and at the same time, as we have heard you testify here and in the Banking Committee, our regulators had little meaningful information about how these contracts were affecting the financial market and our broader economy, and now we know. You know, in this entire episode, I think, the most searing unfairness has been that our parents remain—you know, their retirement accounts are still in terrible shape, our kids remain unhired, and we, the taxpayers, had to bail out, among others, AIG. Mindful of your observation that we are not here to fight the last war, I think it is helpful for people to understand how things might have been different had these rules been in place that you are proposing 10 years ago. What effect would it have had on AIG's ability to engage in the credit default swaps that it did? Would it have ever been able to meet its margin requirements? Would our regulators have been in a stronger position to deal with it? How would the administration's plan have affected other institutions like Lehman Brothers?

Secretary GEITHNER. Excellent questions, and I think that any reform has to meet that test, which is, if you look back and replayed history, if these reforms were in place, would they have given us a reasonable prospect of limiting the damage of the crisis, and I believe they would have. Just to make it as simple as possible, it would not have been possible for AIG and a set of insurance companies to write hundreds of billions of dollars of commitments without capital to back those up. Our major investment banks would have been less leveraged, less vulnerable to runs. Those two things would have made the system less vulnerable to collapse. They would not have been sufficient, but they would have been very helpful in making the system more resilient.

It would have been much less likely—you could have had a whole bunch of non-bank finance companies compete business away from banks in the mortgage market and the consumer credit market and in the broader leveraged lending market in a way that left the system where we have put in place almost 100 years ago a set of protections to protect the economy from bank runs and bank collapse, we had a whole system emerge outside of banks without those protections. So we would have—and we would have had better tools to manage the failure of a major institution. We would have been able to let that failure happen without intervening and without putting the taxpayer at risk, and we would have been able to wind down safely and dismember safely institutions that had managed themselves to the brink failure and could not survive without the Government.

So that is the basic objective. We would have had better protection for consumers, a system strong enough to withstand the failure of large institutions, better tools to manage their failure without leaving the taxpayers exposed, and those are things we can do.

Now, we will not prevent all crises, and we want to have a system in which failure can happen. People can innovate, they can make mistakes, but they bear the consequences of those mistakes,

and we do not put the taxpayer on the hook for protecting the economy from their mistakes.

Senator BENNET. Thank you. As you know, I am on the Banking Committee, as some of my colleagues are here, and we have recently released a proposal on derivatives, and the language says the CFTC can exempt certain companies from clearing requirements if they are not "major swap participants" and their contracts are ineligible to be processed by a clearinghouse. The bill defines a major swap participant as a company "whose outstanding swaps create net counterparty credit exposures to other market participants that would expose those other market participants to significant credit losses in the event of a default."

At the same time, the legislation proposes to give the SEC and the CFTC joint rulemaking authority to further define what a major swap participant is.

I wonder if you could enlighten us about what your thinking is about how those rulemakers ought to be defining what a major swap participant is. What are the factors that they ought to consider?

Secretary GEITHNER. I do not think I can do justice to this now, Senator. I would be happy to spend some time talking to you about it. I think the broad approach that is in that bill, and I think in the language that this Committee is considering, looks very good.

Now, as I said before, this is terribly complicated, and we need to make sure we step back and look at it very carefully so we get the balance right and we are not leaving outside these protections institutions or participants that could put the system at risk in the future, and it is hard to do. But I am happy to walk through it with you, and I think the language looks pretty strong. But, again, the challenge is to make sure that these exceptions do not become the rule.

Senator BENNET. Thank you, Mr. Chairman.

Senator HARKIN. [Presiding.] Thank you, Senator Thune.

Senator THUNE. Thank you, Mr. Chairman. Mr. Secretary, thank you for being here. Our interest in this piece of this at this Committee, of course, is CFTC, and with regard to the markets, I represent agricultural producers. Corn farmers, soybean farmers, all want to manage their risk, and what they need to know is that they are going to have markets that are fair, transparent, effective, not manipulated by speculators. So that is what we all want to achieve in this and try to deal with the issue of systemic risk.

I want to ask you a couple philosophical questions with the issue of systemic risk, which we all have an interest in, and, that is, in your opinion, what types of entities represent systemic risk and should be subject to the unique oversight from regulatory agencies?

Secretary GEITHNER. Well, two broad types of entities. Let us talk about firms first. Firms that are major dealers play a critical role in credit markets generally whose stability is vital to the stability to the system, they are systemic. There is no science in defining who meets that test. It will change over time. But if they are in the business of providing credit, making markets work, central to market functioning, then they are presumptively going to be systemic when things are under acute stress.

But as I said earlier, it is not just the firms. Where risk is centralized, like in clearinghouses or sometimes exchanges, or where markets come together in the OTC markets or in repo markets, those markets, too, can be critical to the stability of the system. That is why it is important there be a level of margin so there are standards in those markets that provide better protections against contagion, against the fire spreading more quickly.

There is no bright line, though. You will never know in advance what mix of factors could make a firm or a market vulnerable to a run and whose failure might cause systemic damage. You saw in this crisis firms that were not very large—Bear Stearns, Lehman, Countrywide were not very large firms, but they played a role in these markets at a time where their failure caused a broader run on the system as a whole, and that is why it makes it hard. It is not just about size. It is more about risk. It is something you will not ever know with perfect certainty in advance.

Senator THUNE. Let me follow up with that, then. Do you believe that labeling an entity "too big to fail" implies that the Government is going to prop up those entities if they become overleveraged?

Secretary GEITHNER. Exactly, right, and I would never do that. But here is the basic challenge: Simple proposition. The riskiest firms have to be held to tougher standards, because when they fail they cause much broader damage. It is not just the shareholders that bear the costs of that damage. It is the system as a whole. So they have to be held to tougher standards. So if you are going to make that distinction between a community bank, it is less risky, better managed, and a large complex global institution, have to be held to higher standards, then you have to make that distinction. We do that now. Major globally active banks in the United States were subject to somewhat tougher standards than for other banks—not tough enough, frankly, in my view. We make that distinction now. We have to make that distinction. I think we can do that in a way that does not create the moral hazard risk you are referring to. I think we can do that.

The critical complement of that, though, is to make sure that when they manage themselves to the edge of the abyss, you can let them fail without bringing the system down. That is why we need this kind of bankruptcy regime for banks, for bank-type entities that gives us a credible capacity to let them fail without putting the taxpayers in this. So that is the balance.

But you are absolutely right. I would not ever support a regime where we created the expectation we created for Fannie and Freddie that in the end the Government would be there no matter what. I would not create that, and we have to—and I think we can avoid that.

Senator THUNE. I hope so. That is one of the questions I get probably more than anything else from constituents that I represent, is this issue of too big to fail and how can these institutions get on a level where we, the taxpayers, have to step in and support them. I want to shift gears on that note for a moment.

As I think you perhaps know, I have a bill that would end the TARP program at the end of this year, and I have noted that you have not endorsed it yet. I want to give you an opportunity to do that today. But I think it ties into this question of too big to fail,

because the TARP program now, it was designed—and many of us held our noses and voted for it because we thought it was designed to prevent imminent financial collapse. It has now sort of evolved into something more than that. It has got banks, insurance companies, auto manufacturers. I will tell you—and you have probably seen, too, news reports—my colleagues have lots of ideas about how to use unspent funds. It seems to me the best way to make sure that does not happen is to end the program.

I am interested in your thoughts on that, whether or not you are going to extend it. You have the authority to do that at the end of the year. I would like to see us end it, and I would want to see you endorse that.

Secretary GEITHNER. It may surprise you to hear me say this, but nothing would make me happier than to end this as quickly as possible. We are actually close to the point where I think we can wind down this program, stop making new commitments, and put it out of existence. We are close to that point. We are not quite there yet, and let me just explain why we are not quite there yet.

We have now brought stability back to the U.S. financial system. Banks can issue capital now, and we have forced them to raise substantial amounts of capital. We have ended the temporary guarantees we put in place to break the back of the panic. We have been able to wind down most of the emergency steps we took and you authorized, and you did the right thing in doing it. You saved the country in authorizing those steps.

But if you look at the U.S. financial system today, there are parts of it that are still very damaged. It is very hard to find a small business in America today that will tell you that they are not facing a very, very difficult time getting credit, holding onto the credit they had, getting new credit to expand their business. Housing markets are still very damaged. Commercial real estate, a huge source of ongoing pressure on our system. Community banks across the country, still under a lot of pressure.

So we have to be very careful to make sure we are not prematurely taking steps that would intensify those financial head winds, weaken the recovery, reignite the kind of pressures we saw last year. That is the balance we are trying to strike.

But I think we are at the point now where we are going to be able to return very, very substantial amounts of money to address the critical economic needs, long-term fiscal needs of this country, because we have been able to achieve stability at much, much lower expected costs than we initially envisioned back in February. You are going to see—the President and I will be making some suggestions to the Congress in the coming weeks about what to do with this program, how to end it safely, and we are getting closer to that point.

Senator THUNE. If I might, Mr. Chairman, just as a closing comment, I just think that—and I know there are some of those issues that are still out there. But it seems to me, at least, that, you know, when you start sort of veering into these other areas, and people now are describing the TARP program as a political slush fund, and taxpayers are—they did not like it in the first place. They like it even less now. You hear about it everywhere you go. Why is the Federal Government, why are my tax dollars going to

bail out these companies? You get this issue where you have the auto companies coming before the Commerce Committee here recently, and you have got 535 Members of Congress asking them about where they are going to close dealerships or where they are going to have— you know, what they are going to do with executive pay and issues like that.

It seems to me the best way to avoid that is to end this program, and any payments that come back in can go to pay the Federal debt. I——

Senator HARKIN. Excuse me. I have to cut you off. We have other Senators. The Senator is 3–1/2 minutes over, and we try to be respectful of time as much as possible. Let us go to Senator Conrad.

Senator CONRAD. I thank the Chairman and I thank Secretary Geithner for being here, and thank you for your leadership during this extraordinarily challenging time for the country. I believe what you said earlier is correct. Had we not done what we did, I believe there would have been a global financial collapse, and I believe the history of this period will demonstrate that that was the case.

Part of the reason that occurred, I will never forget being called to a meeting in the Leader's office one night, an emergency meeting, and there was the previous Secretary of the Treasury, the head of the Federal Reserve, and they were there to tell us they were taking over AIG the next day. They were not there to consult us. They were there to inform us. In no uncertain terms, they told us they believed, if they did not take these steps, that there would be not just economic wreckage here, but there would be global economic wreckage of staggering proportion. They swore us to secrecy and then gave examples of companies that would go down, and go down very quickly. It was, I think, one of the most sobering meetings I have ever attended.

So I believe that it is clear to me that we would have had a global financial collapse had we not taken the steps. However unpopular they are now, they were the right steps. Were they done perfectly? No. When people are dealing in a crisis circumstance, you do not have time to get everything exactly right. But, by and large, the decisions were critically important.

In the jurisdiction of this Committee—we have sort of gone beyond the jurisdiction of this Committee in questions from colleagues, and we understand it is a rare opportunity we have to have the Secretary of the Treasury, and so it is important for us to be able to discuss things that are beyond the scope of this Committee.

We do have a special responsibility for CFTC. Let me just say put me down as one person that is skeptical of the notion of a super regulator. I am very concerned, as a long-term member of this Committee, that we will find CFTC down at the end of a long, dark hallway somewhere at a super regulator and that the people then calling the shots would not have the kind of deep knowledge of commodity markets that are essential.

We have a different set-up in terms of what Committees have jurisdiction, what agencies have jurisdiction, for a reason, and they are good reasons, and they are reasons that have, by and large, stood the test of time. This collapse did not occur under the juris-

diction of this Committee and under the jurisdiction of, I might say, CFTC.

So what can you say to assure us that we would not find ourselves in a circumstance in which the commodity markets would be regulated by people that really do not have a deep understanding of them?

Secretary GEITHNER. Well, as you know, we have proposed to preserve the CFTC and the SEC as independent entities. We have proposed to strengthen both of the authorities they have because I think both of them need a little strong authority, not just in these markets but generally. We are committed to that. I would be very supportive of making sure they have the resources, not just the number of people but the talent they need to do that job well. We are not—I think the simplest way to say this is there are different specialized functions that we want to make individual agencies accountable for. We would not support and I would never support trying to mush those all together in one entity. You want to make sure that they are accountable for a clear set of responsibilities, have the authority to—you do not want to mix that all up, and you cannot give that to a Committee.

Senator CONRAD. Is "mush" a legislative term?

Secretary GEITHNER. It is a technical term, a financial term.

[Laughter.]

Secretary GEITHNER. But, you know, you cannot have committees supervise, you cannot have committees enforce, you cannot have committees police, you cannot have committees put out fires. You need to have clear accountability.

So the model we have proposed is to say you have strong market integrity, investor protection, anti-manipulation entities in the SEC and the CFTC; you have somebody who does consumer protection, wakes up every morning and all they care about is consumer protection, doing that better, because we need that terribly. You have a good firehouse for managing failure in the resolution authority of the FDIC. You have people doing bank supervision better, accountability for that. Somebody has to be in charge of the major systemic institutions.

Those are very different functions, and we can do that in a way that does not weaken them individually. The council we have proposed is just designed to making sure there is a level playing field. We do not have big gaps. There is not competition to erode standards. You let the system evolve over time that it is tough enough that it basically works. But it leaves the individual entities accountable.

Senator CONRAD. If I can take 30 seconds more, I would just ask—I had two prominent North Dakotans in to see me yesterday, people who are deeply involved in the Farm Credit System, both in our State and nationally, and very concerned about effects on the Farm Credit Administration of having a regulator that would sweep up their responsibilities and not be attuned to the special circumstances of farm credit markets.

What would you say to people like that?

Secretary GEITHNER. Well, I would like to hear from them and talk to you about it, because I am not aware of anything in our pro-

posals that would have that risk. If they do, then we should be able to fix that problem.

I have talked to Tom Vilsack many times about the broader challenges farmers face in the United States getting access to credit, but I have not heard from him or his colleagues on this particular concern about mushing up accountability and responsibility. But I would be happy to talk to you about it and talk to him about it.

Senator CONRAD. All right. I thank the Chair.

Chairman LINCOLN. [Presiding.] Senator Johanns has left us. He will be back, I bet. Senator Stabenow—Senator Klobuchar.

Senator KLOBUCHAR. All right. Thank you very much. Thank you, Secretary. I was thinking this hearing seems a little more pleasant than when I last saw you at the Joint Economic Committee hearing, if you remember that.

Secretary GEITHNER. All hearings are pleasant.

Senator KLOBUCHAR. It was on the House side. It just seems a little calmer here today back over in the Senate.

I wanted to focus on the issue at hand with CFTC, and I know when Chairman Gensler came last time, we discussed what needs to be done with credit default swaps and other OTC derivatives, and I would just first ask you if you believe that there is a class of OTC derivatives that poses a greater risk than other over-the-counter derivatives.

Secretary GEITHNER. You know, it is hard to say, but I do not think that—I think the risks are more similar than they are different, and I do not think you can see in any particular type of credit derivatives risks that are that unique. That is a newer market. It grew much more rapidly. It grew in a world that was much more stable, sort of untested by crises and recessions, untested by the major real estate collapse, and that is what caused the crisis more than the particular nature of those instruments. That is my sense.

Senator KLOBUCHAR. Well, as we look at these necessary regulation, what needs to be done here, I know that some points of debate that we have had is how to regulate, and, in particular, we have had some people come and talk to us about the end user definition. Who, in your view, should be treated as an end user?

Secretary GEITHNER. A limited number of non-financial companies that are using this to hedge particular risks. But——

Senator KLOBUCHAR. That would be like an airline locking in on jet fuel or——

Secretary GEITHNER. That might be one example, but there are many. I think that you have done a very good job of saying that you approach this—you do not want to listen just to New York; you do not want to listen just to Chicago. You want to listen to people that are making things and selling things across the country and listen to how to make sure you can meet their economic needs in a way that is safe and efficient. So there is a range of things to make that test, but, again, we have got to be very careful we do not create an exception that would weaken the rest of the framework.

Senator KLOBUCHAR. Exactly. But do you think there could be some accommodations made to certain end users that are in that group that you talked about?

Secretary GEITHNER. I do think there are ways to do that, but, again, I want to err on the side of caution just because, you know, this is a very technical, complicated area, and there are people who will come and say that this is a legitimate, noble exception whose interests are less noble.

Senator KLOBUCHAR. I have seen that happen before. But I do think that we are going to have to differentiate some based on what is going on and what really caused our problems before.

I am one of the sponsors of the Fraud Enforcement Recovery Act which President Obama signed into law, and I believe just from my former role as a prosecutor that it is very important to have these tools that we can use. I believe we have already seen some increase in white collar and we are going to see more.

Could you talk about what role the Treasury Department is going to play in this task force and how it will be working with CFTC's fraud enforcement efforts?

Secretary GEITHNER. I am sorry, Senator. Are you referring to the task force that the Attorney General and I announced 2 weeks ago?

Senator KLOBUCHAR. Yes.

Secretary GEITHNER. Well, thank you for drawing attention to that. We are going to try to make sure that law enforcement authorities and regulators and supervisors are working together at the Federal level and the State level, that they take a much more proactive approach to catching this stuff earlier, that we break the past pattern where enforcement authorities escalate, frankly, long after the peak of the wave of fraud that happens. We are going to try to do that by marshaling much more effectively the particular resources that we have access to at the Treasury through suspicious activity reports in particular on financial transactions that could provide early-warning indicators of widespread fraud.

So our role will be a coordinating catalytic role and making sure we are getting enforcement resources mobilized early with enough force and coordination and not the kind of negative competition we have seen sometimes that gets in the way of effective policing.

Senator KLOBUCHAR. So you are kind of going to be looking for these hot spot areas or things that you see as problems, and then you work together with the Justice Department?

Secretary GEITHNER. Exactly. I will give you one example. In March or April of this year, as we saw, the latest new wave of innovation in fraud was mortgage scams, people calling people and saying, "If you give me a lot of your money, I will help you participate in this program with the Federal Government to reduce your monthly payments." Just a classic financial scam. So we got Justice and the State AGs working together early to go after those even before the mortgage modification programs went into place. That is a good example. But we want to extend that model across consumer credit and a range of other opportunities for that. But, again, the basic thing you want to break is the late response, the fact when people start to move once the peak has already passed. We want to bring it earlier.

Senator KLOBUCHAR. Right. Could I say that I think not only putting some good regulations in place, but also that kind of early response actually makes a huge difference in the fraud area, white

collar, and could have prevented some of this. If you look at the Madoff case at the SEC, that is the most glaring example. But if you get in there early, I think it sends a message to others, and you actually can prevent wholesale problems throughout the system. So thank you.

Chairman LINCOLN. Senator Lugar.

Senator LUGAR. Thank you, Madam Chairman.

Secretary Geithner, in Indiana, most businesses, as well as citizens are not involved in business, are very pleased that the Congress is taking these projects seriously. The only mitigating factors—and these are ones you have touched upon, but I want to reiterate the question of firms that are in business, principally manufacturing, who use derivatives to execute and mitigate economic risk and claim that they are in foreign business, particularly with foreign exchange, and are concerned that the Senate banking bill offers, they believe, a scope that might include them as major users. They like the House Agriculture bill, which they feel does not have those risks.

Without your drafting either bill, is it going to be possible for the Treasury Department, you or your associates, maybe to draw up some general guidelines for those of us who are citizen amateurs at this as to which major users really we are aiming at? It could very well be that these manufacturing firms, in Indiana or elsewhere, could be engaged in practices that are not simply mitigating their particular risk of foreign exchange transactions or what have you. But, in any event, they would claim that they would have to set aside a margin that would be substantial, in the tens of millions of dollars. In this particular climate, they are saying this might affect job production, that we are going to have margins instead of jobs, which makes it a very acute political problem.

I am just wondering what kind of listing clarification guidelines can you give so those of us who finally are going to be voting on the final product rather than participating maybe in the legislation without knowing whether Madam Chairman is going to produce a bill or not—she might—so in that case, we will talk about it here, we could be better guided.

Secretary GEITHNER. I think the best thing for us to do is come to you with the CFTC together, and the Fed and the SEC, with a common recommendation. Now, we may not be able to get complete unanimity in views because, as you know, it is complicated and people have slightly different perspectives on these things. But I think we can get quite close, and I think we can help you make the choices where we do not have unanimity.

But I think you framed the objective we all share. I do not believe, Senator—all these bills are slightly different. They all have slightly different approaches to managing this risk. But I do not think there is any risk that these approaches are going to impose a level of economic costs on end users that would create the risk you said.

You know, the markets as a whole probably charged too little for these risks for too long a period of time. That is not healthy for the system because when things change, they overcorrect. That is not good for manufacturers either, or for farmers who have to hedge these risks. So I think everybody has an interest in trying to make

sure that these risks have enough margin against them that you are measuring those risks, you are paying for those risks, and that will make the system more stable.

I think the broad thrust of these reforms by encouraging central clearing should give end users, too, a better balance. But you have got the challenge right, and we would be happy to try to come to you with as close to a common position as we can across these agencies.

Senator LUGAR. That would be very helpful, and I think it could be included, just the sentence you had, that if we do not take care of risks, that ultimately it is costly to the manufacturers, in addition to the Wall Street financial firms, that this has to be a practical aspect of this.

I wanted to ask about what has been described as the potential competition between the SEC and the CFTC in which some financial commentators that you would be the referee of. Maybe you perceive that is your role and Treasury would do this, but how do we deal with an age-old problem?

Secretary GEITHNER. I do not think they really want us to be the referee, actually, is my sense. But I do think the Congress and the executive branch do have an obligation to try to make sure that the individual interests of these agencies as they see them do not produce a set of gaps or weaknesses in the system as a whole. So what we have tried to do is have a system where there is this council that would help look at the whole framework of rules to make sure they really work and there is not a bunch of competition that would erode standards. That is the balance we are trying to effect.

Now, informally, we can do a lot of things to try to make sure we work out these differences, and we have encouraged, as you know, the CFTC and the SEC to work closely together to try to bring convergence to basic rules and approaches across a set of markets where they engage together, and they are doing—both Chairmen are doing an excellent job in laying a foundation for more consistent, more convergent approaches across their various statutes. We have encouraged that, but it actually has not required a lot of intervention by us so far, and I think that is encouraging.

Senator LUGAR. Finally, let me ask a broadly philosophical question. There are many who philosophically believe that the market works and the market ought to be allowed to work. Now, this has led to a great number of brilliant people in financial circles—many are acquaintances of your own—who really, because of their brilliance, have out-thought the market, have out-thought the regulators, have out-thought the legislators.

Secretary GEITHNER. Or thought they out-thought them.

Senator LUGAR. As you say, we do not want to be fighting other wars in the past and so forth. But are you going to be able to bring about a systematic regulation here that even the most brilliant of persons beating the whole system somehow comes into focus and is regulated?

Secretary GEITHNER. Markets will innovate around any regulation. They will do it with great speed and cleverness if the returns are high to doing that and the system allows that to happen. So your system has to be able to catch up to prevent that, but it will never prevent that fully. We cannot design a system that offers the

prospect of preventing all failure or constraining innovation to the point where we live with a system that was stable, and he says, well, that would be a system none of us would want to live in.

So the theory we have tried to bring to this is to try to make sure that with capital and margin, with more conservative decisions and risk taking, you have a set of basic cushions in the system that makes it safe for innovation, safe for failure. It does not require us to have a system where Government officials are expected to anticipate and prevent any future crisis. We will never be able to do that. So you want to have a system that is more safe for ignorance, safe for failure, and the best way to do that is to make sure you have these thicker shock absorbers in the system against a broader range of foreseeable storms. That is the basic philosophy that underpins this.

Senator LUGAR. Thank you very much.

Chairman LINCOLN. Senator Gillibrand.

Senator GILLIBRAND. Thank you, Madam Chairwoman, for holding this hearing.

Thank you, Secretary Geithner, for coming to meet with our Committee and talk to us about so many important issues, and thank you for your leadership over these many months of great need.

Obviously, we have all heard from our manufacturers and energy and transportation companies about the great need for derivatives, for budgeting, hedging risk, hedging cost, and managing cash flows. I can understand that a company, you know, anywhere in America, let us say Pepsi, might need to lock in the cost of a key ingredient or may need to hedge against swings in foreign currency. However, I want to continue the line of questioning that Senator Klobuchar started, which I agree with and I think was an excellent area of focus.

Some derivatives are considered by many experts to be more dangerous instruments and would be in need of perhaps different regulation. Credit default swaps in particular—and I intend to hopefully ask Blythe Masters some questions on that, who is the leading world expert on this issue, to talk a little bit more about it. But many people, many investors, many experts have described them as having no social value. It is my understanding that clearing facilities have had to create an entirely new risk modeling paradigm from the ones used on other derivative contracts to properly insulated themselves from the CDS risk.

When you look at an instrument that has enormous binary outcome and is often used as a directional or naked bet against a company, shouldn't this be regulated in a dramatically different fashion? How do regulators set capital requirements for a book of derivatives that can go up 100 percent in the money overnight? So I do think there are—you know, you said they are more similar than different. I do not truly believe that is the case, but I would like your thoughts more specifically.

Secretary GEITHNER. All right. I am not sure I can do justice to this, but let me try it this way. Derivatives provide the capacity to hedge against all sorts of different risks: risk of a rise in interest rates; a fall in the value of the crops you are producing; a rise in the value of oil, something you have to use to produce; the risk of

failure of a major counterparty; risk of a collapse in the system. Those risks are very different; they are very diverse. All those are different. The principle has to be that capital and margin requirement are designed in a way that captures those risks.

Now, there is a lot of focus on credit derivatives, which is appropriate, because that is the market that has grown the fastest. Again, it grew up largely in a more stable world untested by the kind of collapse we saw here. It was the scene at the crime, and those present at the scene of the crime attributed a lot of source of damage. But I think the better way to think about the risk in this case is where the losses were most acute, everywhere, were in exposure people took to the real estate market or to risks that were associated with the collapse in housing, because very, very few people built in any expectation to the risk management system, how they priced risk, that actually captured the risk of the fall in housing prices we saw.

Senator GILLIBRAND. Right.

Secretary GEITHNER. That is a different kind of risk than affects risk or interest rate risk. But the principle is the risk should be captured to the greatest extent you can in the margin risk management system capital requirements against those risks.

But, of course, they are slightly different risks, but if that is the philosophy that underpins the approach across derivatives, we will have a stronger system.

Senator GILLIBRAND. But do you see a change in how you would regulate the CDS market over other derivatives?

Secretary GEITHNER. Again, I think the basic principle is standardize things——

Senator GILLIBRAND. Just because they are binary.

Secretary GEITHNER. Well, again, it means that the risk management challenges, margin capital requirements need to be different because there are slightly different risks. But the principle we are trying to bring across these markets is you want to have shock absorbers designed to capture those risks better. A simple principle is stuff that is standardized that could be centrally—should be centrally cleared because that will make the system as a whole a little less vulnerable to contagion. Instead of me having to decide what your exposure is, not just my exposure to you but your exposure to a bunch of other counterparties I have exposure to, to try to unscramble that egg in a crisis, try to sort through that bowl of spaghetti in a crisis, you can reduce those exposures to a single number of exposures to the clearinghouse. That can bring a lot of benefits to the system in terms of stability if the clearinghouse has got good margin capital requirements behind it.

Senator GILLIBRAND. Well, let me follow that up with a question about the clearinghouses. As we look at bringing large numbers of currently unregulated derivatives into central clearing, how do you decide what will be cleared in a way that does not jeopardize the current clearing system? For example, the member firms that guarantee clearinghouses do so at their own discretion, and to the extent they cannot adequately assess risk perhaps in some of these kinds of derivatives, do we risk the enormous financial backstop to the clearinghouses?

Secretary GEITHNER. We do, and that is why, as you said, when you centralize risk like that, you take it from a bilateral market where it is more dispersed and you centralize it in a central counterparty, for that to reduce risk to the system as a whole, you have got to make sure that central counterparty has the kind of financial safeguards against default by a major participant that, again, we are strong enough in very bad states of the world. That is central for this working. If you do not do that, you will make the system less stable, not more stable. You are right, doing that for credit derivatives, like all sorts of other derivatives, is a complicated task. But that is not beyond our capacity.

But it is not true to say that the world will be safer if we left this all in the bilateral over-the-counter market. We had a test of how well the system withstood that, and it was not a great experience for the system as a whole because it made the level of uncertainty and crisis much more acute, it made contagion worse, it made it much harder for anybody in the face of the storm to really understand what the risk is, and we think we can improve on that.

Senator GILLIBRAND. Thank you, Madam Chairwoman.

Chairman LINCOLN. Senator Grassley.

Senator GRASSLEY. Yes, thank you, Secretary Geithner, for being here. I am for transparency, and so whatever goes along the lines of transparency I am probably skeptical of regulation. I think you can have greater transparency without more regulation, but from this standpoint, one of the recommendations of the administration is to aggregate data of OTC trades and make them available to the public.

So this is a problem I would like to have you explain. How can you make this available to the public but at the same time safeguard information that could be used to manipulate the markets?

Secretary GEITHNER. I agree with you completely. I think that you—it is very, very hard to aggregate in a sensible way, and you want to make sure that you are giving supervisors and regulators a real window into these kind of transactions. That is a necessary thing because their authority, their ability to police fraud, to deter fraud, to go after manipulation does depend on better transparency into those transactions and firms.

The challenge for the public is a more difficult challenge, and you are right to emphasize it. I do not want to be part of a system that tries to—how should I put it?—that puts at risk the proprietary information that a firm has to husband to compete effectively in these markets. But I think we can do that.

Senator GRASSLEY. Well, are you saying that the recommendations make sure that this will not happen, or we pass a piece of legislation and it is dependent upon the people out there in the various agencies administering it?

Secretary GEITHNER. Well, I think that we may not have gotten perfect in our language, and I would be happy to work with you to make sure we respond to that concern. But I think we can design the law, the legislation in a way that ensures that regulation does not make your concern worse.

But there are two different types of transparency. I want to distinguished between access for regulators to information to allow them to do their job and greater transparency for the public that

will help make these markets work better. They are different, and we can make that distinction in a way that I think is responsive to your concerns.

Senator GRASSLEY. You think your recommendations have made that distinction?

Secretary GEITHNER. I think it has, but if it has not done it adequately, we will improve it.

Senator GRASSLEY. Okay. On another issue, your testimony includes support for a trade repository that would assist regulators. Could you expand on who and how this repository would be administered? But more importantly than that explanation is how will this be kept independent from market players?

Secretary GEITHNER. Excellent questions. Fortunately, there is a model that is actually doing this today, and the market is having more and more experience with how that is working. I think that can help provide some reassurance against the concern you have expressed that it is going to be to the advantage of a more limited number of institutions. But this is sort of set up like a utility today, a market utility today. It exists today, and I think that people have enough experience now to make sure that it is not vulnerable to the concern you raised.

Senator GRASSLEY. I am going to get to a little word called greed, and I am going to refer to some Washington Post articles that I would like to have in the record. These were a three-part series on AIG. After reading these articles, it is not clear to me that a systemic risk regulator would have prevented AIG's demise. It seems to me that AIG's failure was driven in large part by greed of certain executives. There was too much money to be made from credit default swaps.

So how do you think your concept of systemic risk regulators can police such greed if you agree with me that greed was behind it?

Secretary GEITHNER. Greed is what makes markets work and can make markets fail. It is what drives so much of what you see in markets. You are absolutely right. That is why you have to have protections in place, and we have for decades and decades and decades to constrain risk taking by institutions that perform the function of banks in our system. So it is very important that institutions like AIG, which came to play a role in markets that was critical to how the system works as a whole, that they are subject to constraints on risk taking. That is why we have capital requirements. That is why we need margin requirements.

The market itself cannot police and discipline that adequately, even where there is a dramatically better transparency. That is the basic lesson of financial crises in the United States and across countries over time, and that is why we try to have in place capital requirements that try to constrain that kind of risk taking as a basic check against the excess that you described.

Senator GRASSLEY. Thank you, Madam Chairman.

Chairman LINCOLN. Senator Grassley, your articles will be made a part of the record.

Senator GRASSLEY. Thank you very much.

[The articles can be found on pages 116, 127 and 139 in the appendix.]

Chairman LINCOLN. Senator Cochran.

Senator COCHRAN. Madam Chairman, thank you very much for convening this hearing of the Committee. Mr. Secretary, we welcome you and thank you for your service in the Government.

I am concerned about the mandatory clearing of all swap transactions, the implications that this has for end user margin requirements in particular. While more transparency may be needed, I think we must avoid overreaching and eliminating the opportunity for participants to enter contracts. Many industries utilize these markets, as you well know, to enhance profitability, but we must be aware of the impacts to all end users. Congress should not adversely affect the ability of market participants to adequately hedge risk.

My question, if there is one in that, is: What is your reaction to those comments?

Secretary GEITHNER. I agree with everything you said except your first sentence, because we are not proposing to force all derivatives onto clearinghouses or exchanges. Our proposal is to say there is a set of products that are standardized. The markets would be safer if those were centrally cleared and traded on exchanges or electronic trading platforms. But we think there is a useful role still for the capacity for people to benefit from customized hedges that cannot be centrally cleared.

We want to make sure that there is transparency into those products, that there is adequate margin and capital held against them. That will make the system safer, make sure that exception does not erode the basic protections around the rest of the system. But I think we can find the balance, and I agree with everything you said except for— and I think we are not disagreeing—that we are not proposing to ban non-standardized products, and we are not proposing, therefore, to force all products onto exchanges.

Senator COCHRAN. Well, thank you very much for helping us understand the implications of these suggested changes.

Madam Chairman, thank you.

Chairman LINCOLN. Well, Mr. Secretary, thank you so much for joining us today. We appreciate you being here, and we look forward to working with you as we move forward in solving these very complicated issues.

Secretary GEITHNER. Thank you all very much, and we look forward to working through these remaining things. We will try to come with, as I said, a somewhat closer position on these remaining issues that separate us so that you can make some choices.

Chairman LINCOLN. Great. Thank you, Mr. Secretary.

We would like to call our second panel to the table, and I want to thank them for appearing today. As you are coming to the table, I will briefly introduce our next panel.

On the panel we have Mr. Terrence Duffy, the Executive Chairman, CME Group, here with us today. Mr. Duffy has a long history with CME and has served as Executive Chairman since July of 2007. From 1981 to 2002, he was President of TDA Trading, Incorporated, and was confirmed by the U.S. Senate in 2003 as a member of the Federal Retirement Thrift Investment Board.

We also are joined by Mr. Johnathan Short today, Senior Vice President, General Counsel, and Corporate Secretary of ICE, the IntercontinentalExchange. Mr. Short oversees ICE's legal and gov-

ernment affairs in addition addressing corporate governance matters.

Also, Mr. Peter Axilrod is currently a Managing Director at the Depository Trust & Clearing Organization, or the DTCC, as it is known. Mr. Axilrod spent years working in risk management at the National Securities Clearing Corporation, one of DTCC's predecessor organizations, Fidelity Investments, and finally with the DTCC in 2000.

Having started at JPMorgan in 1991, Ms. Blythe Masters has had a long and distinguished career in the derivatives field and is currently a Managing Director and the head of Global Commodities at JPMorgan Chase, serving on the Executive Committee. She is also currently the Chair Emeritus of the SIFMA, the Securities Industry and Financial Markets Association, and the former Chair of ISDA, the International Swaps and Derivatives Association, Credit Derivatives Market Practices Committee. So welcome, Ms. Master.

Our last panelist is Mr. Okochi, the Chief Executive Officer and co-founder of Reval, a derivatives risk management and hedge accounting firm. Mr. Okochi has a long history working in the derivatives world and brings a valuable perspective to round out our panel today.

So we thank you all for your patience and appreciate having you today, and, Mr. Duffy, we will begin with your testimony.

STATEMENT OF TERRENCE DUFFY, EXECUTIVE CHAIRMAN, CME GROUP, CHICAGO, ILLINOIS

Mr. DUFFY. Well, thank you, Chairman Lincoln and Ranking Member Chambliss, for inviting me to testify today. This Committee's role in the success of U.S. futures markets should be the starting point for any discussion of the various pending bills and the importance of central counterparty clearing for OTC derivatives.

After years of intense scrutiny, this Committee concluded that U.S. futures exchanges operated in a global market and that the existing outdated regulatory system clearly puts us at a significant disadvantage to foreign competitors. This was apparent from the large shift of volume from U.S. exchanges to foreign exchanges. This Committee performed a careful cost/benefit analysis on the restrictive rules-based regulatory regime in the United States. It concluded that a competitive position of U.S. markets could be improved with no loss of safety or soundness if the CFTC acted in a true oversight right.

CFMA, or Commodity Futures Modernization Act, was put into place in 2000 and was an unqualified success so far as regulated futures markets and clearinghouses were concerned.

As has been reported to this Committee on many occasions by independent observers, CFMA encouraged U.S. futures exchanges to innovate and compete on a level playing field in the global market. U.S. futures exchanges are more efficient, more economical, and safer and sounder under the CFMA than at any time in their history. If CFMA went too far in any direction, it was with respect to the deregulation of many aspects of the OTC market, not regulated exchanges.

Last year's financial crisis has drawn substantial, well-warranted attention to the lack of regulation of OTC financial markets. A number of critical lessons were learned which should permit this Committee to craft legislation that reduces the likelihood of repetition of that near disaster. However, it is important to note two positives we are seeing throughout the recent turmoil.

First, regulated futures markets and futures clearinghouses operated flawlessly. Futures markets performed all of their essential functions without interruption and despite failures of significant financial firms. Our clearinghouse, for example, experienced no default. No customers on the futures side lost their collateral or were unable to immediately transfer positions and continue to manage their risk. Second, central counterparty clearing with proper collateralization could have prevented some of the worst losses in the OTC market.

CME's announced offering to clear credit default swaps will be an open-access platform. We employ very strict quality standards respecting the OTC derivatives we will accept for clearing. This in turn will ensure the safety and soundness of the CME clearinghouse.

The success of the regulatory regime for futures, exchanges, and clearinghouses during the worst of the crisis is clear evidence that the principles of the CFMA should be reaffirmed. Unfortunately, there is much in pending legislation that reverses the CFTC's role as an oversight agency. It creates a highly intrusive role which would impair effective exchange innovation, require substantial new staffing at the CFTC, and add hundreds of millions of dollars to the agency's budget, adding additional burden to the American taxpayer.

The agency would become the arbiter of new contracts and new rules. Principles-based regulation would be eliminated; margin setting and position limits would be politicized, impairing liquidity and efficiency. Layers of additional regulators would be added. Dual registration and regulation would operate to stifle the most important growth parts in our industry—the clearing of OTC transactions. Even the threat of such policies has already driven major customers to move business off U.S. exchanges.

We support the administration's goals to reduce systemic risk through central clearing and exchange trading of derivatives to increase data transparency and price discovery, and to prevent fraud and market manipulation. Legislation needs to accomplish the following to achieve those goals:

First, clearinghouses should be permitted to clear all categories of OTC swaps, subject to oversight by a single regulator, and the CFTC as our primary regulator should not be subordinate to the Federal Reserve or any other agency. The ability of a clearinghouse to respond immediately to swap dealer defaults must not be stayed or otherwise impaired. Customer collateral must be protected in the event of a swap dealer bankruptcy. Clearing should be encouraged to the appropriate capital charges and tailored regulation for participating in the swap market makers. Finally, the Federal Reserve should be permitted to provide a liquidity facility in the event of a market emergency.

My written testimony includes clear and concise recommendations to accomplish these goals. We look forward to working with this Committee to shape the important regulatory reform, and I thank you for this opportunity and look forward to answering your questions.

[The prepared statement of Mr. Duffy can be found on page 72 in the appendix.]

Chairman LINCOLN. Thank you, Mr. Duffy.

Mr. Short.

STATEMENT OF JOHNATHAN SHORT, SENIOR VICE PRESIDENT, GENERAL COUNSEL, AND CORPORATE SECRETARY, INTERCONTINENTALEXCHANGE (ICE), ATLANTA, GEORGIA

Mr. SHORT. Madam Chairman, Ranking Member Chambliss, I am Johnathan Short, Senior Vice President and General Counsel of the IntercontinentalExchange, Inc., or ICE. ICE very much appreciates the opportunity to appear before you today to share its views on financial market reform.

ICE has an established track record of working with market participants and regulators alike to introduce transparency and risk intermediation into OTC markets. Along with the introduction of electronic trading in OTC energy markets in 2000, ICE also pioneered clearing of OTC energy swaps in 2002, and in March of 2009 became the first clearinghouse to clear credit default swaps, having now cleared over $4 trillion in notional value.

Appropriate regulation of OTC derivatives markets is of utmost importance to the long-term health and viability of our financial system and to our broader economy. ICE has four recommendations for improvements to the proposed financial reform legislation.

First, while clearing and electronic trading of standardized swaps would be appropriate for large portions of the market, it may not be appropriate for all portions of the market.

Second, clearinghouses should have ultimate control over their risk management subject to meeting minimum safety standards. Provisions such as fungible clearing or open access could impact a clearinghouse's ability to properly manage risk.

Third, Congress should act to protect and encourage competition, and any market-wide position limits should be set by the Commodity Futures Trading Commission on a venue-neutral basis.

Fourth, Congress should adopt a flexible principles-based approach, much like what was adopted in the CFMA, in any new regulation and endeavor to avoid duplicative or overlapping regulation.

Briefly turning to each of these recommendations, mandated electronic trading and clearing may result in significant unintended consequences by attempting to force transactions that are not readily amenable to clearing into clearinghouses, or by forcing commercial market participants—including those who would rather, for a price, outsource their risk management to an OTC swaps dealer—to incur the cost and expense of trading in standardized contracts that may not perfectly fit their risk management needs. Instead of forcing all derivative transactions to be exchange traded and cleared, Congress should focus on the segments of the market where risk is greatest like the inter-dealer and major swaps par-

ticipants market. Mandating that inter-dealer and major swaps participant trades be cleared would eliminate the bilateral counterparty risk that was central to the financial crisis that occurred last year and achieve many of the risk reduction and transparency objectives that Congress is seeking. Combined with prudential regulatory oversight of the remaining bilateral risk exposure of dealers and major market participants, this proposal would strike an appropriate balance between safety and serving market end user needs.

Second, under the current regime, clearinghouses handle risk management under the supervision of their respective regulator, and ICE favors minimum standards that would avoid a proverbial race to the bottom. That said, some of the proposed bills pending before Congress could inhibit a clearinghouse's ability to properly control and manage risk. Clearinghouses have been some of the few institutions that have operated well in the financial markets during the time of crisis. However, forcing clearinghouses to take contracts from other clearinghouses or to provide margin offsets with other clearinghouses could present significant systemic risk issues, making it more difficult to track positions and counterparty risk exposure, and creating significant problems in the event of a default of a major market participant. In this regard, interconnected clearinghouses might not have been very different from interconnected banks, with problems in one clearinghouse impacting other clearinghouses.

Third, competition. Every financial reform proposal pending before Congress gives the CFTC the authority to set aggregate position limits across all markets—that is, exchanges, OTC venues, and foreign boards of trade offering contracts linked to a domestic market. Should such limits be deemed to be desirable, Congress and the CFTC should be careful to protect competition. Some proposals pending before Congress would require exchanges to set position limits based upon the relative size of their market share, allowing an exchange with a large percentage of the market to have higher position limits than an exchange with a smaller market share. Such provisions would only work to limit competition by inhibiting the development of the liquidity necessary to run an efficient market. This would be contrary to the CFTC's statutory mandate to promote competition among exchanges.

Fourth, and finally, appropriate regulation. Regulation should be principles based and flexible to accommodate future changes in the derivatives markets. ICE believes that a broad set of core principles governing markets would allow domestic and foreign regulators to work toward the goal of protecting market integrity and reducing systemic risk on a global basis in financial markets that span jurisdictions. Congress should endeavor to avoid overlapping and duplicative regulation and should work towards a common set of principles that would apply to all markets.

Madam Chairman, thank you for the opportunity to share our views with you today, and I would be happy to answer any questions.

[The prepared statement of Mr. Short can be found on page 107 in the appendix.]

Chairman LINCOLN. Thank you, Mr. Short.

Mr. Axilrod.

STATEMENT OF PETER AXILROD, MANAGING DIRECTOR, THE DEPOSITORY TRUST & CLEARING ORGANIZATION (DTCC), NEW YORK, NEW YORK

Mr. AXILROD. Chairman Lincoln, Ranking Member Chambliss, and members of the Committee, thank you for having me. I currently oversee DTCC's OTC derivatives services, and, by the way, we are the unnamed utility to which Secretary Geithner referred, and more on that later.

We broadly support the administration's proposal regarding reform of the OTC derivatives markets. In the area of regulated repositories, however, our experience to date leads us to conclude that the administration's initial proposal does not go far enough and could have serious unintended consequences in the area of systemic risk. I will get to those in a minute.

DTCC is a market-neutral, member-owned cooperative which is the primary clearance and settlement infrastructure for the U.S. capital markets. Last year, DTCC settled about $1.88 quadrillion in securities transactions across multiple asset classes. As the central counterparty for the U.S. Government and mortgage-backed securities markets, as well as the U.S. equities and corporate and municipal debt markets, DTCC proved its value during the last year's global financial crisis as it guaranteed and was able to liquidate over half a trillion dollars of Lehman's open trading positions in these markets without giving rise to market disruption or loss and avoiding any burden on taxpayers.

In addition, DTCC operates the only central repository for the global credit default swap market. This repository currently maintains and centrally services nearly all CDS contracts traded worldwide, whether cleared or not. This, by the way, largely resulted from the activities of the group of international regulators that Mr. Geithner sort of led while he was President of the New York Fed.

With respect to the central question before this Committee—that is, reform of the OTC derivatives market and reducing systemic risk—our suggestion is simple: Require a single central repository of transaction data for each OTC derivatives asset class; that is, one for credit derivatives, one for rates derivatives, one for equities, and so on.

While the administration's initial proposal would ensure that all transactions are reported somewhere, which is a huge step forward, the potentially fragmented nature of the reporting could seriously erode market safety and soundness. The legislation should mandate that all transactions in any class, whether cleared through a central counterparty or not, be reported to a single central repository. Why? The collapse of Lehman Brothers and the bailout of AIG provide adequate examples.

In the case of the Lehman collapse, there was false speculation of payouts required on credit default swaps written on Lehman rising to the $400 billion level. In fact, by having all contracts on Lehman registered in our repository, we were quickly able to assure regulators and the market that while $72 billion in contracts were actually written on Lehman, there was only a maximum of $6 bil-

lion in exposure; and, in fact, net payouts on these contracts were $5.2 billion.

The important point here is that if the credit default swaps on Lehman were spread throughout multiple repositories and central counterparties, or CCPs, and not centrally reported, the aggregate exposure from Lehman could have been reported, misleadingly and probably inaccurately, to be as high as $72 billion depending on the distribution of transactions among the reporting entities. Misleading reporting on CDS exposures, during times of market stress or otherwise, should not be acceptable.

As a result of this experience, by the way, and at the urging of the Federal Reserve, DTCC began publishing aggregate data on CDS activity on our website, including aggregate exposures to the top 1,000 names traded worldwide.

With respect to AIG, the salient point for this hearing is that the AIG bailout might have been avoided altogether had, one, an adequate regulatory structure been in place for systemically important firms; two, position reporting to a single central repository been mandatory at the time AIG's positions were taken; and, three, excessive AIG exposure was flagged by the repository to the relevant regulators early on.

Here again it should be emphasized that the position reporting would have had to be centralized to be effective. If the AIG positions were spread across multiple CCPs and trade repositories, very possibly nothing would have been flagged to regulators because no single entity would have been in a position to recognize the magnitude of the exposure.

In light of these considerations, DTCC suggests that there should be one central repository for asset class globally. This is the situation that exists, finally, in the global credit default swap market, and we should not go backwards.

Thank you for having me, and I am happy to answer any questions.

[The prepared statement of Mr. Axilrod can be found on page 55 in the appendix.]

Chairman LINCOLN. Thank you, Mr. Axilrod.

Ms. Masters.

STATEMENT OF BLYTHE MASTERS, MANAGING DIRECTOR AND HEAD OF GLOBAL COMMODITIES GROUP, JPMORGAN CHASE & CO., NEW YORK, NEW YORK

Ms. MASTERS. Chairman Lincoln, Ranking Member Chambliss, and members of the Committee, thanks for having me to testify today. I appreciate the opportunity.

JPMorgan believes that reform of the regulatory framework for over-the-counter derivatives markets is necessary. The experience with OTC derivatives during the financial crisis highlighted at least three major issues that will be addressed, by and large, completely by the proposed reforms currently under consideration: lack of transparency in the market; excessive interconnectedness amongst major financial institutions; and the absence of a systemic risk regulator to intervene in the event of excessive risk taking by underregulated, but systemically relevant, companies, such as AIG.

There is a welcome degree of consensus among market participants and regulators about what needs to be fixed. As the Committee considers the detail of these reforms, it is critical for legislation to recognize the essential role that derivative markets play in helping companies across the Nation hedge their risks and thereby gain access to the credit necessary for economic growth and job creation.

Two of the key legislative proposals to reform the market are clearing and exchange trading requirements, and while we agree with the need for clearing and for improved transparency, in these particular areas we believe that some elements of the proposals will have significant unintended consequences on U.S. companies' ability to transact in these markets.

Let me turn first to clearing. Clearing of OTC derivatives transactions through regulated clearinghouses provides critical stability benefits to the global financial system and should be mandated; however, that mandate must take into account two important facts: first, not all OTC market participants are capable of clearing; and, second, not all OTC derivatives are capable of being cleared.

In making determinations about clearing, we should ask two questions: Who has to clear? What should be cleared? JPMorgan believes that clearing should be required amongst dealers and major swap participants—that is, those systemically important institutions whose failure could destabilize the financial system and, thus, threaten our economy.

Most U.S. companies are commercial end users that need OTC derivatives but do not pose systemic risk to the financial system. While there is no benefit to be gained from requiring them to clear, U.S. companies, as they have testified, will incur a significant cost if that is required. We believe they should be exempted from this requirement.

Nonetheless, there have been arguments made that these entities still should be required to clear because the credit risk from their derivatives transactions, in the aggregate, could imperil the dealers with whom they transact. Those arguments are wrong; they misstate the size and the nature of the risk. For example, JPMorgan's aggregate derivatives-related credit risk to non-financial entities as of the fourth quarter of 2008 was approximately $59 billion. Our Tier 1 capital as of that time was approximately $120 billion, twice the size of our exposure. To put our derivatives credit risk in context, our total loan exposure at that time was $745 billion. Derivatives credit risk is qualitatively the same as loan credit risk. We make loans to companies, and using the same credit analysis, we provide risk management products to companies. Both are forms of lending and are essential to U.S. companies and to the U.S. economy.

There have also been proposals suggesting that end users be required to clear and that the requisite collateral would be lent to them by banks under margin financing arrangements. As discussed by companies at a hearing before this Committee just 2 weeks ago, these arguments ignore the balance sheet impact that margin loans would have on end users as well as the costs of such loans, not to mention the fact that the net amount of credit risk in the system would not be reduced as a consequence.

As for what has to be cleared, we believe that the focus should not be on defining "standardized" transactions which will always be challenging and will always be subject to arbitrage. Rather, we believe that the focus should be on maximizing each dealer's and each major swap participant's cleared exposure. This would address the interconnectedness between these entities that cause systemic risk. Specifically, we propose that the prudential and derivative regulators together determine the appropriate percentage that should be cleared by asset class and according to that asset class and the clearability of the product.

Let me turn to trade execution. Many are of the opinion that we oppose a requirement to trade on exchanges because of our profit motive. Nothing could be further from the truth. We oppose it because it will harm our ability to manage risk and it will harm end users' ability to transact in these markets. Mandatory exchange trading would require dealers to post their risk positions through the central limit order book operated by an exchange. Posting large or longer-term risk—that is, the kind of risk that arises in OTC derivatives transactions and the kind of risk for which there is not a natural pool of liquidity on exchange—would alert the rest of the market to a dealer's position and would move the market against that dealer, making it much more risky to execute its transaction. The result would be fewer transactions executed for end users and at higher cost.

The primary reason used to justify a mandatory exchange-trading requirement is transparency. While we support efforts to increase transparency, that cannot be the only goal. The policy objective should be a well-functioning market for risk management measured by transparency but also liquidity, volatility, transaction costs, and other factors. It does not benefit market participants to have complete transparency when the result is a poorly functioning market, which is the inevitable result of mandating exchange trading for products which do not lend themselves to being traded on exchanges.

Another important point is that OTC derivative markets are extremely competitive. There are 15 to 20 dealers at any given time competing fiercely primarily on the basis of price. That pricing information is already accessible to all market participants through electronic screens and pricing services that are widely available through trade information warehouses, through brokerage firms that provide execution services to end users, and even through daily newspapers and websites. In fact, both the Wall Street Journal and the Financial Times publish daily pricing information for OTC derivatives. Simply puts, the facts do not support the rationale for mandating exchange trading of OTC derivatives.

In conclusion, JPMorgan is committed to working with Congress, regulator, and other market participants to create a 21st century regulatory framework for OTC derivatives. To that end, we support comprehensive regulation of dealers and major swap participants. We support reporting requirements for all transactions. We support mandatory clearing requirements for dealers and for major swap participants who have significant outstanding exposures. We support end-of-day position reporting to the public of the aggregate positions of dealers and major swap participants. As always, we be-

lieve regulators should have access to whatever information they need at any time and in any form.

Thank you, Chairman Lincoln and Ranking Member Chambliss. I appreciate the opportunity to testify and look forward to your questions.

[The prepared statement of Ms. Masters can be found on page 97 in the appendix.]

Chairman LINCOLN. Thank you, Ms. Masters.

Mr. Okochi.

STATEMENT OF JIRO OKOCHI, CHIEF EXECUTIVE OFFICER, REVAL.COM, INC., NEW YORK, NEW YORK

Mr. OKOCHI. Good morning, Chairman Lincoln, Ranking Member Chambliss, and members of the Committee. Thank you for the opportunity to testify today on the topic of the OTC derivative reform.

My name is Jiro Okochi, and I am the CEO and co-founder of Reval. We provide web-based solutions that help over 375 companies better handle their use of derivatives to hedge business risks. We help our clients with risk management and specialize in accounting for derivatives under U.S. GAAP and international financial reporting standards. Our clients range from the Fortune 10 with thousands of derivatives down to the middle market company with just a handful of OTC derivatives.

As I may be the last person to testify representing end users, I would like to take this opportunity to state that non-financial corporations using OTC derivatives to hedge specific business risks were not the cause of the recent financial crisis, and every consideration should be given to this class of users so that they are not penalized for using OTC derivatives properly.

While a majority of our clients understand the need for better regulation of the OTC derivatives market, there are three areas of concern for corporate end users of derivatives:

Standardization of OTC derivative contracts could result in mismatches between the terms of the derivative and the specific terms of the business risk they are trying to hedge, resulting in improper hedging results. Standardization may also result in failing the hedge effectiveness testing requirements around derivative accounting under U.S. GAAP, called FAS 133. As a result of failing these tests, additional P&L volatility could arise.

The reform may also lead to higher costs to hedge. There is a concern that the pending legislation will result in fewer swap dealers and, therefore, less competition as smaller dealers and foreign dealers may find the new regulations too onerous to comply. Furthermore, additional capital and margining requirements for swap dealers will ultimately be passed on to the end user, resulting in a higher cost to enter into these transactions.

The third major concern is margin requirements are costly to provide as well as to maintain. Companies will either have to raise cash, which would impact their balance sheets and potentially their credit ratings, or their liquidity would be impacted as most companies invest in highly liquid securities that could be sold at any time instead of being held and tied up in a margin account. Furthermore, the cost to maintain and post daily margin would be new in terms of systems and people for most companies.

Some of the legislation to date has indeed exempted non-swap dealers and non-major swap participants from having to clear their OTC derivatives and to post capital and margin. However, it is our concern that if swap dealers will be required to post capital and margin against all uncleared trades, then ultimately the swap dealers may in turn require their end users to post margin to them, defeating the purpose of allowing exemptions for margin posting by end users.

With these points in mind, I would like to make the following suggestions which will not only benefit the end users of OTC derivatives, but hopefully help in the long-term success of implementing the reform.

Swaps sold to end users by swap dealers should also be exempt from margining and additional capital to avoid the likelihood that these costs and margining to the swap dealers will then be passed on to end users.

It appears there is a need to narrow the scope of who may benefit from any exemptions from requirements to like margining. One approach may be by defining the term "swap end user." Companies that hedge have specific risk management policies that clearly state they do not use OTC derivatives to speculate and also are required to define their hedging strategies and their use of derivatives in handling U.S. GAAP. This policy could be used as one of the cornerstones to define a swap end user.

Certain non-event-related transactions pose minimal risk to the system, so I hope the Committee will not only include the exemption for foreign exchange forwards and swaps outlined in other proposals, but will also consider exemptions for single currency interest rate swaps and commodity swaps less than 12 months.

Finally, I would like to reiterate and clarify that our clients understand the need for the regulation of the OTC derivatives market. Our clients feel that, given their relatively limited and simple use of OTC derivatives, the current legislative proposals to have regulated trade repositories would go a long way towards alleviating systemic risks, provide much better transparency, and address the business conduct issues outlined in the current reform proposals.

Despite some of the negative perceptions around OTC derivatives, corporate end users are able to lower their capital costs, raise profit margins, which is not only beneficial to shareholders but also to consumers, who otherwise would have unhedged costs and risks passed on to them instead of them being intermediated to swap dealers.

I look forward to addressing any questions from the Committee, and thank you for the honor of testifying today.

[The prepared statement of Mr. Okochi can be found on page 102 in the appendix.]

Chairman LINCOLN. Thank you, Mr. Okochi. I will begin my questions, and then turn it over to Senator Chambliss.

Mr. Duffy, it has been proposed that clearinghouses should be the decisionmaker in determining what types of contracts can and, therefore, should be cleared. Just a couple questions on that. What are your standards for determining whether a transaction is clear-

able? Do you think there is a role for Federal regulators in that process?

Mr. DUFFY. Well, first, I do believe that the exchanges should be the ones, the clearinghouses should be the ones to decide what they are going to accept into their clearinghouses and not the regulators, as proposed by some of the regulation. We have the deep domain expertise of clearing and risk management. You look at some of the standards that we are going to apply, we are not going to accept customized type OTC transactions, only standardized.

Now, the big question that has been raised here today, What is standardized? Nobody has actually defined what is standardized, and it is very difficult to do.

Senator, you and I can make a trade and just because we did it, we decide it is standardized. But, unfortunately, Senator Chambliss is not quite sure what we did, so he does not know how to participate in that. So it is customized.

So it is a very difficult process. So what we are going to do in turn is look to see where we have highly liquid, index-type, over-the-counter transactions and credit default swaps and other OTC contracts that we believe that we can risk-manage. We also own a company at the CME called CMA, Credit Market Analytics, who gets a lot of information on pricing OTC contracts.

So if we cannot risk-manage a product properly, we will not accept it for clearing.

Chairman LINCOLN. Mr. Axilrod, your organization has got long experience in providing clearing and settlement services in the OTC marketplace. Certainly we think your expertise is helpful in the context of our hearing today. Maybe you could comment on issues related to segregation of swaps margin. Several market participants have noted that they believe such a requirement is not necessary. However, I note that this is an indispensable part of the financial responsibility regime under commodities law.

Should we require clearinghouses and counterparties to segregate their swap margin funds? How important is segregation of the initial and the variation margin in mitigating the counterparty and the systemic risk?

Mr. AXILROD. Well, I guess I would like to respond just to clarify what the argument is and what motivated this. As everybody knows, when a lot of hedge funds lost a lot of money because they had margin sort of at Lehman, unsegregated, and they had a very difficult time getting it back from Lehman when Lehman went under, this is a controversial topic, to say the least.

Chairman LINCOLN. There are a few of them in this basket we are dealing with.

Mr. AXILROD. I guess from DTCC's point of view, I would sort of like to demur. We do not have a company view on what the best solution is for the market. I do think that any solution that is finally adopted by the market ought to be able to assure non-defaulting counterparties that they get their margin back in the event that the counter—excess margin back in the event that their counterparty defaults.

I am not sure that I can tell you that—segregation certainly does that. I am not sure I can tell you that is the only way of doing it. But I can tell you that it ought to be the case that your excess mar-

gin, your initial margin should not be at risk if your counterparty defaults.

Chairman LINCOLN. So you are not exactly endorsing that, but you are saying it is one way or there are——

Mr. AXILROD. That is one way of accomplishing this. I have not done a detailed study of all the potential ways.

Chairman LINCOLN. So you do not really have a recommendation of how we achieve that ability to——

Mr. AXILROD. Not right now.

Chairman LINCOLN. Mr. Short, you made several points regarding the position limits and the open-access issues. The CFTC is considering position limits on various energy commodities and has been reaching out to persons in the energy industry and the trading world. It is my understanding that it will issue a proposed rule later this year on those limits.

Are you comfortable with how that process has been handled? Do you support or oppose position limits generally? What should we keep in mind as we put forward regulatory reform in that regard?

Mr. SHORT. I think the CFTC has done a good job in hearing from all parts of the market about whether position limits should be imposed. I think position limits are widely misunderstood, in all candor. I mean, position limits have traditionally been used to prevent delivery squeezes and market corners, and I think what is being proposed now is to use position limits to limit the overall level of speculative activity in markets.

I think that is somewhat problematic in that I do not think there have been any studies that have really shown that speculation has driven markets, at least in the energy markets, and you have a lot of market participants like index funds, for example, that are widely misunderstood. These are passive investors in markets. They have actually been shown to lessen volatility in markets. If you impose position limits on those types of market participants or dealers, you could have—we are afraid of dislocation in markets. Basically those people would be forced to go to the opaque OTC bilateral markets where they might have to pay to get exposure to a given derivative or commodity.

Chairman LINCOLN. Well, in——

Mr. AXILROD. Can I add a little bit, if that is okay?

Chairman LINCOLN. Sure.

Mr. AXILROD. One thing I would just note is that with multiple exchanges, multiple trading platforms, and multiple clearinghouses, position limits simply are not going to be effective, again, without a central place where all the positions are reported.

Chairman LINCOLN. Mr. Short, in regard to that open-access issue, how would you suggest that we best design our regulatory reform architecture to benefit consumers? Do you have any recommendations there?

Mr. SHORT. To benefit consumers? I mean, we are definitely incented to take in trades from a variety of venues. I think our point is that that decision should be left—is best left to the clearinghouse. But something like a legal mandate, you know, we would oppose. We would note that there is no legal mandate in the futures world right now, and if we are saying that a lot of these

swaps are the economic equivalent of futures, I do not see why they would be treated differently.

Chairman LINCOLN. Ms. Masters, you discussed in your testimony an interesting idea that I want to explore, a ratio of non-cleared to cleared trades that could be used to drive the OTC transactions to clearinghouses and exchanges. First of all, I am glad you are thinking about outside the box. That is a good thing. We always need that. A regulator, I think, in your plan would allow the swap dealers and the major swap participants to have a certain small percentage of their trades to be customized or non-cleared.

How would the dealer determine which of those trades to move through a clearing solution? In your plan, what regulator would set the ratio and how would they set it?

Ms. MASTERS. In terms of the question of who would set the ratio first, our thought is that it would need to be a combination of the relevant derivatives regulator, so either CFTC or SEC as appropriate, and the prudential regulator for the relevant entity in question, so a banking regulator if it was a bank.

The reason for believing that both those regulators have a role to play is that the value judgment that is required there needs to take into account factors that are both specific to the entity in question, how leveraged they are, what systemic risks they create, as well as the characteristics of the products and activities themselves, and, hence, the role for both regulators.

The question around how one would decide what to clear or not to clear I think under this framework is simplified a lot. The reason for making this suggestion is that as we have tried to come up with words to describe what is a standardized versus a non-standardized contract, we immediately realized that even if you had that wonderful "Aha" moment—which has not yet happened, I might add— shortly thereafter the markets would evolve and products would change, and the perfect definition on day one would have no longer served the purpose.

Furthermore, even if you take a very simple contract like a swap, you can break it into two pieces, neither of which are simple, which add up to one simple total and then have a rationale for not clearing either of those two sub-transactions, if you will. So the opportunity for regulatory arbitrage is, frankly, gigantic.

We think it is a waste of regulators' time and market participants' time and legislators' time to try to come up with that definition if an alternative can be found. So by setting percentage targets, our view is that the combination of dealers working with service providers in the clearinghouse sector would be incentivized to maximize that which they clear in order to meet those targets, and by definition, they would clear those things which, as you have heard, are most liquid and which most naturally lend themselves to being cleared and would, therefore, be most likely to be accepted for clearing by the clearinghouses.

I think that is a symbiotic approach. I think it leaves the dealers' and the clearinghouses' and the regulators' incentives all aligned rather than in conflict; whereas, the prior suggestion that we attempt to define "standardized" in some sense actually I think leave all sorts of conflicts of interest out there that are not in anybody's best interest.

So I think the other advantage of the suggestion is that percentage target can vary by asset class. For example, if you take the credit derivatives asset class, there are a far lower proportion of corporate end users, almost none, in that asset class than, for example, in the commodities asset class where corporate end users are much more active. So a higher percentage would be applicable and appropriate in credit derivatives than perhaps in commodity derivatives.

So you could tailor the approach based on the regulators' knowledge of the product—hence, the role for the SEC and the CFTC—and the prudential regulators' understanding of the risks created by the individual entity in question.

Chairman LINCOLN. Thank you.

Senator Chambliss.

Senator CHAMBLISS. Let me ask all of you to comment on the issue of speculation. Do we need speculators in the marketplace? What is going to happen to the market if we overregulate speculators?

Mr. Duffy.

Mr. DUFFY. Well, Senator, there is no question that if we did not have a composition of speculators in the market, we would not have a market. So the simple answer is, yes, we do need to have them. If we restrict them, they have alternatives to where they can go outside of the United States, and they are doing that by example after example.

Deutschebank's large commodity index that they had when their no-action letter was revoked by the CFTC is basically now coming off regulated exchanges. They are trading their corn, wheat, soybeans, and other products. They are going to reconstitute in Europe, and so there are examples such as that.

If you start to get liquidity to move overseas, I assure you liquidity follows liquidity. There are no barriers to entry from the United States into Europe or from Europe into the U.S., and, conversely, with Asia also.

U.S. Oil is another prime example. U.S. Oil was asked to ratchet down their regulated positions on the New York Mercantile Exchange. They are reconstituting their funds to trade in the Brent market in London outside of the reach of the United States. There is no question there are multiple, multiple examples of how, if you take speculators out of the marketplace, they are going to find the ability to get access to these types of markets.

Senator CHAMBLISS. Has the movement by Deutschebank been dictated by what is going on with respect to this legislation?

Mr. DUFFY. Not with respect to this legislation. It was with respect to the CFTC revoking their no-action letter, basically not allowing them to carry the positions in the agricultural products at the Chicago Board of Trade.

Senator CHAMBLISS. Mr. Short.

Mr. SHORT. I agree with much of what—well, basically all of what Mr. Duffy just said. I think speculators are an important part of any market. They have largely been, I think, improperly demonized in the last year with a lot of wild allegations about the effects of speculation in markets, and I just do not think the facts, you

know, shore up those statements suggesting that speculators were the major problem here.

Senator CHAMBLISS. Mr. Axilrod.

Mr. AXILROD. I am in broad agreement with my two colleagues. I would just point out generally the more liquid markets are, the better, especially in the basic capital-raising markets. You want very liquid secondary markets. Trying to define speculation and hold them out of the market is going to reduce liquidity. It may turn out to be a necessary evil, but I think they need to be there.

Senator CHAMBLISS. Ms. Masters.

Ms. MASTERS. It is important to ask the question, you know, why you would want to exclude investors or speculators from these markets. I have seen no credible evidence that supports the argument that speculators or investors were responsible for the high commodity prices that occurred during the summer of 2008. Those high prices were entirely supported by factors of supply and demand. If you want to in the long run depress commodity prices, you need to have policies that impact the supply of and demand for those commodities, or prices will continue to rise.

With respect to the negative impact of withdrawing the presence of investors from these markets, ultimately the people who will pay the consequence for that will again be the man on the street because the end user, the producer, the consumer, will no longer be able to use these markets effectively to hedge their exposures because they will not be able to find the other sides of the trades that presently investors provide for them.

We should remember that investors in these markets are as likely to be short as they are to be long. They tend to position themselves as a function of their view and their expectations, and typically when prices rise, they will start to sell, and vice versa. So they can be a strong stabilizing effect in markets. By removing their ability to access markets, you will end up with less liquidity, more activity in unregulated markets, and more activity outside the United States.

Mr. SHORT. Could I just add one point there? One other thing that I think has not been largely explored is the price discovery or price signaling effects of markets. These markets do send important price signals, and when we talk about the United States becoming energy independent and developing alternative energy, et cetera, you know, some of these signals that are being sent out 2 years down the road, I mean, these are important things that, say, an alternative energy company would need to prove in order to get an alternative project financed. Eliminating speculators from the market is, in my view, the equivalent of kind of sticking our head in the sand. We may not like, you know, what the thermometer is saying, but ultimately it is probably accurate about what the market thinks the future will look like. I think that is very important information for Government and business to have.

Mr. OKOCHI. I would like to comment that, you know, again, corporate end users of derivatives are not speculating. They are not paid to speculate. Their bonuses are not tied to, you know, profitability against derivative hedges.

I would agree with Ms. Masters that while the end users are not necessarily always happy about some of the speculation that goes

on in one direction, they need that other side of the marketplace to provide that liquidity. You know, sometimes these investors are right and sometimes they are wrong, but, you know, corporate end users are used to having both sides of the market and require that.

Senator CHAMBLISS. So, Ms. Masters, if we require—or if we exempt end users from having to clear contracts, does that mean that all speculators' contracts would be cleared?

Ms. MASTERS. The way the current proposals address this question of who is and who is not a systemic entity or a major swap participant is to look at the amount of open positions they hold and whether, if they were to fail, that would have systemic consequences for their counterparties with knock-on implications in the economy.

I think that is an appropriate definition, and I think that under that definition, a number of investors who maintain large open positions might be captured. Others that do not maintain systemically relevant size positions would not be captured. It would depend on the nature of their activity, and I think that is appropriate.

Senator CHAMBLISS. Mr. Duffy and Mr. Short, could you discuss how certain trading activities have moved away from the exchange to the over-the-counter space due to concerns CFTC may soon modify the manner in which exchange-traded positions are limited?

Mr. DUFFY. Well, I will go back to my earlier statement, Senator. With the Commission making innuendos that they are going to limit participants, participants need to get exposure to these particular markets, and they are going to get it. Every major dealer has access to the European market. Every major dealer has access to the Asian market. They do not need to worry about just being here in the United States. There are markets being started up every day. I made an example earlier about Deutschebank fleeing out of the U.S. into European commodity indexes. The Paris exchange today trades 10,000 contracts each and every day of corn. If in fact, the liquidity starts to garner higher and higher numbers, that will make it very, very difficult for the people who need to manage risk in this country, our farmers that rely on the Chicago Board of Trade's prices, to manage risk. They will be beholden to what the price is on the Paris exchange to do their transactions to manage risk. I think that is a big issue. Anytime you limit participants, it is a bad idea. The more participants, the better.

I obviously agree with Ms. Masters. Liquidity is king, and if you do not have the liquidity in the marketplace, the cost of doing business goes up significantly, so every participant is critical. So to limit that would be a huge mistake.

Mr. SHORT. I agree with what Mr. Duffy just said. We had a similar experience with the U.S. Natural Gas Fund and U.S. Oil Fund in terms of moving off of our U.K.-regulated market, which has screen-based access to the United States and is subject to the same position limit regime as Mr. Duffy's market, as well as our regulated significant price discovery markets on our OTC platform. We are not sure the benefit that was achieved from making these index investors, which, when you step back and look at it, these are an aggregation of individual investors, pension funds, et cetera, people who just want some exposure to commodities to move them

into the OTC bilateral market. It seems to us that as passive investors, they should have been able to maintain these larger positions in our markets.

Senator CHAMBLISS. Mr. Axilrod, do you believe that central repository data collection disseminated to the regulators and then made available to the public in aggregate form provides sufficient transparency? Or do we also need public reporting of positions as they occur through execution on an exchange or an alternative execution facility, as the administration has suggested?

Mr. AXILROD. I think in terms of systemic risk, reporting of positions to a repository or aggregating this so someone can see the entire exposure of a particular firm is probably adequate. I think to have the general public know a little bit more about position taking as it is happening is probably a good thing.

I think one thing I would emphasize is it might be good for regulators to know more about position taking as it is happening. I guess in my prior career as a risk manager, you get startled by how fast some of these positions go on, and sometimes when you see these positions building up, you can step in and stop it before it is too late if you have sufficient authority. So some transparency, maybe not—I am really speaking from the point of view of risk management and regulators. Some transparency into aggregate position taking as it is happening across all markets might set off alarm bells even intra-day that would let somebody do something about it. I guess I have offered another context to make sort of our aggregate data available to clearing corps., individual clearing corps., who may not actually see the entire picture and may not be able to see undue exposure being created intra-day where they can actually step in and, even if they only have a part of it, protect themselves.

Mr. DUFFY. Senator, may I just add a little bit to that?

Senator CHAMBLISS. Sure.

Mr. DUFFY. I think what is important—and there are a couple differences between our model and the DTCC's model. First of all, as it relates to tracking positions, we track positions real time so we can see as these positions are building, the technology today allows us to do that. If, in fact, we think these positions are getting too large in a short period of time, we will step into the participants.

Another issue that Mr. Axilrod raised was margin and the loss of margin during the Lehman default. The answer to that is simple. It is to deploy the futures model, which is to have segregation and have all these margins and positions segregated into the client's name, and you would avoid the bankruptcy issues that they would head into.

So I just wanted to add those two points.

Senator CHAMBLISS. You mentioned the issue of you are in a position to review the transactions on a constant basis daily. Obviously, we have got one issue that has got to be resolved as to who sets position limits, whether it is going to be the clearinghouse or whether it is going to be CFTC. Let me throw that out there. Anybody want to comment?

Mr. SHORT. From ICE's perspective, that should be the regulator if those position limits are going to be aggregate across markets.

Mr. DUFFY. Senator, CME Group, 160 years in business, never had a customer lose a penny due to a clearing member default, is a very strong record. We have set position limits since the beginning of time. The CFTC has the ability in the statute today to supersede what the exchange's position limits are. They have never done so.

We have numerated position limits set by the Federal Government as it relates to our agricultural products, so that is already done in that manner. We are in the best position to set these position limits, and, again, we do not want to drive people off the regulated marketplace into the opaque markets. Anytime you look to tinker with position limits, that is exactly what you are going to do. You are going to either drive them off OTC markets, or even worse, you are going to drive them to OTC markets in other overseas jurisdictions.

So I think it is very important that the exchanges continue to facilitate the role of position limits.

Ms. MASTERS. Senator, may I add a comment?

Senator CHAMBLISS. Sure.

Ms. MASTERS. One of the challenges with setting position limits in futures markets is that the way that today's markets operate today, futures markets and over-the-counter derivative markets are really seen as and used as a single continuum of risk execution venue. So, for example, a dealer may have a position over the counter with a client which is hedged or offset using a corresponding futures position. If you place position limits just on the futures markets in isolation without taking into account those other activities which are offsetting that, you will obviously interfere with the ability of dealers to hedge their customer business and, hence, the ability of customers to execute that business.

So as Mr. Short said, the ideal situation, if position limits are to be imposed, is that those limits need to take into account not just futures activity, but the activity of over-the-counter derivatives in the same underlying at the same time. For that reason, I believe that the only entity that would be properly positioned to make those decisions would be a regulator such as the CFTC or the SEC, depending on the underlying rather than the exchange itself, because the exchange itself by definition is only seeing the futures part of the equation.

Mr. DUFFY. Senator, just if I may jump in for a second, we do give hedge offsets to OTC transactions against futures positions today. So that is a little bit of a misdirect because we can have the ability to give the hedge offset today, so we do see the transaction.

Mr. OKOCHI. If I could just add to that, I just want to make sure that for end users that have, again, OTC derivative positions, there is actually a net position of what it is they are hedging on the other side. So, again, they could be long. Typically, corporations will go in the same direction. They are swapping from floating to fixed so they will have a unidirectional position on their swaps. So just consideration in terms of the net position of OTC derivative plus whatever it is they are hedging.

Senator CHAMBLISS. Okay. Thank you.

Chairman LINCOLN. Thank you, Senator Chambliss.

Senator Gillibrand.

Senator GILLIBRAND. Thank you, Madam Chairwoman.

Thank you all for testifying. I really appreciate your expertise being brought to the focus of this debate. I want to continue my conversation with Secretary Geithner with Ms. Masters. You are one of the leading experts on credit default swaps, and as we talk about how to regulate and whether to regulate, many have told me that these instruments in particular have increased risks that are truly beyond the current margin and risk paradigms.

As we look at these outsized risks, it reminds me of the movie "Jaws" when they see the shark and they say, "We need a bigger boat." Do we need a bigger boat with regard to these kinds of derivatives? You know, you mentioned in your testimony having different frameworks for different asset classes, so I would like your thinking on this in particular.

Ms. MASTERS. To take a step back and talk about nomenclature for a minute, I think one of the unfortunate things that has happened over the course of the recent crisis has been that the word "CDS" or the phrase "CDS" has been applied to a host of different types of derivative structures, many of which really do not look that much like traditional credit derivatives at all. In particular, the transactions that got AIG into trouble were not really credit derivatives. They were mortgage derivatives. I think that was a point that Secretary Geithner made in his response to your earlier question.

What AIG undertook was several hundreds of billions, more than $400 billion of exposure where they wrote protection on leveraged portfolios of primarily subprime mortgages, and the issue with that asset class is that all of those securities simultaneously were vulnerable to one thing, and that thing was a decline in house prices in the United States. It was assumed that the geographical diversity of that portfolio would somehow offset this and that not all prices could fall together and the U.S. housing market could never decline 30 percent in total, and obviously, with hindsight, that assumption proved wrong. So the underlying reliance on diversification in the portfolio as a defense really was proved unfounded.

If you take those types of transactions out of the picture for a minute and look at the rest of the credit derivative marketplace, first of all, those types of transactions represent a small percentage of the total, I would suggest maybe a couple of percentage points, maybe 2 or 3 percent of the total. More traditional credit derivatives look like structures where the underlyings are corporations, companies that you have heard of typically. When you look at the overall marketplace of credit derivatives, the risk that those contracts represent is no more or less binary than the risks inherent in portfolios of corporate bonds.

For a single event to wipe out value on the scale that we saw in the subprime mortgage securities would be almost inconceivable. You would have to have corporations engaged in totally different industries, in totally different activities, in totally different regions simultaneously becoming bankrupt. It is obviously very hard to imagine a scenario like that.

So my sense is that, generally speaking, in what I will refer to as the standardized or plain vanilla and actually the largest part of the credit derivative markets, the Treasury Secretary was cor-

rect in his characterization that they share the characteristics of most other derivatives. They can be adequately modeled and collateralized for the purpose of central clearing, and we have competing platforms, two of them represented right here, who are capable of safely clearing those products.

The last point that you made when you addressed the Treasury Secretary earlier was whether or not these instruments, because they can be used to express a negative view or a short-selling view on companies should somehow be treated differently, and I think that is a very difficult question. It is obviously a question which came up during the course of the crisis, and it is no different in the context of short selling using credit derivatives than in the context of short selling in the equity markets.

I think we all understand intuitively the reasons why interfering in the natural operation of the equity markets is distasteful, but we also understand the scenario where that will sometimes be necessary because of the need for Government to intervene in a situation where the market dynamic has become not constructive.

I think it is, therefore, right and relevant that going forward under the proposals the SEC will have a joint role for regulating the product of credit derivatives and equity derivatives, because the two products share many of the same characteristics with respect to that narrow question of whether short selling should be allowed. I think that in certain circumstances, in extremis, it may be appropriate for activity to be constrained, but as a general matter, I think the ability to express a negative view on a corporation is an important free market function.

Senator GILLIBRAND. I understand. One of the issues that you have all brought up a bit is the effect that the capital requirements will have on the liquidity in the system, and each of you has expressed some concern about that. So I am curious what impression you have on what the ultimate impact of this derivatives market through these kinds of regulatory frameworks that we have been discussing will be. Do you anticipate a significant change in liquidity and availability of capital? What impacts do you see? Blythe, go ahead.

Ms. MASTERS. I think that there are several parts to the question. If we talk about transaction execution first, the question is whether or not certain activities should be required to be executed on exchanges, and the concern is that in that eventuality there would be a destruction of liquidity in markets because the act of forcing a market participant to show their hand by posting a large position on a central limit order book would cause the market to become dysfunctional and to run away in front of the proposed transaction.

Very often, the nature of end users in OTC derivative markets is that they do have large size to transact. Ultimately and over time, that size or those risks do make their way back into the exchange-traded market very often, but during the period of execution, end users need dealers to be willing to commit capital so that they can execute the size and the structures that they need in order to manage their risks.

If you were to force those types of activities onto a central limit order book, you would destroy liquidity, and those transactions would not be able to be conducted at all.

The second part of the question relates to whether by mandating clearing you could drain liquidity out of the system, and really I think the issue there is that there are certain types of end users, mostly traditional corporate end users, who just do not have the credit capacity and the collateral cash capacity to be pledging collateral to exchanges.

Senator GILLIBRAND. Like an airline.

Ms. MASTERS. Like an airline, like a gas producer, like a refinery, those types of companies. They are not in the business of—they are not financial institutions. They are in the business of flying planes or doing whatever they do as a corporation. They use banks to provide those services to them. That is a useful social purpose of banks and dealers that should not be restricted. If you force that activity to be centrally cleared or collateralized, again, the costs will rise, and you will squeeze that liquidity out of the system, that credit capacity out of the system, to what benefit? If it were the case that the benefit were the eradication of systemic risk, then perhaps that would be an acceptable price to pay. But the argument that I have put forth here, and others have, too, is that you can eradicate systemic risk by focusing on those companies which were responsible for it, namely, the large financial institutions and the major swap participants.

Mr. DUFFY. Senator, if I may?

Senator GILLIBRAND. It is up to the Chairman. My time has expired.

Chairman LINCOLN. Sure.

Mr. DUFFY. I would just like to make a few other comments on what Ms. Masters said. First of all, as it relates to trading, the exchanges are not what they were in 1977 or 1997. These are highly electronic systems that are disseminated around the world that have complete anonymity, and we have algorithms to make certain that dislocation of markets do not happen the way Ms. Masters was describing it. If it was an old open-outcry trading floor, I would not be able to make that argument, but it is not today.

Also, there has been a little bit of a misdirect on balance sheet capital and margins. What is the difference? The Secretary said it today. There is a difference between balance sheet capital, what you have on your balance sheet, and margins. Margins are dedicated towards that position of that contract. That margin money does not go away when you exit your position. It goes back to the user of the marketplace. The dealers still charge the end users a price to come in and elect to do a transaction over the counter. So the margins that are being imposed and everybody is saying it is going to drive the cost up, drive unemployment up—I have heard all different types of scenarios what is going to happen with margin—is ridiculous. Margin is there to protect the system. Margin is there to protect against a 1-day move in a futures market. In a credit default swap, margin is put in for a 5-day move, whatever the worst-case scenario would be, and then you risk-manage it.

So I believe there has been a little bit of misdirects here on margin and the use of margin and like this margin money just goes

away once you elect out of your position, which is absolutely not true.

So there are some other benefits to trading, and, again, we are not promoting as the CME Group to transact business on our central limit order book for OTC transactions. Our offering will be a cleared-only solution, and we believe that if you have capital charges of X for clearing versus Y for non-clearing, you will find what the definition of standardized is very, very quickly.

So I would just like to add those points. Thank you.

Chairman LINCOLN. Well, we want to thank everyone for coming today and certainly sharing your insight, your expertise, your experiences with us. It seems we are all agreeing on one thing, and that is, we absolutely must reform our financial markets and our regulatory system.

Some significant issues need to be worked out, from the clearing mandate to the margin requirements, but we can and we will get it done. Hearing your testimony today was an important reminder that although we must do this quickly— and I think the American people are looking to us to provide these reforms and create greater confidence—it is more important to do it correctly. I would like to certainly thank my colleague Senator Chambliss and his staff for their help, as well as the Committee members for all of their time in being here today. I look forward to working with you all. We hope to continue to have conversations with you all as we move through in producing the solutions.

So we will hold the record open for 5 days for Senators' questions and statements for those of you all on the panel and any additional testimony that groups would like to submit.

With that, thank you all very much for spending your time with us today, and the Committee is adjourned.

[Whereupon, at 12:18 p.m., the Committee was adjourned.]

APPENDIX

DECEMBER 2, 2009

Senate Committee on Agriculture, Nutrition & Forestry
Over-the-Counter Derivatives and Addressing Systemic Risk
Statement for the Record
Treasury Secretary Timothy Geithner
December 2, 2009

Senator Sherrod Brown

I would like to thank Chairman Lincoln for her leadership and commitment to developing strong financial reform legislation focused on the all too opaque world of derivatives. I also look forward to hearing from our witnesses on this critical topic.

With Wall Street emerging from the rubble of the recent financial crisis, manufacturers, small businesses, and consumers are suffering from the consequences of the irresponsible risk-taking of large financial institutions. While we have taken aggressive action to restore short-term stability to our financial system, we must learn from the crisis and address the factors that precipitated it.

Among the factors that caused the financial crisis, one of the most potent was the unregulated use of derivatives. Derivatives were created to reduce operating risks for businesses, but their use has been abused by institutions seeking windfall profits at the expense of manufacturers, small businesses, and consumers. Instead of reducing risk, derivatives increased it. Instead of reflecting sound business practices, derivatives showcased the recklessness of financiers.

If we do not act, the evolving derivatives market will become an even bigger threat to financial stability and security. The value of over-the-counter derivatives has vaulted from a notional value of $91 trillion in 1998 to $593 trillion in 2008. This rapid growth – coupled with the lax oversight of these complicated instruments – is a ticket to disaster.

New regulations should close the loopholes that subject businesses and consumers to market exploitation and manipulation. Information about pricing, market participants, and trading volume should be collected to help businesses reduce risks, costs, and volatility. Clearinghouses and exchanges should become more prominent in preventing a repeat of the financial collapse we witnessed last fall.

With better regulation of over-the-counter derivatives, our nation's leaders can establish stable markets that provide for more transparency and reduce long-term costs for financial institutions, end users, and consumers. As we have seen with the recent financial crisis, the time bomb that is the vast world of derivatives must be addressed, and it must be addressed now.

I look forward to working with Chairman Lincoln and my colleagues on both sides of the aisle to produce a bill that will strengthen our financial system to serve the interests of the small businesses, consumers, and all Americans.

Peter Axilrod
Managing Director
The Depository Trust & Clearing Corporation

Testimony before the
United States Senate
Committee on Agriculture, Nutrition, and Forestry

Hearing on
"OTC Derivatives Reform and Addressing Systemic Risk"

December 2, 2009

Chairman Lincoln, Ranking Member Chambliss and Members of the Committee, my name is Peter Axilrod, managing director of the Depository Trust & Clearing Corporation (DTCC) and former manager of Risk Management at the firm. I'd like to thank you for the opportunity to share our views with you as you consider legislation addressing over-the-counter derivatives markets to mitigate systemic risk in light of the lessons learned during the past year's financial crisis.

Summary

We share your goals of ensuring more transparent markets for regulators, who must oversee market stability and mitigate systemic risk, while protecting the public and ensuring that innovation and risk mitigation that are trademarks of the OTC business continue to exist. We very much appreciate the Committee's decision to take a fresh look across-the-board at the approach taken towards these issues to date, and will respond by suggesting one important refinement to the Administration's initial proposal.

We ask the Committee to reinforce the role of a central repository as a matter of public policy, instead of moving forward with an approach which would fragment that responsibility and create the risk of inadequate oversight of derivatives markets at times of crisis. There should be one central repository per asset class globally (that is, one for credit derivatives, one for rates derivatives, one for equity derivatives, and so on) to which all other potential central reporting entities, such as central counterparties, should also report their positions. Each such repository should function as a utility that would serve the market in a non-discriminatory manner, be neutral and independent, and make its data fully available to regulators, with aggregate data released publicly.

Need to Refine Initial Administration Proposal

DTCC supports the broad goals of the Administration's approach to addressing systemic risk. We also share the assessment that meaningful transparency to regulators and the public at large requires that all OTC derivatives either be cleared through a regulated central counterparty or else registered in a regulated repository. But in the area of trade reporting, we believe further refinement is needed to assure that potentially serious unintended consequences are avoided.

Unfortunately, the Administration has proposed a system which, if implemented, would result in regulators receiving reports on OTC derivative trades and positions from multiple information providers. In the case of cleared trades, the information would come from multiple clearinghouses. In the case of uncleared trades, the information would come from multiple trade repositories.

Such a system, involving multiple sets of information coming from multiple providers, will not serve the information needs of regulators or the markets, especially at times of stress, because it would tend to obscure rather than expose risk. This problem would be especially acute at the time that comprehensive and timely information would be needed most, in cases of unusual market pressures such as we saw last fall with the collapse of Lehman Brothers.

DTCC has not taken a position on which trades in the OTC derivatives markets need to be cleared. But we are certain about one thing: whether cleared or uncleared, for the safety and soundness of all market participants and the public, all market participants need to report trades to a central repository that will make that information immediately available in a comprehensive manner to regulators and the general public.

The proposal of a system of relying on five or six clearinghouses for cleared trades and multiple trade repositories for non-cleared trades reporting independently to regulators risks fragmenting that information, preventing any single entity from having an overview of the entire market that it can provide regulators and the general public, and thereby undermining the transparency of derivatives positions. Such fragmentation can significantly increase systemic risk, particularly during times of stress, by (1) impeding the ability of regulators to protect investors and the integrity of the financial services system as a whole and (2) increasing uncertainty and thus instability in the markets. For this reason, the approach initially proposed by the Administration actually represents a step backward that would unintentionally reduce the level of transparency that now exists in the OTC markets.

By contrast, the core policy goals are advanced when information on trades is held on a centralized basis, with the consolidation of the market information facilitating rapid disclosures and enabling regulators to address market risks. This is best done through a centralized, consolidated trade repository per asset class.

The reasons for consolidation of such information should be especially clear to this Committee, with its history of jurisdiction over the CFTC. With responsibility for different categories of financial instruments bifurcated between the SEC and CFTC, there is the potential for gaps in information, delays in reporting, or inefficiencies in sending data from one regulatory body to another. As a result, in the absence of a consolidated trade repository – especially one that is unbiased and indifferent as to how the trade is executed or whether or how it is cleared -- would be difficult for regulators and the public to see a comprehensive view of market activity, impairing the kind of view that a single trade repository is able to give regulators. In addition, there is the potential for a firm to mask transparency by hiding a large and systemically dangerous trade from regulators by spreading it out across several clearinghouses. By the time the regulatory authorities are able to connect the dots, the entire financial system could be at risk. This scenario underscores the critical need for a consolidated, comprehensive single entity that collects and maintains the underlying position data and makes it available to regulators in the most efficient, timely and usable manner.

Sufficient experience in these activities should be required to ensure that a central swap repository per asset class is able to carry forth its role successfully and protect the integrity of over-the-counter markets. And, to protect its independence, it should be prohibited from being owned by any exchange, single market participant or small group of market participants.

With that introduction, I would like to provide you more background on DTCC, our history and structure, our services to the market as well as our work with regulators.

What is DTCC?

DTCC is unique entity serving the financial markets, regulators, and the public. We are a market-neutral, member-owned cooperative and governed organization, which has been the primary infrastructure organization serving the capital markets in the U.S. We are regulated by the SEC, the Federal Reserve Board of Governors and the New York State Banking Department. We have a 36 year history of bringing safety, soundness, risk mitigation and transparency to our financial markets.

DTCC, throughout its history, has played a central role in helping our financial markets during a period of crisis. Our subsidiaries, The Depository Trust Company (DTC) and National Securities Clearing Corporation (NSCC), were created in the 1970s to help address the famous paperwork crisis on Wall Street, when thousands of messengers carried bags of stock certificates and checks to settle trades and recordkeeping strains forced the New York Stock Exchange to shut down on Wednesdays to process the backlog of trade records. During this period the NYSE traded an average of 15 million shares daily. Today, DTCC supports more than 50+ equity markets, including the NYSE, NASDAQ, ECNs and ATSs, and we have processed as many as 19.3 billion shares traded in a single day. In the mid-1980s, we implemented similar protections for the U.S. Treasury markets, providing automation and processing safeguards to protect the certainty and attractiveness of trading in U.S. Government securities. In the late 1980s,

we removed the barriers preventing the growth in sales of mutual funds, providing U.S. investors with unprecedented choice and low cost.

At its core, DTCC is a huge data processing and risk management business, involving the safe transfer of securities ownership and settlement of trillions of dollars in trade obligations, under tight deadlines every day. At the same time, DTCC's primary mission is to protect and mitigate risk for its members and to safeguard the integrity of the U.S. financial system. Mitigating risk means we not only have the capacity to handle unpredictable spikes in trading volume, but that we have the business continuity and resiliency to withstand both the "unthinkable" –and even the "unknowable."

The general public may not have heard of DTCC before. That's probably not an accident. We have traditionally kept a low profile, given the critical nature of the essential infrastructure role we play in U.S. financial markets. Last year DTCC settled $1.88 quadrillion in securities transactions across multiple asset classes. We essentially turn over the equivalent of the U.S. gross domestic product (GDP) every three days.

DTCC, through its subsidiaries, provides clearing, settlement and information services for virtually all equities, corporate and municipal bonds, U.S. government securities, mortgage-backed securities, commercial paper and other money market instruments traded in the U.S., as well as serving as the central repository and central life-cycle event processing facility for the global CDS market. In addition, DTCC has supported the enormous growth and consumer choice in the purchase of mutual funds and annuity transactions, linking funds and carriers with the firms who market these products. Today, DTCC's central securities depository is the largest securities depository in the world, providing custody and asset servicing for 3.5 million securities issues from the United States and 110 other countries and territories valued at $30 trillion.

As global financial markets went through crisis last year, DTCC's record-keeping, transparency and risk mitigation systems helped federal regulators identify the true exposure of major market participants, and afforded regulators the ability to make informed decisions about to how to work through that exposure and how best to protect the public.

As an example, following the Lehman bankruptcy last year, DTCC clearance and settlement systems played a significant role in unwinding over $500 billion in open trading positions in equities, mortgage-backed and U.S. government securities, without any loss to the industry—and avoiding any burden on taxpayers. This past week, we have worked to ensure that positions relating to the Credit Default Swap ("CDS") market relating to Dubai are visible and transparent, thereby facilitating the ability of regulators to understand market positions of major players and thereby properly to assess risks. We also note that gross and net global exposure to Dubai in the CDS markets is among the comprehensive information on the global CDS markets published on our website, thus helping to preserve market stability that might otherwise not exist had such exposures been unknown or there was some question around the reliability of their reporting.

Bringing Automation and Efficiency to OTC Derivatives

By 2003, the market for OTC credit derivatives had taken off, but none of the trades were being confirmed electronically. The confirmation process was manual and error-prone. Both the global dealers and regulators felt the market for these instruments faced growing risks, if a solution was not found. DTCC was asked by the dealers to develop and we delivered within nine months, an automated matching and confirmation system, called Deriv/SERV.

As major dealers make ambitious commitments to global regulators about improving their operational practices, DTCC's collaboration with the industry has continued to bring a wider universe of the OTC derivatives market on to its electronic matching and confirmation platform (now part of a joint venture – called MarkitSERV – with another electronic matching and confirmation platform), which has helped to significantly reduce the level of unconfirmed trades that remain in the market. These services have been provided at-cost to global dealers or sell-side firms and at no charge to buy-side customers.

Trade Information Warehouse

After entering the OTC derivatives space, it was clear to DTCC and market participants that the downstream process for CDS was another major area of concern. Once CDS trades were completed, these contracts could be resold or reassigned multiple times over their five-year lifecycle, but the processes for recordkeeping and reconciling these transactions, and processing life-cycle events such as credit events, were decentralized, and largely manual.

Working with market participants DTCC launched its central repository known as the Trade Information Warehouse ("Warehouse") in November 2006, to provide an automated central repository to house and service all CDS contracts globally. During 2007, DTCC back-loaded physical records in the Warehouse with information on over 2.2 million outstanding CDS contracts. Today, over 95% of all OTC credit derivatives are captured in this automated environment and matched by MarkitSERV, which is now supplying the Warehouse with more than 41,000 transactions daily. Today, the Warehouse is the only comprehensive global database or repository for any asset class of OTC derivatives anywhere in the world.

I'd submit to you, Madam Chairman, and Members of the Committee, that had DTCC and the industry not had the foresight to create this Trade Information Warehouse and load the Warehouse with all these records of CDS trades in 2007, we might still be sitting here today in 2009 trying to sort out the total exposure of trading obligations following the Lehman bankruptcy. Such basic questions as who traded with whom, when the trades were made, and what the price was for each trade would not have been readily answered, without having to first piece together information from disparate, non-standardized sources.

Evolution of the Trade Repository During the Crisis

In the course of the 2008 market crisis, the Warehouse was further developed by regulators globally and market participants to serve multiple, essential functions for the market. These included:

(1) Acting as a source of market transparency for the global markets, including both weekly publications of aggregate information relating to the global CDS market, as well as providing specifically requested information to Federal Reserve Bank of New York, the European Central Bank and the Financial Services Authority in London among others in support of their regulatory missions;

(2) Providing a single point to efficiently implement changes to the CDS credit event process, enabling prompt information process changes in response to regulatory concerns; and

3) Functioning as a neutral and independent infrastructure support for CCPs, providing them with open and non-discriminatory access to CDS information and life-cycle event processing.

Regulatory Status of Trade Repository – Domestic and Global

During the crisis, DTCC understood that the Warehouse had a global function, given the cross-border nature of the credit derivatives markets. As last year's crisis played out, DTCC believed it important to support regulators on both sides of the Atlantic that was exhibited during and after the crisis. Our longstanding commitment to business continuity planning and back-ups, where DTCC is multiply redundant, made it so that regardless of the nature of a crisis, we would be well-situated to carry out our function for markets and for regulators under any imaginable stress.

We also decided to establish a limited purpose trust company that would be a NY State Member Bank of the Federal Reserve System. Currently, this leaves the Warehouse subject to the direct jurisdiction of the Federal Reserve, the SEC, and the New York State Banking Department.

The bottom line on this is that we believe that any trade repository – including ours – should be regulated.

At this point, regulators worldwide are working with the Federal Reserve to ensure that relevant regulators throughout the world will be brought into a cooperative and shared regulatory structure ensuring appropriate access to data by all regulators and representing all interested regulators' oversight interests relating to the safety and soundness of the infrastructure.

The ultimate structure of regulatory oversight worldwide over DTCC's trade repository functions is still the subject of ongoing discussions, but all regulators have seen the

advantages of a single global source of data, and have been very pleased with DTCC's responsiveness. For this reason, we believe it may well be that international jurisdictional concerns will give way to the advantages of seeing risks globally from a central vantage point, avoiding fragmentation of the data that is so critical to managing systemic risk.

Need for Integrated Data on Derivatives Through a Unified Repository

This experience leads me to emphasize one fundamental policy point. Repositories for trade information need to be unified, consolidated, and integrated by asset class, to make it possible for regulators to protect investors and the integrity of the financial services system as a whole and to assure accurate aggregate public reporting of exposures. These core policy goals are advanced when information on trades is held on a centralized basis.

We believe maintaining an integrated trade repository for OTC derivatives contracts by asset class is an essential element of safety and soundness for two primary reasons. First, as explained below, it is the only practical way to provide accurate and timely public information around aggregate exposure to particular issuers or asset classes. Second, as a practical matter, it provides the ability, from a central vantage point, to timely identify the exposures of trading parties that are growing too large or dangerous and to speed the resolution of these positions whether or not in the context of a firm insolvency.

Fragmentation of Information the Result of Initial Administration Proposal

DTCC supports the role of central counterparties (CCPs) in OTC derivative trading to provide trade guarantees. But CCPs do not obviate the need to retain the full details on the underlying trading positions in a central trade repository to support regulatory oversight and transparency in this market. As an organization that provides CCP services in other markets, such as equities and government securities, DTCC understands and recognizes the value a CCP can bring to the derivatives markets. In fact, our Warehouse will support all CCP services in the U.S. and overseas on a non-discriminatory basis. Entities functioning as CCPs in the CDS market currently submit their trade data to DTCC, and we include it in our reporting to regulators.

At the same time, we are concerned that some in the OTC derivatives market may assume once a trade guarantee is provided through a CCP, there may be less need for a central repository to track the underlying position data. We reject this view, based on our long experience managing the risk flowing from the failure of a single member firm. To protect the safety and soundness of markets it is important that regulators have timely information as to market-wide exposure of the major market participants, which would help avoid bailouts of systemically important firms. In addition, the public at large would reap the benefits of timely information as to aggregate exposures to particular issuers or asset classes, which would help preserve market stability in times of stress. Both of these could be lost if the Administration's initial proposal were adopted without refinement.

Today, our Warehouse connects and services some 1,600 global dealers, asset managers, and other market participants, providing a central operational infrastructure covering approximately 95% of all current credit derivatives traded worldwide. Unfortunately, the approach initially proposed by the Administration would put at risk this comprehensive source of information that is now in place, which currently serves U.S. and international regulators as well as the public at large. We, therefore, strongly recommend that the Committee ensure that all swap trades, regardless of whether they are cleared or not, be reported to a single swap repository, which exists to provide regulators and the public with the consolidated information they need during normal times, and, especially, at times of crisis.

Unfortunately, by **not** requiring all swap documentation and trade information to be reported to a single, comprehensive repository per asset class, the Administration's initial proposal would have the effect of denying regulators the opportunity to see systemic risk from a central vantage point, because it would fragment the existing information on CDS contracts stored in the Warehouse. In other words, it would be significantly more difficult to create a comprehensive source of information for regulators and the public for all other classes of OTC derivatives.

The initial Administration proposal tabled this summer would authorize two different mechanisms for the collection of information on OTC derivative contracts – either a derivatives clearing organization, or a trade repository. Under this proposal, the trade repository would only be required for derivative contracts that were not accepted for clearing by a derivatives clearing organization. While it may be contemplated here that the proposal would encourage multiple trade repositories, the real effect is to create multiple sources of different information for OTC derivatives, making it more difficult for regulators and the public to see a comprehensive view of market activity.

The result of this approach to repositories would mean that information on derivatives contracts could be split up among a number of different clearing organizations, as well as one or more trade repositories. For public policy reasons, this is very undesirable. The fragmentation of information would create grave inefficiencies and delays at times of crisis, impairing the kind of view that DTCC was able to give regulators in the minutes and hours after the Lehman Brothers collapse.

One particular risk that would be newly created by fragmentation of information across multiple clearing organizations and trade organizations is that it would present an opportunity that could be exploited by a market participant who wishes to hide a large, systematically risky position. Such a participant could split his position across these clearinghouses and trade repositories in an effort to use the fragmentation, inefficiency, and delay to hide the size and risk of his aggregate position.

A second, equally important concern is the risk that multiple reporting vehicles, whether they are central counterparties or repositories or some combination, will almost certainly provide misleading initial public reporting of aggregate exposures to particular underlying issuers or asset classes. This is primarily because the calculation of true net

exposures requires analysis of counterparty specific positions which may be distributed across many different reporting entities. This would likely be exacerbated in a multiple reporting entity environment by positions either being double counted due to uncertainty around the appropriate reporting entity or slipping through the cracks in the complicated aggregation and determination process.

Examples of Unintended Consequences and Risks of Initial Administration Proposal

DTCC, like many other market participants, are in the process analyzing the potential unintended consequences of a multiple repository system applied to any class of derivatives. However, at least in the global credit derivatives market, where a single global central repository already exists and provides a significant aggregate market information to the public and counterparty specific information to relevant regulators, it is clear that much could be lost under the currently proposed structure.

The first potential loss is in the area of public transparency of the market. There we note that the current global central repository, operated by DTCC as a not-for-profit utility, was able to exert a calming effect on markets during the Lehman insolvency by publishing the maximum net exposure to Lehman in the global credit default swap market as approximately $6 billion, which turned out in actuality to be about $5.2 billion. This was in contrast to the approximately $400 billion of exposure that was initially speculated. The initial Administration proposal contemplates an infrastructure where records of credit default swaps may be separately maintained in multiple CCPs and regulated repositories on a disaggregated basis. If such a system were in place at the time of the Lehman insolvency, we assess that the aggregate exposure to Lehman in the credit default swap market could have been publicly, and inaccurately, reported to be as high as $72 billion depending on the distribution of transactions among reporting entities. And, this ignores any effects of potential double counting or inadvertent omissions based on double reporting by market participants or uncertainty by market participants over where a particular trade has been reported. Having such an inaccurate report on CDS exposures – off by an order of magnitude -- would not have been an acceptable outcome.

In response to Lehman insolvency, DTCC began publishing, without charge, significant market information on a weekly basis, including gross and net outstanding interest and turnover information with respect to the top 1,000 underlying credits traded worldwide. For example, our website as of November 30 provided the general public data showing a net CDS exposure to the Government of Dubai and DP World as less than $620 million in the aggregate. Again, disaggregated reporting by multiple reporting entities could have inaccurately indicated aggregate net exposures as high as $6.5 billion, depending on the distribution of transactions among those entities.

Current reporting to the CDS Warehouse is voluntary. We estimate that nearly all CDS trades are now reported, with exceptions due to client secrecy laws in some jurisdictions, but this wasn't always the case. In particular, while we had been reporting counterparty specific positions to regulators at the time of the AIG insolvency, virtually none of the AIG trades creating the exposure that lead to the company's downfall were registered in

our Warehouse. A universal reporting mandate would have fixed that problem, but without a single central repository maintaining all positions, the AIG positions could have been maintained in multiple CCPs and repositories, masking the undue concentration until too late.

We think it is simply too risky to attempt to manage undue concentration risk for systemically important firms through multiple regulators taking information from multiple trade maintenance facilities and attempting to aggregate the information themselves. All well intended, but the potential for something slipping through the cracks or not being noticed until it is too late is just too high, and in this case we are playing with taxpayer money.

Evaluating the Effectiveness of Fragmented vs. Unified Trade Repositories

So, how can a single data source help avoid systemic risk in practice? A key instigator of a bailout scenario is when a systemically important company becomes over-exposed to a particular issuer, industry sector or asset class and a serious event adversely affects that issuer, sector or asset class. The problem for regulators concerned with systemic risk is how to identify and react to that over-exposure before the event hits the relevant issuer, sector or asset class (at which point liquidations would take place in a falling market, exacerbating the problem and threatening the financial viability of the firm).

The legislative proposal initially suggested by the Administration provides a theoretical way of doing this. It proposed that all OTC derivatives trades would have to be cleared through a CCP or registered in a central repository somewhere, in the U.S. or in other countries. As a result, in theory, each interested regulator, regardless of its location in any of the more than 180 countries and territories in the world, would have jurisdiction over whatever trade repository is located in its territory, or is mandated to cover trades in its territory. Each national or local regulator would have the authority to demand relevant position and turnover information from such repositories. Each such regulator would then amalgamate the information and set up its own concentration tests and so forth, and then enter into agreements with other regulators for disclosures and pathways for sharing the data. Even assuming that all of the world's regulators were equally functional and capable, this fragmented, bureaucratic, many-nation, many regulators, multilateral approach would not seem to be very practical.

By contrast, we have a regulated apparatus today that could, if requested by regulators, fill that role, the DTCC Warehouse, or unified repositories generally. The question really is whether it makes sense to undo this existing infrastructure, to leave it to market forces, or to give it a statutory basis to preserve it and strengthen it.

Who Owns the Trade? - The Risks of Global Fragmentation

Another concern, relating to the narrower issue of having multiple repositories, is the risk of duplication and double-counting of data, on the one hand, or missing data on the other, for national regulators, arising out of uncertainties as to the location of trade information.

Take, for example, a situation where a U.S. firm executes a CDS contract with a European firm on an underlying asset in Asia. Where should that contract be stored? There are no rules for dealing with this issue needed today for a U.S. firm, as DTCC covers the entire market. This would change as soon as there were multiple repositories.

For example, if you go by parties to the trade, the contract would need to be placed in both the U.S. and European repositories. However, under that scenario, the contract would be duplicated, and therefore double counted in reporting to the public and regulators. Because there's no common identification system for derivatives, regulators, the public and the industry would not necessarily know that the U.S. repository listing and European listing of the trade are, in fact, the same. And if the U.S. firm at some point decided to assign the trade to a European firm, it would simply drop out of the U.S. repository – and there would be no audit trail on the contract.

Likewise, if the storage of trades in a repository is based on the underlying asset, then the above trade would be held only in the Asian repository. As a result, neither U.S. nor European regulators would have regulatory authority over the data even though the risk of the contract is assumed by parties under their jurisdiction. The systemic risk regulators in each region would have only a partial and incomplete view of the market.

This result is further highlighted when one considers turnover information and not just position data. DTCC is today able to provide the total turnover of each relevant market participant in an asset class, information that helps regulators understand the role and type of activities of the participant in the market over time. This information, too, would be disaggregated by the proposals, and become at risk of being difficult or impossible to retrieve in real time for regulators.

A Better Alternative – Unified Reporting in a Trade Repository

DTCC urges this Committee to consider including in any final legislation a requirement that all derivatives traded by U.S. financial institutions be reported to a single trade repository for each asset class, which would serve regulators as a comprehensive source of information. The derivatives CCPs, which are organized as derivatives clearing organizations, would continue to retain the data from the trades that they clear. This would allow them to capture whatever commercial value they desire from that market data. However, from a broader public policy perspective and in the interests of ensuring the stability and transparency of financial markets, there must be a consolidated, comprehensive single entity that collects and maintains the underlying position data and makes it available to regulators in the most efficient, timely and usable manner.

Based on our long experience managing the risk flowing from the failure of a single market participant, we have found that knowing the underlying position data of multiple transactions across asset classes in a timely manner is significant in providing transparency to regulators—and in protecting confidence in the market itself.

DTCC also suggests that any final legislation include a few basic principles guiding how a trade repository should function as follows:

1. Any trade repository should function as a utility that would serve the market in a non-discriminatory manner.
2. Any trade repository should be neutral and independent. To protect its independence, it should be prohibited from being owned by any single market participant or small group of market participants.
3. The data collected by the repository should be fully available to regulators, with aggregate data released publicly.
4. Sufficient experience in these activities should be required to ensure that a repository is able to carry forth its role successfully and protect the integrity of over-the-counter markets.

Further Background on DTCC - Operating During Crises

One major challenge to our resiliency was after the attacks on the U.S. on September 11, 2001. Our headquarters were just 10 blocks from the World Trade Center. While the stock exchanges did not open, DTCC still had a job to do and never missed a beat. Despite the chaos that Tuesday morning, nearly 400 employees remained at DTCC 's headquarters, even though lower Manhattan was sealed off by the government, to complete that day's settlement of more than $280 billion in outstanding trades from the prior Friday and Monday. Throughout that week, working from backup facilities, DTCC completed settlement of nearly $1.8 trillion in trades that were in the "pipeline", which was a critical step to allowing our capital markets to open the following Monday.

The crisis following the Lehman bankruptcy was equally challenging. Because of our ability to manage risk and see exposure from a central vantage point across asset classes, DTCC was able to help market participants and regulators ensure that market risk and systemic risk were controlled. DTCC successfully closed out over a half trillion dollars in exposure from Lehman's trading in equities, mortgage-backed and U.S. government securities. Most would agree this was the largest and most complex wind-down in history. With nearly 36 years of experience in managing risk events, we were able to complete this wind down in a matter of a weeks with no impact to our own company's balance sheets, loss to our market participants' clearing fund deposits—or additional exposure to taxpayers. These are just two examples of the comprehensive and critical roles DTCC has played in maintaining stability for our capital markets.

Managing Multiple Credit Events from a Central Vantage Point

Our Warehouse for OTC credit derivatives likewise does more than simply maintain comprehensive records on CDS transactions. The Warehouse also handles the calculation, netting, and central settlement of payment obligations between counterparties, and it has automated the processing of "credit events" – situations where the protection against default provided by a credit default swap is activated.

During 2008 and 2009, DTCC has seamlessly processed through the Warehouse, more than 45 credit events, including the Lehman Brothers and Washington Mutual bankruptcies, as well as the conservatorships for Freddie Mac and Fannie Mae. No one could have foreseen the storm of credit events that shook the market during this period, but thanks to the central infrastructure we built for the CDS market and our ability to see and manage these credit events from a central vantage point, we were able to ensure a more seamless and safe final disposition of hundreds of billions of dollars in CDS payouts triggered by these bankruptcies and government takeovers.

If I may cite the March 9, 2009 report, prepared by the Senior Supervisors Group, which comprises the senior financial regulatory supervisors from seven major countries, including Germany, France, UK, Swiss, Japan and the U.S.:

> DTCC's credit event processing service enabled firms to manage the large number of affected CDS trades during the recent events. All surveyed participants indicated that without the DTCC service and the [Trade Information Warehouse], the process would have been manual and burdensome and they could not have completed timely processing.[1]

Having all CDS trade information in one centralized infrastructure was highlighted in the report as making it easier for market participants to identify affected trades and facilitate handling of various lifecycle events, such as settlement and credit event processing. In the midst of the crisis, the process of having to glean and coordinate the necessary information from more than one repository would have been a frightening prospect.

Enhancing Transparency

As the only source of key data on the CDS market, DTCC recognizes and supports the public policy goal of promoting transparency in the OTC markets.

DTCC has been working closely with market participants and regulators to achieve that vision. Since November 2008, DTCC has been publishing weekly on its website, key statistics and data from the Warehouse on the size and turnover of the CDS market.

Perhaps the clearest example of the impact of DTCC having its broad vantage-point over the CDS market was exhibited in the Lehman Brothers bankruptcy last year. At the time of the Lehman crisis, rampant speculation valued the market's CDS risk exposure from the bankruptcy to be as high at $400 billion, causing unease and a sense of panic in some quarters. Since DTCC held the vast portion of information on CDS positions in our Warehouse, we took the unprecedented step to issue a press release on a Saturday in mid-October to clarify the numbers. We reported that based on our Warehouse records, the exposure to Lehman was closer to a net notional value of about $6 billion. Ultimately, at the close of this credit event, $5.2 billion changed hands between counterparties.

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[1] Senior Supervisors Group, "Observations on Management of Recent Credit Default Swap Credit Events," March 9, 2009http://www.sec.gov/news/press/2009/report030909.pdf.

Over the summer, we issued a similar press release following the GM bankruptcy, reportedly the largest for an industrial company in U.S. history, surpassed only in dollar value by the Lehman bankruptcy CDS numbers.

In the June 8 *New York Times'* Breaking Views column, the Warehouse was praised for bringing greater transparency on CDS exposure following the GM bankruptcy:

> The vague guesses of four years ago have been replaced by hard data. The Depository Trust & Clearing Corporation, which now collects trading information, was able to say last week that the $35.3 billion in outstanding swaps trades on GM netted down to possible payments between market participants of an unremarkable $2.2 billion.[2]

Today, when credit events occur, having this data more readily accessible to the public through our weekly postings has helped demystify CDS instruments somewhat and help avoid the market anxiety that was so pervasive during the Lehman crisis.

Working with Global Regulators

The marketplace for OTC derivatives is truly global in nature, which means that to be most effective any trade repository needs to serve market participants and regulators on a global basis. When we originally designed the Warehouse with market participants, we spent a long time making sure there would be no duplication of data and that the transfer of information happens when it is supposed to. None of those control mechanisms would work very well in a context where there is more than one Warehouse. Additionally, every regulator in the world, if it was seeking to ensure the soundness of firms under its purview, would need access to *all* global central repositories in order to effectively supervise the risks firms were taking. The risks associated with the market for OTC derivatives will not be easily managed, if you can not see the positions globally. To this end, we regularly provide information to regulators worldwide in support of their own regulatory missions, including the European Central Bank and the Financial Services Authority in the U.K.

International regulators have demonstrated their own commitment to increasing cooperation on a global basis with the announcement this November that they have established a new OTC Derivatives Regulators' Forum, a group comprised of central banks, market regulators, government bodies and others that have jurisdiction over OTC derivatives market infrastructure providers or OTC derivatives market participants.

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[2] "A Swap Disaster That Wasn't One," June 7, 2009, New York Times, http://www.nytimes.com/2009/06/08/business/08views.html.

The Forum will be charged with developing a global framework for regulatory cooperation and to share ideas and information on CCPs and trade repositories serving the OTC derivatives market. DTCC supports this effort because we recognize that in the OTC derivatives market, there needs to be a global solution with a regional approach versus a regional approach that doesn't provide a global perspective. In other words, a global marketplace demands a coherent set of regulations that apply on a global basis.

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DTCC stands ready to work with the Congress, Administration, global regulators and market participants to help accomplish our shared vision of greater transparency, risk mitigation and resiliency in this dynamic market. Thank you.

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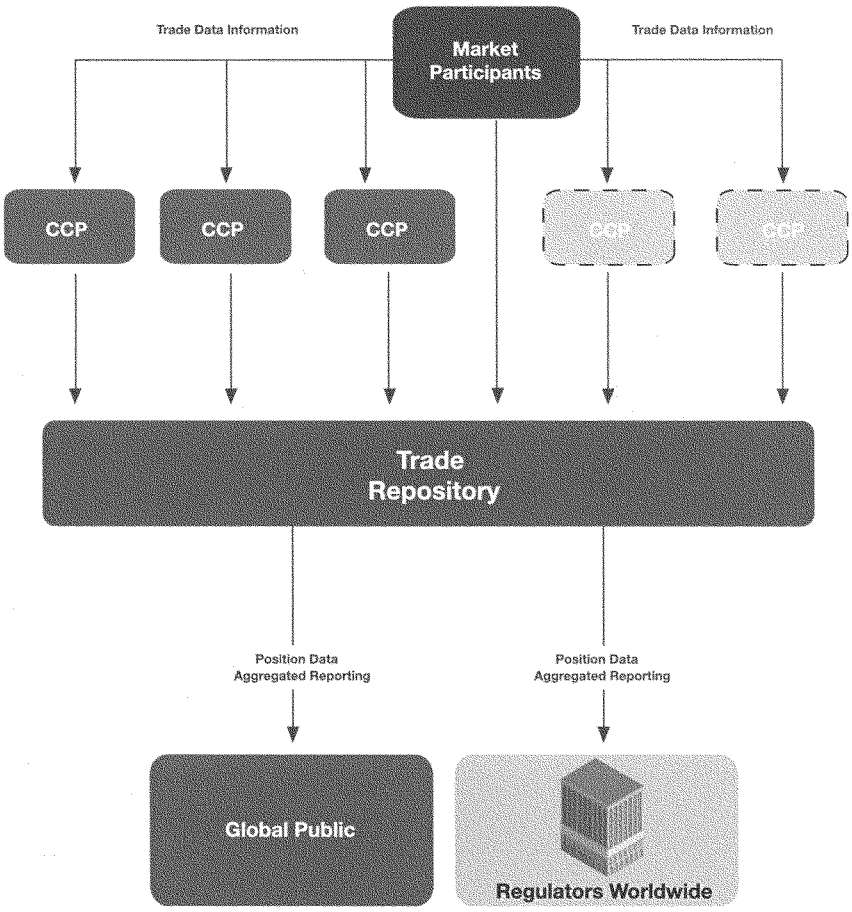
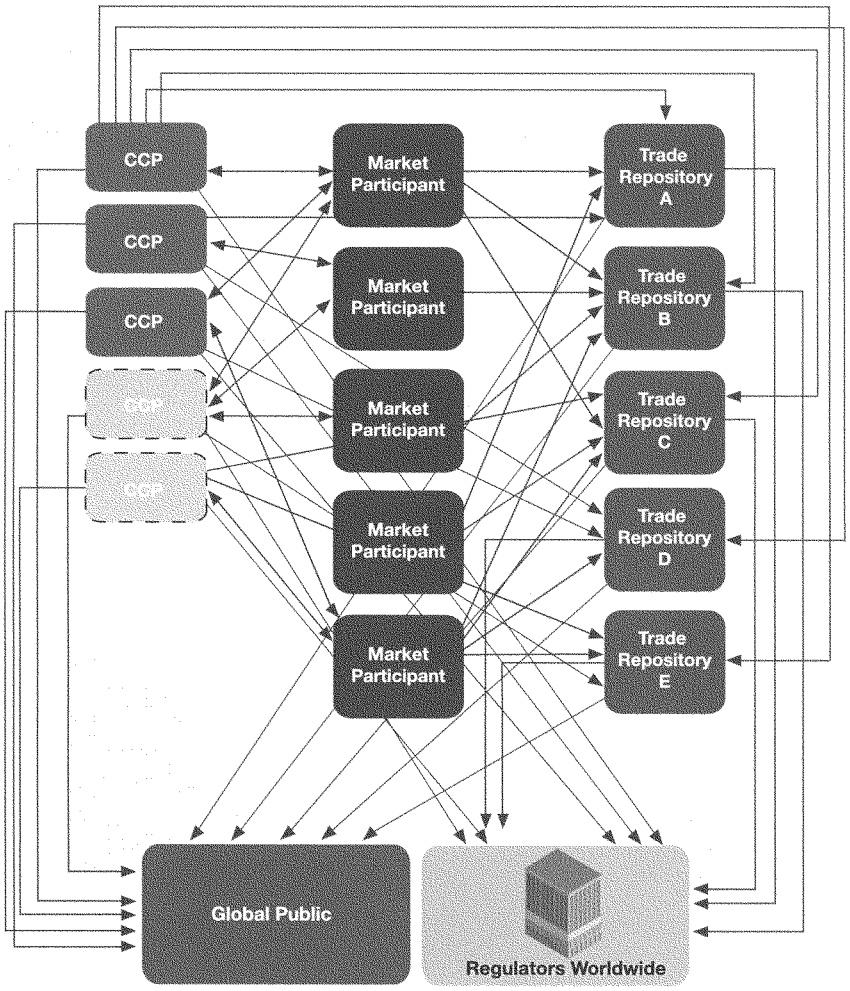
Current Situation in Global CDS Markets



Fragmentation of Data in an OTC Derivatives Marketplace with Multiple Repositories



TESTIMONY
OF
TERRENCE A. DUFFY
EXECUTIVE CHAIRMAN
CME GROUP INC.
BEFORE THE
SENATE COMMITTEE ON AGRICULTURE

DECEMBER 2, 2009

I am Terrence A. Duffy, executive chairman of CME Group Inc. Thank you Chairman Lincoln and Ranking Member Chambliss for inviting us to testify today. You asked us to discuss the various legislative proposals currently circulating in Congress respecting regulatory reform in the OTC derivatives and futures market. These proposals include: the "**Over-the-Counter Derivatives Markets Act of 2009**," passed by House Financial Services Committee on October 15, 2009 (the "FSC Bill"); the "**Derivative Markets Transparency and Accountability Act of 2009**," passed by House Committee on Agriculture on October 21, 2009 (the "Ag. Committee Bill"); the "**Financial Stability Improvement Act of 2009,**" released by the House Financial Services Committee on October 29, 2009 (the "FSC Systemic Risk Bill"); and the "**Restoring American Financial Stability Act of 2009**," revised by Senator Dodd on November 16, 2009 (the "Senate Bill," collectively the "pending legislation"), and in particular Titles I, II, VII and VIII of this Act. Our testimony focuses on the provisions in these bills that most directly impact derivatives clearing organizations ("DCOs") and designated contract markets ("DCMs").

CME Group is the world's largest and most diverse derivatives marketplace. We are the parent of four separate regulated exchanges, including Chicago Mercantile Exchange Inc. ("CME"), the Board of Trade of the City of Chicago, Inc. ("CBOT"), the New York Mercantile Exchange, Inc. ("NYMEX") and the Commodity Exchange, Inc. ("COMEX") (collectively, the "CME Group Exchanges"). The CME Group Exchanges offer the widest range of benchmark products available across all major asset classes, including futures and options on futures based on interest rates, equity indexes, foreign exchange, energy, metals, agricultural commodities, and alternative investment products.

CME Clearing, a division of CME, is one of the largest central counterparty clearing services in the world, which provides clearing and settlement services for exchange-traded contracts, as well as for over-the-counter derivatives contracts through CME ClearPort®. Using the CME ClearPort service, eligible participants can execute an OTC swap transaction, which is transformed into a futures or options contract that is subject to the full range of Commodity Futures Trading Commission (the "Commission" or "CFTC") and exchange-based regulation and reporting. The CME ClearPort service mitigates counterparty credit risks, provides transparency to OTC transactions and enables the use of the exchange's market surveillance monitoring tools.

The CME Group Exchanges serve the hedging, risk management and trading needs of our global customer base by facilitating transactions through the CME Globex® electronic trading platform, our open outcry trading facilities in New York and Chicago, as well as through privately negotiated CME ClearPort transactions.

Introduction

Last year's financial crisis has drawn substantial, in many cases well-warranted attention to the lack of regulation of OTC financial markets. We learned a number of important lessons that should permit Congress to craft legislation that reduces the likelihood of a repetition of that near disaster. However, it is important to note that two important positive lessons were also learned. First, regulated futures markets and futures clearing houses operated flawlessly. Futures markets performed all of their essential functions without interruption and despite failures of significant financial firms, our clearing house experienced no default and no customers on the futures side lost their collateral or were unable to immediately transfer positions and continue managing risk. Second, central counter party clearing with proper collateralization could have prevented or at least significantly limited some of the worst excesses and corresponding losses in the OTC market.

We support the overarching goals of Congress and the Administration to reduce systemic risk through central clearing and exchange trading of derivatives; to increase data transparency and price discovery; and to prevent fraud and market manipulation. Unfortunately, the pending legislation does not stop at providing the CFTC with the tools necessary to achieve these goals.

Rather, the pending legislation creates a highly intrusive role for the Commission while at that same time adding layers of additional regulation to an already well-regulated industry. Among other things, under the pending legislation: (i) the Commission will become the arbiter of new contracts and new rules; (ii) principles-based regulation will be eliminated; (iii) margin setting and position limits will be politicized and impair liquidity and efficiency; and (iv) dual registration requirements will be added. The unintended adverse consequences of such provisions are the impairment of effective exchange innovation and the stifling of the most important growth paths in our industry, including the clearing of OTC transactions. Indeed, the threat of such policies has already driven major customers to move business off U.S. markets.

We believe that, with certain revisions to the pending legislation, the aforementioned goals of regulatory reform can be accomplished while avoiding unintended adverse consequences to the derivatives industry specifically, and to the U.S. economy as a whole. To this end, we discuss in detail below our recommended revisions for each of the Ag. Committee Bill, the FSC Bill, the FSC Systemic Risk Bill and the Senate Bill. We also are available to provide technical drafting assistance respecting these bills or any proposed legislation.

1. Preservation of the Commodity Futures Modernization Act's ("CFMA") Principles-Based Regime

The Commodity Exchange Act ("CEA") currently prohibits the CFTC from mandating that its "Guidance On, and Acceptable Practices In, Compliance with Core Principles" (Appendix B to Part 38 of CFTC's Regulations) is the exclusive means to comply with core principles (CEA §5c(a)(2)). The Ag. Committee and Senate Bills each would amend this provision and expressly grant the CFTC the authority to state that an interpretation by the CFTC may provide the *only* means for compliance with core principles.[1] In effect, such a provision grants the CFTC administrative authority to eradicate the advantages of the CFMA's principles-based regime and inhibit the ability of U.S. futures exchanges to develop innovative and potentially more effective ways of complying with the core principles.

[1] Section 5c(a)(2) is amended by striking "shall not" and inserting "may." All of the new core principles included in the draft bills are modified by language similar to the following: "Except where the Commission determines otherwise by rule or regulation, a derivatives clearing organization shall have reasonable discretion in establishing the manner in which it complies with the core principles."

The CFMA has facilitated tremendous innovation and allowed U.S. exchanges to compete effectively on a global playing field. Principles-based regulation of futures exchanges and clearing houses permitted U.S. exchanges to regain their competitive position in the global market. U.S. futures exchanges are able to keep pace with rapidly changing technology and market needs by introducing new products, new processes and new methods by certifying compliance with the CEA and thereby avoiding stifling regulatory review. U.S. futures exchanges operate more efficiently, more economically and with fewer complaints under this system than at any time in their history.

Unfortunately, instead of pursuing this successful regime, the reaction against excesses in other segments of the financial services industry appears to have generated pressure to force a retreat from the principles-based regulatory regime adopted by the CFMA. The myriad problems resulting in the financial services meltdown did not originate in futures markets and the exchanges performed impeccably throughout the crisis and should not be penalized by a return to a prescriptive regulatory regime. Moreover, this is exactly the regime that impaired the competitiveness of the U.S. futures industry pre-CFMA.

The benefits of the CFMA's principles-based regulatory regime are easily overlooked in the turmoil following the collapse of the housing market and major investment banks. We have said it before, but it bears repeating: derivative transactions conducted on CFTC-regulated futures exchanges and cleared by CFTC-regulated clearing houses did not contribute to the current financial crisis. Moreover, it was not unintentional gaps in the regulatory jurisdiction of the SEC and the CFTC that caused the meltdown. To the extent that regulatory gaps contributed to the problem, those gaps existed because Congress exempted broad classes of instruments and financial enterprises from regulation by either agency. As discussed in more detail below, the pending legislation addresses those gaps by eliminating the exemptions from regulation for such classes of instruments and enterprises.

With respect to increased margin authority for the Commission, we believe that the amendments to the CEA included in each of the Senate Bill, the Ag. Committee Bill and the FSC Bill respecting core principles for DCOs already impose significant direct obligations on clearing

houses to set margins at appropriate levels to protect the financial integrity of the clearing house. Generally, such provisions on the core principles provide:

(i) The derivatives clearing organization shall have the ability to manage the risks associated with discharging the responsibilities of a derivatives clearing organization through the use of appropriate tools and procedures.

(ii) The derivatives clearing organization shall measure the credit exposures of the organization to the members of, and participants in, the organization at least once each business day and shall monitor the exposures throughout the business day.

(iii) Through margin requirements and other risk control mechanisms, a derivatives clearing organization shall limit the exposures of the organization to potential losses from defaults by the members of, and participants in, the organization so that the operations of the organization would not be disrupted and non-defaulting members or participants would not be exposed to losses that they cannot anticipate or control.

(iv) Margin required from all members and participants shall be sufficient to cover potential exposures in normal market conditions.

(v) The models and parameters used in setting margin requirements shall be risk-based and reviewed regularly.

These new core principles mimic the best practices long in place at CME. We believe that they are appropriate standards and that the Commission already has adequate authority in connection with its ability to insure compliance with the existing and these new core principles, to assure itself and its fellow regulators that these principles will be appropriately applied. Accordingly, DCMs and DCOs should continue to retain discretion in establishing the manner in which they comply with the core principles and the Commission should not be granted authority to mandate margin requirements as is the case under the FSC Bill.

If, however, the Commission must be granted some additional authority respecting margin, such authority should be limited to allow the CFTC margin authority only to ensure the financial integrity of a clearinghouse; the CFTC must be explicitly prohibited from setting specific margin amounts. Such a provision was incorporated in the Ag. Committee Bill through the amendment process. We recommend that, at a minimum, legislation limit the CFTC's margin authority in a manner consistent with the Ag. Committee Bill.

2. Preservation of the Self-Certification Process for Rules and Contracts

Each of the Ag. Committee, FSC and Senate Bills impose some form of prior approval requirements on DCMs respecting new rules or new contracts and amendments to existing rules. Specifically, the pending legislation provides that a new rule and/or contract does not become effective for 10 days and the CFTC can delay the rule or contract from becoming effective for at least 90 days by filing an objection. The circumstances under which the CFTC can object are "novel or complex issues that require additional time to analyze, an inadequate explanation by the submitting registered entity, or a potential inconsistency with this Act (including regulations under this Act)."

As each of these bills are currently drafted, the certification process could revert to that which existed pre-CFMA; industry experts have testified repeatedly at the various hearings held over the past few months addressing the Treasury's Title VII and the harmonization efforts of the CFTC and SEC that this archaic process, which is currently employed by the SEC, would put participants in the U.S. futures markets at a significant competitive disadvantage when compared to their foreign competitors. This provision should be deleted or, at a minimum, restricted to rule amendments that materially change the terms and conditions of listed contracts with open interest as was done with the FSC Bill.

3. Maintain the Foundations of the Existing Regime Respecting Position Limits and Hedge Exemptions

A. Position Limits

The CEA currently grants the CFTC sufficient authority to set limits for DCMs. Section 4a(a) of the CEA directs the Commission to fix position limits for a commodity traded on a DCM if it first finds that such action is "necessary to diminish, eliminate, or prevent" "sudden or unreasonable fluctuations or unwarranted changes in the price of such commodity." However, the Commission's direct use of the authority conferred in Section 4a(a) is neither required nor justified if the relevant designated contract market has acted effectively to avoid "excessive speculation." Indeed, as the Commission has previously noted, the exchanges have the expertise and are in the best position to set position limits for their contracts. In fact, this determination led the Commission to delegate to the exchanges authority to set position limits in non-enumerated commodities, in the first instances, almost 30 years ago.

Since that time, the regulatory structure for speculative position limits has been administered under a two-pronged framework with enforcement of speculative position limits being shared by both the Commission and the DCMs. Under the first prong, the Commission establishes and enforces speculative position limits for futures contracts on a limited group of agricultural commodities. Under the second prong, for all other commodities, individual DCMs, in fulfillment of their obligations under the CEA's core principles, establish and enforce their own speculative position limits or position accountability provisions (including exemption and aggregation rules), subject to Commission oversight.

The Ag. Committee and Senate Bills would change this regime and impose an absolute obligation on the CFTC to impose hard limits and the Ag. Committee Bill requires the CFTC to hold public hearings twice a year to get input on whether the position limits are sufficient. This is completely inconsistent with the proposed amendments to the core principles (discussed in Section 1, *supra*), which impose the obligation to control limits on DCMs. It makes no sense to impose the same duty upon the CFTC and the exchanges. In fact, we believe that if this provision is not changed, the order to the CFTC will take precedence and the amendment to the core principle will be meaningless. If this language is not omitted from legislation, at a minimum, language must be added to ensure that the CFTC refrains from placing hard position limits on regulated exchanges until such time that they are simultaneously placed on the OTC market and foreign boards of trade, which is consistent with the amendment offered by Rep. Halvorson and approved by House Committee on Agriculture.

Moreover, the DCMs' enhanced obligation to impose position limits should not include a requirement to "eliminate or prevent excessive speculation as described in section 4a(a)." This phrase remains without real definition and there would be no way for a DCM to know whether it is in fact complying with its statutory obligations. In addition, legislation should mandate that each DCM or Swap Execution Facility ("SEF") be required to set its own position limits based on and in proportion to its liquidity, volume, open interest and other factors respecting trading for which it is directly responsible. Indeed, it is contrary to the purposes of the CEA's prohibition on excessive speculation for an exchange with limited liquidity, volume and/or open interest to simply mimic the position limits set by another exchange.

Each of the Ag. Committee, FSC and Senate Bills also grant the CFTC authority to impose aggregate limits on contracts listed by boards of trade and on swaps that perform a significant price discovery function with respect to regulated markets; however, these bills do not provide clear guidance as to how aggregate limits will be calculated. As noted above, any aggregate limits set by the CFTC should not permit free riding exchanges to set internal limits at the level of the aggregate limit, irrespective of the limits it should be setting based on its own liquidity, volume, open interest and other factors respecting trading for which it is directly responsible.

Additionally, legislation should provide that the Commission's power to set position limits be subject to explicit guidance comparable to the existing regime in that it should only act if the relevant regulated market has failed to act and only act for the purpose of avoiding "sudden or unreasonable fluctuations or unwarranted changes in the price of such commodity." It is critical that position limits not become a political tool to control the underlying prices in the cash market. Position limits are not an effective tool to control price; any attempt to use position limits for this purpose will have a devastating impact on the U.S. futures industry and participants that rely on these markets to manage risk.

Finally, allowing self-interested entities a more formal role in the setting of position limits creates incentive for them to argue what is in their own individual self-interest and politicizes a process that should not be politicized. Indeed, exchanges acting in their SRO capacity in furtherance of the public interest, in consultation with and under the oversight of the CFTC, are in the best position and have the best expertise to make the determination of what the limits should be. Therefore, the provision in the Ag. Committee Bill, requiring the Commission to hold bi-annual public hearings respecting the setting of position limits, should be eliminated.

As we have previously testified, the United States has been the center of global futures trading because of its first mover advantage and its rational regulatory regime, which has provided efficient and fair markets while encouraging innovation. If speculative traders and accumulators like swap dealers and index funds are restricted from trading global commodities such as oil and metals on U.S. exchanges and on the U.S. OTC market, their alternative is clear. They will turn to their foreign affiliates and the market will move offshore. For example,

although Natural Gas delivered at Henry Hub is a natural U.S. product and it is not likely that that specific contract will move offshore, natural gas is a global product and it is certain that a new global benchmark contract will emerge on a foreign exchange if trading on U.S. markets is constricted by inappropriate limits. The likely chain of effects is predictable and unacceptable; liquidity of U.S. markets will be impaired, causing damage to the domestic natural gas industry and its customers.

Even if Congress or the Commission could find a legitimate basis to restrict or impede U.S. firms from participating in offshore markets, the only consequence will be to disadvantage U.S. firms and U.S. markets. World prices would be set without U.S. participation. Thus, precisely calibrated and properly administered position limits on energy contracts, along with a carefully managed exemption process, are critically important to the preservation of properly functioning markets. We believe that the exchanges are in the best position to impose such limits.

B. Hedge exemptions

Under the Ag. Committee Bill, a bona fide hedging position would have to be linked to a transaction to be made or position to be taken at a later time in a physical marketing channel. This narrow conception of a bona fide hedge excludes hedging of a wide range of ordinary business risks. For example, electric utilities will be precluded from hedging capacity risks associated with weather events by use of degree day unit futures contracts. That hedge involves no substitute for a transaction in a physical marketing channel. Insurance companies may not hedge hurricane or other weather risks. Enterprises that consume a commodity that is not used in a "physical marketing channel" such as airlines that use fuel, generating facilities that use gas and produce electricity, freight companies whose loads depend on geographic pricing differentials and hundreds of other important examples that readily present themselves, will not be entitled to a hedge exemption from mandatory speculative limits.

Moreover, any limitation on hedge exemptions for swap dealers will limit the ability of commercial enterprises to execute strategies in the OTC market to meet their hedging needs. Under these proposals, swap dealers could qualify for a hedge exemption only if their counterparty's transaction met the definition of a bona fide hedging transaction. Because we do

not believe that particular futures positions can be linked to identified OTC transactions, the utility of futures markets as a risk transfer venue, which is a legitimate and necessary business activity, will be seriously impaired. For example, commercial participants often need customized OTC deals that can reflect their basis risk for particular shipments or deliveries. In addition, not all commercial participants have the skill set necessary to participate directly in active futures markets trading. Swap dealers assume that risk and lay it off in the futures market, but largely will be precluded from doing so.

Market makers and spreaders are critical market participants because they provide liquidity and reduce transaction costs, permitting trades that would otherwise be costly and market distorting. Also, neither Congress nor the CFTC is an appropriate body to make the day-to-day determinations as to whether a particular hedge exemption is appropriate; this task should be remain with DCMs so as to allow DCMs to continue operating their businesses and allow the CFTC to continue functioning as a regulator. Accordingly, the definition of bona fide hedge should, at a minimum, recognize that offsetting of positions of intra- and inter-market spreaders and market makers should be netted when calculating compliance with limits. A simple amendment to the Ag. Committee Bill – namely, changing "***and***" before (iii) in subsection (A)(i) of Section 113 to "***or***" – would go a long way towards preserving the competitive position of U.S. exchanges in the global marketplace.

4. Remove Prohibitions Against Providing Clearing Houses With Federal Assistance During Time of Crisis

The Ag. Committee Bill includes a provision that prohibits Federal assistance to support clearing operations, including making loans to or purchasing any debt obligation of a DCO. This provision must be omitted from legislation. Indeed, CME Group and other clearing houses agree that the Federal Reserve should be permitted to provide a liquidity facility to clearing houses in the event of a market emergency.

If there is a failure of a CME clearing firm, CME Clearing expects to rely on its financial safeguards to cure the default event. However, in a default, CME Clearing will have to liquidate the collateral that it has in its possession. The liquidation proceeds will be used by CME Clearing to cure the default amount owed to it by the defaulting clearing firm. It is possible that the

securities markets may be "stressed" or illiquid at such point in time that a clearing firm defaults. In this scenario, access to the resources of the Federal Reserve would be useful. Exchange of the defaulting firm's collateral for cash would take on the profile of a short term loan, secured by high quality collateral. Overt and explicit denial of access to Federal assistance will only exacerbate the initial default.

DCOs' access to the discount window in exigent circumstances would help contain problems associated with temporary market illiquidity. Access would provide greater flexibility in the range of collateral and greater timing flexibility when managing through a default event. The DCO should be permitted to borrow on the basis of good security in the event that a liquidity crisis interferes with its established liquidity lines, and if the market for securities is in turmoil. It would be a serious mistake to force a clearing house into bankruptcy and disrupt customer positions by denying a clearing house access to the discount window in the event of a disaster that is not of its own making.

The current crisis taught us that it is important to have flexibility in making and implementing policies that help contain problems. Explicitly preventing the Federal Reserve from taking action to contain issues associated with temporary liquidity problems at a systemically important clearing house is a recipe for disaster. In times of severely reduced market liquidity, such as that which we saw last Fall, it will be important for DCOs to have the ability to get liquidity by collateralized borrowing at the discount window until market conditions normalize.

The European Central Bank and Banque de France see part of their roles as lenders of last resort to clearing houses within their jurisdictions. Even though a clearing house should be managed to avoid the need for access to a lender of last resort, it is not acceptable for a U.S. clearing house to be at an explicit disadvantage in their ability to contain systemic risk relative to clearing houses whose central banks can be a lender of last resort.

5. Eliminate A Dual Regulatory Regime

Dual registration and regulatory provisions, similar to those contained in the Senate and FSC Bills, should be eliminated. No benefits are gained through a dual-regulatory regime, particularly where both are agencies of the same government and are required to implement

almost identical rules and regulations. Legislation should provide that *either* the CFTC *or* the SEC will be the "primary" regulator depending on whether a person is otherwise subject to regulation by the CFTC or SEC, or which agency has primary regulatory contact with such persons. Similarly, instruments should be subject to regulation by *either* the CFTC *or* the SEC depending on whether their value is based "primarily" on a single, non-exempt security or narrow-based security index, or to CFTC regulation if their value is based "primarily" on other physical or financial commodities.

Such a "primary" regulator system would greatly enhance regulatory harmonization between the agencies, and would eliminate legal uncertainty that can lead to market disruption and volatility. By coordinating between a primary regulator and a secondary regulator, the agencies will reduce the risk of overlapping and inefficient oversight and can focus on ensuring market stability and transparency through proper regulation of markets, their products and market participants.

6. Provide for Open Access, Not Mandate Interoperability Among Clearing Houses

Although the FSC Bill originally included language that could have been interpreted to mandate interoperability among clearing houses, that provision was revised in the amendment process to conform to the language in the Ag. Committee Bill providing for open access. Unfortunately the Senate Bill contains language similar to the initial FSC draft, which could be read to mandate interoperability among clearing houses. While we support open access as provided for in the FSC and Ag. Committee Bills, we strongly oppose interoperability for the following reasons.

At the most basic, technical level, in order to make interoperability feasible, each participating clearing house must agree on an identical set of operating procedures to coordinate collateral, variation margin and settlement flows. Each clearing house should insist that each other participating clearing house has financial resources at least equal to its own and that each conduct regular detailed financial and operational audits of each other member of the interoperability circle. Finally, no clearing house can permit another to change any contract terms or specifications that will distort future cross clearing house flows. Thus, every exchange and clearing house loses the ability to innovate and distinguish itself and its products.

The immediate impact of mandated interoperability is to force regulated exchanges and their associated clearing houses to truncate the services they offer to their customers by giving up control over the clearing function, which provides the financial, banking and delivery services that guarantee performance of futures contracts. Exchange control of these services — either in-house or through a dedicated third party — is at the heart of current efforts to improve the value of exchange services by offering straight-through, integrated processing to clearing member firms and their clients.

Systemic risk also is increased. When one side of a matched trade is transferred, the original clearinghouse would automatically become exposed to the risk of the other clearinghouse. As transfers build and links between clearinghouses increase, the ability to contain a single failure decreases and risk throughout the system increases.

Finally, it is only through differentiation that product innovation is accomplished. Differentiation with respect to product and the delivery of that product has been a fundamental tenet of futures clearing houses' business strategies and, intuitively, a prerequisite for product advancement. Any suggestions to impede clearing houses' ability to explore new opportunities in non-generic, unique products accessible through unique value-added trading platforms cleared and settled on an essentially "straight-through," integrated basis should be rejected. Accordingly, legislation should include the open access language contained in the Ag. Committee and FSC Bills, and not the language in the current draft of the Senate Bill.

7. Encourage, Not Mandate, Exchange Trading and Centralized Clearing

We are strong proponents of the benefits of central counter party clearing as an effective means to collect and provide timely information to prudential and supervisory regulators and to greatly reduce systemic risk imposed on the financial system by unregulated bilateral OTC transactions. While we support efforts to reduce systemic risk in the marketplace, we do not believe that this is best accomplished through mandated exchange trading and centralized clearing. Rather, we believe that the most effective way to reduce systemic risk without creating unintended adverse consequences, such as steering market activity to foreign jurisdictions with more favorable regulatory regimes (which will result in less liquidity and more price volatility in the U.S. for both exchange and OTC markets, where price discovery and hedging also would

suffer) is by increasing transparency and incentivizing centralized clearing. Moreover, not all standardized contracts can be cleared. Contracts that are infrequently traded, for example, are difficult if not impossible to clear even if they contain standardized economic terms because they are hard to price daily, which makes it difficult for a clearing house to calculate collateral requirements consistent with prudent risk management.

We believe that the provisions in the each of the Bills aimed at increasing transparency are adequate, and, when coupled with appropriate incentives to trade on exchanges and use centralized clearing – such as appropriate capital charges on non-cleared trades – will significantly reduce systemic risk in the U.S. marketplace. Legislation should not include a mandate for exchange trading or centralized clearing, but rather should include incentives to trade on exchanges and use a centralized clearing system. Accordingly, we believe that each of the Bills should be revised in this regard. We would be happy to work with the Committee to shape such measures for inclusion in legislation.

8. Protect Customer Funds and Collateral Respecting Swap Transactions

Each of the Bills contains a provision addressing the treatment of customer funds and collateral respecting swap transactions, providing that such funds and collateral must be segregated from the property of the customer's DCO or FCM. The drafting of the language of this provision, however, is ambiguous and should be revised to clarify what appears to be the intent of this provision. Specifically, this provision in each of the Bills should be amended to clarify that, to the extent that a single clearing house clears both swaps and security-based swaps, if a DCO is holding positions, once cleared these positions and supporting collateral will be treated as "customer property" within the meaning of Subchapter IV of Chapter 7 of Title 11. With such treatment, the collateral will be required to be placed in a segregated commodity account, and be treated as "customer property" in relevant bankruptcy proceedings. We have been working with the CFTC on language for such an amendment and would be pleased to share that language with the Committee.

9. The CFTC's Jurisdiction

The CEA's exclusive jurisdiction provision mandates that CFTC regulation is the sole legal standard applicable to virtually all futures trading. This exclusivity provision was

purposely included in the CEA decades ago to prevent duplication and inconsistency in regulating the industry; indeed, the phrase "except as hereinabove provided" was inserted in the original CFTC Act so that it would supersede all others in regard to futures and commodity options regulation. Despite the success of this jurisdictional delineation to date, the FSC and Senate Bills propose to disrupt it. Specifically, these bills provide that the CFTC's exclusive jurisdiction does not supersede any other authority's jurisdiction thereunder and would be referenced in existing CEA Section 2(a)(1)(A) as an exception to the CFTC's exclusive jurisdiction clause. Moreover, these bills appear to give CFTC "primary" enforcement authority over matters respecting swaps, but permit other regulators to take action if CFTC does not, and another provision allows other agencies to apply "any other applicable law." The effect of these provisions would be to subject market participants to potentially conflicting standards and multiple regulators. Accordingly, as contemplated by the Ag. Committee Bill, the legislation should maintain, in substance, the CEA's exclusivity provision.

10. Eliminate Stay Respecting DCOs in the Event of a Default of One of Their Members

Centralized clearing and settlement of financial transactions through clearing organizations such as those serving exchange markets is generally acknowledged to reduce systemic risk, and for this reason proposed regulatory reform legislation seeks to impose clearing requirements on OTC derivative contracts to the fullest extent possible. However, central clearing can achieve its risk reducing function only to the extent that the regulated clearing organizations are themselves able to ensure timely settlement of transactions. Provisions of Title II of the Senate Bill and Subtitle G the FSC Systemic Risk Bill of the give broad authority to a receiver or qualified receiver to take actions to repudiate contracts, avoid transfers, and otherwise affect the rights of counterparties and creditors of a financial company that is subject to the resolution process.

While certain provisions applicable to a "qualified financial contract" or "QFC" under the legislation provide protection for counterparties to such contracts, one destabilizing aspect of QFC treatment is the stay on the exercise of any acceleration for one business day while the receiver makes the determination whether to assign the contract to a third party. Such a delay would interfere with the ability of a clearing organization to close out exposures to a failed institution and thereby reduce risk to other participants. Institutions are most likely to fail in

volatile market conditions. Forcing clearing organizations to wait for even one business day before closing out positions of a failed member may cause collateral that would have been sufficient to fund an immediate close-out to become inadequate, maybe dangerously so. Since clearing organizations are central risk-mitigation bodies, it is essential that their ability to immediately close out exposures be protected in order to avoid spreading rather than eliminating risk. Thus, while provisions facilitating the transfer of positions of an insolvent clearing member to a solvent one are desirable, the legislation should make clear that the receiver or qualified receiver appointed under Title II of the Senate Bill/Subtitle B of the FSC Systemic Risk Bill with respect to a member of a clearing organization must meet all margin and settlement obligations of the clearing member to the clearing organization when due if feasible, and that if the receiver fails to do so, the clearing organization will not be prevented from exercising all available remedies under its rules and applicable law.

Accordingly, Title II of the Senate Bill/Subtitle G of the FSC Systemic Risk Bill should be amended to require that the receiver use its best efforts to meet all margin and settlement obligations of the covered financial company to the clearing organization when due. Such amendment should further provide that, if the receiver or qualified receiver fails or is unable to meet such obligations in full for any reason, the clearing organization shall have the immediate right to exercise, and shall not be stayed by any provision of the Act or by order of any court acting under authority of the Act from exercising, all of its rights and remedies under its rules and/or any other applicable law. Indeed, such an amendment should explicitly provide that the clearing organization maintains the right to, among other things, liquidate all positions and collateral of such clearing member, net the settlement rights and obligations of such clearing member, and suspend or cease to act for such clearing member, all in accordance with the rules of the clearing organization.

11. Prudential Regulation Under the Senate and FSC Systemic Risk Bills

Last, but by no means least, many provisions in the Senate Bill and FSC Systemic Risk Bill should be revised to eliminate duplicative and unnecessary regulation of entities, such as DCOs and DCMs, that are already subject to substantial prudential regulation by the CFTC. This can be achieved through the elimination of certain titles or subtitles and tightening the language in the draft legislation to ensure that it comports with Congressional intent.

Both Bills appropriately address a gap in oversight of payment systems by giving statutory authority to the Agency for Financial Stability ("AFS" or "Agency") (in the case of the Senate Bill) or the Federal Reserve Board (the "Board") (in the case of the FSC Systemic Risk Bill) to oversee inter-bank payment systems. As currently drafted, however, they potentially go further by also authorizing the AFS or the Board to effectively regulate securities, futures and derivatives clearing houses and exchanges. In addition to prescribing standards, the Agency or the Board would have the authority to directly examine compliance with and make recommendations for enforcement and implement those recommendations in certain circumstances. Thus, both Bills may effectively set up a system of dual regulation of clearing houses and exchanges between the market regulators on the one hand and the Agency or Board on the other.[2]

Specifically, the broad definition of "financial companies" in both Bills is so overly inclusive that the CFTC regulated clearing houses and designated contract markets may be designated as "identified" or "specified" "financial holding companies" subject to the provisions of Titles I and II in the case of the Senate Bill or Subtitles B and G in the case of the FSC Systemic Risk Bill, and subjected to a set of regulations and prescriptions that are not logically applicable to such enterprises. CFTC Chairman Gary Gensler testified on November 17, 2009 before the House Committee on Agriculture, that "[w]hile seeking to address the gaps and inconsistencies that exist in the current regulatory structure of complex, consolidated financial firms, [Titles I and II/Subtitles B and G] also may have unintentionally encompassed robustly regulated markets such as securities and futures exchanges."[3] Chairman Gensler correctly

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[2] A further inappropriate, and probably unintended, consequence of including clearing houses and exchanges within the definition of "financial company" is that they could become subject to the resolution authority of Title II and Subtitle G, which clearly were not drafted with such entities in mind.

[3] Although Chairman Gensler was specifically referencing the provisions the FSC Systemic Risk Bill, as discussed herein, the provisions of Subtitles B and G of that bill are substantially similar to the referenced provisions in the Senate Bill.

reasoned that the intent of these Titles/Subtitles cannot be applied to CFTC and SEC regulated clearing houses or exchanges.[4]

Titles I and II and Subtitles B and G however, may end up being applied to these fully regulated enterprises because they operate within a holding company structure and, depending on whim, may fall under the rubric of a "financial company." As discussed in more detail below, these holding companies and their subsidiaries, such as the New York Stock Exchange or the Chicago Mercantile Exchange, are currently comprehensively regulated by the SEC or the CFTC.

Obviously, Titles I and II and Subtitles B and G were drafted to deal with bank holding companies, and are not reasonably applied to clearing houses or exchanges. For example, Title I/Subtitle B prohibits any specified financial holding company from having credit exposure to any unaffiliated company that exceeds 25% of the identified financial holding company's capital stock and surplus. Clearing houses would be unable to comply with such a limitation because they do not trade or take market risk and, in connection with their central counterparty clearing function, rely primarily on operating a fully matched book, performance bond, security deposits, twice daily mark-to-market and other well-understood means to protect against loss. Clearing houses exist to reduce risk, not to take risks for profit. In addition, standards would be set for risk-based capital requirements and leveraging, yet clearing houses and exchanges themselves conduct no investment activity. In short, the standards contemplated by Title I/Subtitle B simply do not pertain to how clearing houses or exchanges function.

The application of Titles I and II and Subtitles B and G to clearing houses and exchanges is unnecessary and Title VIII of the Senate Bill is unnecessary in its entirety because clearing houses and exchanges are already subject to specific regulation under the CEA, and certainly will be subject to enhanced prudential regulation with the passage of proposed OTC legislation. Indeed, under both the Ag. Committee Bill and the FSC Bill, and under Title VII of the Senate Bill, important enhancements to the CFTC's oversight of clearing houses and designated contract

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[4] Although Title I/Subtitle B purports to define "financial company" for purposes of "this Act," which could be interpreted to include all Titles/Subtitles, the term is nevertheless redefined (differently) in Title II/Subtitle G. Accordingly, the definitions should be consistent in making clear that regulated exchanges and clearing houses are not covered.

markets were included, both for futures and OTC derivatives. These provisions clarify and materially enhance the CFTC's ability to regulate clearing houses and exchanges, write rules and oversee the setting of margin to protect the financial integrity of clearing houses and exchanges. For example, in the Ag. Committee Bill, the CFTC is granted authority respecting the setting of margin for CFTC-regulated derivatives clearing organizations to protect the integrity of the clearing house and the integrity of the transactions conducted therein; the core principles of the FSC and Senate Bills provide that DCOs must have adequate financial resources to discharge their responsibilities, which shall, at a minimum, enable each DCO to (i) meet its financial obligations to its members and participants notwithstanding a default by the member or participant creating the largest financial exposure for that DCO in extreme but plausible market conditions, and (ii) to cover its operating costs for a period of one year, calculated on a rolling basis. Moreover, each of the FSC, Ag. Committee and Senate Bills require that DCOs measure their credit exposures to their members and participants at least once each business day and monitor such exposures throughout the business day. All these new provisions are designed to insure that CFTC-regulated clearing houses and exchanges avoid situations that might create systemic risk for the financial system and to allow the CFTC to transparently monitor these entities on a real-time basis so that action may be taken before such risk is created.

For all these reasons, Title VIII should be deleted from the Senate Bill as was done with Subtitle E of the FSC Systemic Risk Bill and no such provision should be included in legislation. Similarly, Titles I and II and Subtitles B and G of the Senate Bill and FSC Systemic Risk Bill respectively should be amended to clarify that neither regulated clearing houses (such as DCOs) nor regulated exchanges (such as DCMs) qualify as "financial companies" for purposes of such legislation.

Treasury Secretary Timothy F. Geithner
Written Testimony
Hearing on OTC Derivatives Reform and Addressing Systemic Risk
Before the Senate Committee on Agriculture Nutrition and Forestry
December 2, 2009

Chairman Lincoln, Ranking Member Chambliss, members of the Senate Agriculture Committee, thank you for the opportunity to testify today about a critical component of our financial reform package – a comprehensive framework for regulating over-the-counter (OTC) derivatives.

Let me begin by discussing the larger context within which this component fits – a broad and thorough reform of our financial system designed to protect Americans from the consequences of a preventable economic collapse.

In the years leading up to the crisis, our financial regulatory regime permitted an excessive build-up of risk, both inside and outside the traditional banking system. The shock absorbers critical to preserving stability – capital, margin, and liquidity cushions in particular – were inadequate inside the banking sector and woefully inadequate in critical places outside the banking sector. As a result, our overall system was too weak to withstand the failure of large, interconnected financial firms.

To make matters worse, the government did not have the tools to handle the failure of major firms in ways that kept it from destabilizing the financial system and imperiling the economy.

There was also a fundamental failure of consumer protection. Millions of Americans were sold products they did not understand and could not afford. In some cases, this was the result of irresponsible choices by households. But in many of these cases, people were misled by unclear disclosures, overly complicated contracts or loan originators whose incentive was to close deals regardless of borrowers' ability to pay.

The Administration has proposed comprehensive reform to address the causes of the recent crisis and reduce the risk of future crises.

We have proposed to establish a new Consumer Financial Protection Agency with the power to establish and enforce protections for consumers across a wide array of financial products.

We have proposed to extend the scope of prudential regulation beyond the traditional banking sector to cover all financial firms whose failure could pose a threat to financial stability.

We have proposed to put in place more conservative constraints on risk taking: tougher capital and liquidity requirements for financial institutions, and stronger cushions in the critical market infrastructure. And we have called for standards on our largest and most interconnected financial firms to be substantially higher than those on other firms. These higher standards would substantially reduce the probability that large, interconnected firms fail. They would require these firms to internalize the costs that they impose on the system. And they would give these firms incentives to shrink and reduce their complexity, leverage, and interconnections.

We have proposed that the government have authority – as we do today for banks and thrifts – to break apart or unwind major non-bank financial firms in an orderly way that imposes pain on shareholders, creditors, and managers, but limits collateral damage to the financial system and spares taxpayers.

And we have proposed to work with other countries to establish strong international standards, so that the reforms we put in place here are matched and informed by similarly effective reforms abroad.

Over the past few months we have worked closely with Chairman Lincoln, Chairman Dodd, Chairman Frank, Chairman Peterson, members of their Committees, and other Members of Congress to craft strong financial reform legislation.

I have been particularly pleased by the convergence on good policy that we have seen in the derivatives bills produced by the Senate Banking Committee, the House Agriculture Committee, and the House Financial Services Committee, and I know this Committee is hard at work on its own legislation. There is a growing strong consensus about the nature and scope of reforms necessary to make our derivatives markets more transparent, more efficient, more fair, and more stable.

The rapid growth and innovation in the markets for derivatives, especially OTC derivatives, has been one of the most significant developments in our financial system during recent decades.

Because of their enormous scale and the critical role they play in transferring risk around our financial system, establishing a comprehensive framework of oversight for the OTC derivative markets is crucial to laying the foundation for a safer, more stable financial system.

A derivative is a financial instrument whose value is based on the value of an underlying "reference" asset. The reference asset could be a Treasury bond, a stock, an interest rate, a corporate loan, a mortgage-backed security, or a non-financial commodity such as oil or copper or corn. Although some derivatives are traded today on regulated exchanges, the vast majority are traded off exchanges, or over the counter.

The OTC derivative markets grew explosively in the decade leading up to the financial crisis, with the notional amount or face value of the outstanding transactions rising more than six-fold to almost $700 trillion at the market peak in 2008. Over this same period, the gross market value of OTC derivatives rose to more than $20 trillion.

Although derivatives bring substantial benefits to our economy by enabling companies to manage risks, they also pose very substantial challenges.

Under our existing regulatory system, some financial firms were allowed to sell large amounts of protection against certain risks without adequate capital to back up those commitments. The most conspicuous and most damaging examples of this phenomenon were the monoline insurance companies and AIG. These firms sold massive amounts of credit protection, including on mortgage-backed securities and other more complex real-estate related securities, without the

capacity to meet their obligations in an economic downturn. And banks were able to get substantial regulatory capital relief by buying credit protection on mortgage-backed and other asset-backed securities from these firms, which were thinly capitalized, special purpose insurers subject to little or no initial margin requirements. Regulatory requirements and market discipline were both weak and failed to constrain in any meaningful way the exposures of banks to these thinly capitalized firms.

The apparent ease with which derivatives permitted firms to transfer risk during a period of global expansion and ample liquidity led financial institutions and investors to take on imprudent amounts of risk.

The complexity of the instruments that emerged overwhelmed the checks and balances of internal risk management and government supervision. And these weaknesses were magnified by systematic failures in judgment by credit rating agencies. The result was a substantial increase in leverage across the financial system.

Because of a lack of transparency in the OTC derivatives and related markets, the government and market participants did not have enough information about the location of risk exposures in the system or the extent of the mutual interconnections among large firms. So, when the crisis began, regulators, financial firms, and investors had an insufficient basis for judging the degree to which trouble at one firm spelled trouble for another. This lack of information magnified contagion as the crisis intensified, causing a damaging wave of margin increases, deleveraging, and credit market breakdowns.

The lack of transparency in the OTC derivative markets, combined with insufficient regulatory power to police these markets, left our financial system more vulnerable to fraud and manipulation.

These problems were not the sole or even the principal cause of the crisis, but they contributed to the crisis in important ways. They need to be addressed as part of comprehensive financial reform. And they cannot be adequately addressed within the present statutory framework.

In designing its proposed reforms for the OTC derivative markets, the Administration has attempted to achieve four broad objectives:

- Preventing activities in the OTC derivative markets from posing risk to the stability of the financial system;
- Promoting efficiency and transparency of the OTC derivative markets;
- Preventing market manipulation, fraud, and other abuses; and
- Protecting consumers and investors by ensuring that OTC derivatives are not marketed inappropriately to unsophisticated parties.

Our detailed legislative proposal, which is now working its way through Congress, provides a comprehensive approach to derivatives regulation that meets the core objectives set forth above. The plan provides for strong regulation and transparency for all OTC derivative transactions, regardless of the reference asset, and regardless of whether the derivative is customized or

standardized. In addition, our plan provides for strong prudential and business conduct supervision and regulation of all OTC derivative dealers and other major participants in the OTC derivative markets.

To meet the Administration's core objectives, comprehensive derivatives reform should include the following substantive elements:

First, all derivative contracts that are liquid and standardized should be cleared through well-regulated central counterparties.

Central clearing involves the substitution of a regulated clearinghouse between the original counterparties to a transaction. After central clearing, the original counterparties no longer have credit exposure to each other – instead they only have credit exposure to the clearinghouse. Central clearing of sufficiently liquid and standardized OTC derivatives will reduce risks to those on both sides of a derivative transaction and make the market more stable. With careful supervision and regulation of the margin and other risk management practices of clearinghouses, central clearing of a substantial proportion of OTC derivatives should help to reduce risks arising from the web of bilateral interconnections among our major financial institutions. This should reduce the prospect of threats to financial stability emerging from the derivative markets.

We should employ a presumption that a derivative contract that is accepted for clearing by one or more clearinghouses, and approved by the Commodity Futures Trading Commission (CFTC) or Securities and Exchange Commission (SEC), must be centrally cleared by all. But we should not rely exclusively on decisions by the private sector to determine the scope of the central clearing requirement. It is imperative that the CFTC and the SEC also have authority to proactively require central clearing of derivative types that are sufficiently standardized and liquid or whose economic terms are substantially the same as contracts that are centrally cleared – regardless of whether a clearinghouse would accept the derivative type for clearing today. This two-channel approach to determining which derivative types must be centrally cleared takes advantage of the expertise of private clearinghouses even as it protects the government from abuse at the hands of rogue clearinghouses that are imprudently seeking new business, or strategic decisions by clearinghouses that are seeking to keep the derivatives markets over-the-counter for the benefit of their owners.

We also should require that regulators carefully police any attempts by market participants to use spurious customization to avoid central clearing.

Second, we should use capital and margin requirements and other measures to provide market participants with incentives to make substantially greater use of centrally cleared derivatives, and thus produce a substantial migration of OTC derivatives onto central clearinghouses. Specifically, capital and margin requirements for non-centrally cleared OTC derivatives should be increased. Given the higher risk they pose, capital requirements for derivative contracts that are not centrally cleared should be set substantially above those for contracts that are centrally cleared.

Third, all OTC derivative dealers and other major OTC derivative market participants should be subject to tough prudential supervision and regulation, including conservative capital requirements, conservative margin requirements, and strong business conduct standards. Conservative capital and margin requirements for OTC derivatives will help ensure that dealers and other major market participants have the resources necessary to make good on the promises they have made to their derivative counterparties.

Fourth, the OTC derivative markets should be made fully transparent. Clearable derivatives should be required to be traded on regulated exchanges or regulated electronic execution facilities. Such a requirement should result in improved price discovery for liquid derivative markets and for many of the reference assets on which derivatives are based. The requirement also should lead to greater price competition among dealers and improved prices for end users of derivatives.

In addition, relevant regulators should have timely and complete access on a confidential basis to the transactions and open positions of individual market participants. And the public should have access to aggregated data on open positions and trading volumes.

To bring about this high level of transparency, the CFTC and SEC should have authority to impose recordkeeping and reporting requirements (including an audit trail) on all OTC derivatives. Counterparties to OTC derivatives that are not centrally cleared should be obligated to report each transaction to a regulated trade repository on a timely basis.

These reforms will bring OTC derivative trading into the open so that regulators and market participants have a clear view into the market and a greater ability to assess risks in the market. Increased transparency will improve market discipline and regulatory discipline, and will make the OTC derivative markets less volatile.

Fifth, the CFTC and SEC should be provided with clear authority for civil enforcement and regulation of fraud, market manipulation, and other abuses in the OTC derivative markets.

Sixth, the standards that govern who can participate in the OTC derivative markets should be tightened. We must zealously guard against the use of inappropriate marketing practices to sell derivatives to unsophisticated individuals, businesses, and municipalities.

Finally, we must continue to work with our international counterparts to help ensure that our strict and comprehensive regulatory regime for OTC derivatives is matched by a similarly effective regime in other countries.

These reforms will help prevent the OTC derivative markets from threatening the stability of the overall financial system. They will do so by requiring central clearing of clearable derivatives and by requiring that all OTC derivative dealers and other significant OTC market participants be strictly supervised by the federal government, maintain substantial capital buffers to back up their obligations, and comply with prudent initial margin requirements.

These reforms will help make the derivative markets more efficient and transparent and thus help ensure that the government is not caught – as it was in this crisis – with insufficient information about market activity, risk concentrations, and connections between firms. They will do so by requiring that all clearable derivatives be executed on regulated exchanges or regulated electronic execution facilities and by requiring that detailed information about all derivatives be readily available to regulators.

These reforms will help prevent market manipulation, fraud, and other abuses. They will do so by providing full information to regulators about activity in the OTC derivative markets, by providing the CFTC and SEC with full authority to police the markets and impose position limits, and by taking steps to prevent OTC derivatives from being marketed inappropriately to unsophisticated parties.

Both chambers of Congress are moving quickly now to consider, deliberate, and pass legislation to reform our financial system, and the Administration stands ready to help advance the process. We welcome the commitment of the Congressional leadership and of the key Committees, including the Senate Agriculture Committee, to move forward with legislation in the coming weeks. This is an enormously complex project. It is important that we get it right. And it is critical that we finish the job.

The recent crisis caused enormous damage to trust and confidence in the U.S. financial system, to the American economy, and to the ability of individual Americans to thrive. We share responsibility for fixing the system, and we can only do that with comprehensive reform – reform that includes strong oversight of the derivatives markets.

We look forward to working with you to achieve that objective.

Testimony of Blythe Masters
JPMorgan Chase & Co.
Senate Agriculture Committee
December 2, 2009

Chairwoman Lincoln, Ranking Member Chambliss, and Members of the Committee, my name is Blythe Masters, and I am a Managing Director and Head of the Global Commodities Group at JPMorgan Chase & Co. J.P. Morgan's commodity business provides thousands of commercial, industrial and financial customers with risk management and transactional services in both physical and financial commodities globally. Thank you for inviting me to testify at today's hearing.

J.P. Morgan believes that reform of the regulatory framework for over the counter (OTC) derivatives is necessary. The experience with OTC derivatives during the financial crisis highlighted three major issues that will be more than adequately addressed by some of the proposed reforms now under discussion: lack of transparency in the market, particularly to regulators; excessive interconnectedness among major financial institutions; and absence of a systemic risk regulator to intervene in the event of excessive risk-taking by under-regulated, but systemically relevant, companies, such as AIG. There is a welcome degree of consensus among market participants and regulators about what needs to be fixed. As the legislative process moves forward, and the Committee considers the details of these reforms, it is critical for legislation to recognize the essential role these markets play in helping companies across the nation hedge their risks and thereby gain access to credit necessary for economic growth and job creation. We hope the Committee will consider the costs and benefits of proposals as they formulate their approach.

Two of the key legislative proposals to reform the market are clearing and exchange trading requirements, and I will address each in turn.

Clearing

As the Committee heard during other hearings on this topic, clearing of OTC derivatives transactions through regulated clearinghouses provides critical stability benefits to the global financial system and must be mandated; however, that mandate must take into account two important facts:

1. Not all OTC market participants are capable of clearing. At the November 18 hearing held by this Committee, end-users of OTC derivatives unanimously testified that OTC derivatives are essential risk management tools, that clearing such transactions would result in significant liquidity difficulties, and that the attendant costs would in some cases be insurmountable, preventing them from managing risk and inhibiting their growth. Moreover, those costs would produce no benefit to the financial system because end users' use of OTC derivatives had nothing to do with the financial crisis and OTC derivatives entered into by end-users did not contribute to the problems facing our financial system.

2. Not all OTC derivatives are capable of being cleared. To clear a type of OTC derivatives product, a clearinghouse must establish relatively standard terms that frame the

contract to be cleared, a formula for determining initial margin, a method for pricing to determine variation margin, and systems for processing transactions submitted for clearing as well as for payments and collateral with respect to those transactions. This work is sophisticated and expensive, and it would not be feasible, and in all likelihood would be risky, for a clearinghouse to create a cleared version of every OTC derivatives contract that might be traded. Clearinghouses will, and do, focus on the products that trade with sufficient frequency so as to enable them to manage their risks appropriately without having to impose initial margin requirements at a level that would make trading uneconomical. Importantly, clearability should not determine whether end users should continue to have access to these products. As end users have testified, their risks can be highly specific and they often require customized products, so banning forms of transactions would only prevent them from managing those risks.

For the purposes of determining a clearing mandate, recognition of these two facts can be expressed in two questions: who has to clear, and what has to be cleared? The answer to the first question is more important in our view because market participants, rather than transactions, create systemic risk. J.P.Morgan believes that clearing should be required among systemically important institutions whose failure could destabilize the financial system and thus threaten the entire economy: derivatives dealers and major swap participants. Derivatives dealers are well known; as Chairman Gensler testified, these are the fifteen to twenty large, complex financial institutions that are at the center of today's global derivatives marketplace. Major swap participants, on the other hand, are creatures of legislative definition. There are common elements in the definitions contained in recent legislation proposed in Congress, and J.P.Morgan believes the key determinant should be the systemic risk posed by an entity's outstanding derivatives transactions.

Entities that are not dealers or major swap participants should be exempt from the clearing mandate. These entities, the vast majority of which J.P.Morgan expects to be commercial end users, need OTC derivatives but do not pose systemic risk to the financial system. Further, there is no benefit to be gained from requiring them to clear but, as they have testified, there is significant cost. Nonetheless, there have been arguments made that these entities still should be required to clear because the credit risk from their derivatives transactions, in the aggregate, could imperil the dealers with whom they transact. Those arguments are wrong; they misstate the size and the nature of the risk. For example, J.P.Morgan's aggregate derivatives-related credit risk to non-financial entities as of the fourth quarter of 2008 was approximately $59 billion. Our Tier 1 capital as of that time was approximately $120 billion. To put our derivatives credit risk in context, our total loan exposure at that time was $745 billion. Derivatives credit risk is qualitatively the same as loan credit risk, and both should be encouraged and managed in a safe and sound manner. We lend to American companies, and using the same credit analysis, we provide risk management products to American companies.

There have also been proposals suggesting that end-users be required to clear and that the requisite collateral would be lent to them by banks under margin financing agreements. These arguments ignore the balance sheet impact that margin loans would have on end-users as well as the costs of such loans to end-users as discussed by companies at a hearing before this Committee two weeks ago. Margin loans would double the size of an end-user's liabilities because the loan would be in addition to the derivatives exposure, thus limiting the ability of the end-user to borrow for investment and jeopardizing its credit rating. Furthermore, the interest

rate on margin loans would be variable and could not be hedged, so the end-user would be exposed to additional risks beyond those it sought to hedge, which in some cases could undermine the entire purpose of hedging. Lastly, it is not at all certain that margin financing would be available at all times in the amounts an end-user would need for the duration of its derivatives transaction. The current method by which end-users negotiate and execute OTC derivatives is suitable for them, as they have testified, and does not harm the financial system. Given the material impact such a change would have on end users, the certain costs and uncertain benefits of this proposal should be carefully considered.

With regard to what should be cleared, attempts have been made to define the characteristics of "standardized" transactions and to delegate the power to make the relevant determination with respect to particular transactions. J.P.Morgan believes this effort is fundamentally flawed. No definition can be precise enough to capture all these characteristics, nor can it evolve over time as new risk management products are introduced, in each case leaving open the possibility of regulatory arbitrage as products might be structured in such a way as to not meet the definition. Delegation to regulators, clearinghouses or other arbiters has also been shown to be problematic. The end result likely would be a body of financial regulation to rival the tax code in length and complexity.

J.P.Morgan believes the better approach is to address the issue causing systemic risk: the degree of interconnectedness between systemically significant institutions (i.e., dealers and major swap participants). To achieve the goal of minimizing the extent to which a single dealer's or major swap participant's default could harm other dealers and major swap participants and the financial system overall, we propose that the regulators require that the cleared exposures of each dealer and major swap participant be greater than a stated percentage of the overall exposures of the dealer or major swap participant for each asset class. This percentage would be determined by the CFTC for commodities-based swaps and the SEC for securities-based swaps -- in each case jointly with the prudential regulator, since the prudential regulator must be involved in efforts to address systemic risk. These percentages should vary by asset class and by institution to reflect the degree to which end-users enter into risk management transactions in that asset class and the capital strength, and other systemic attributes, of the relevant institution.

J.P.Morgan believes this might be a useful approach because it would eliminate the conceptual problems and other issues with defining what transactions are "standardized", it relies on known, easily understandable information (all regulated dealers already report this information to their regulators), it is flexible (the regulators can change percentages over time, as they see fit), and it provides incentives to dealers and major swap participants to clear their exposure between themselves, thus minimizing interconnectedness. This approach, combined with greater capital requirements for non-cleared exposures and zero capital requirements for cleared exposures, would address systemic risk in a comprehensive manner using existing information with no room for gamesmanship or evasion.

Trade Execution

On November 18, Chairman Gensler testified that "transparency benefits the marketplace," and J.P.Morgan wholeheartedly agrees and supports efforts to increase transparency in the OTC derivatives market. Transparency, however, is a means to a policy end, rather than an end in

itself. J.P.Morgan believes the policy objective is a well-functioning market for risk management. Well-functioning is not measured only by transparency but also by liquidity (the ability to execute transactions), volatility (the rate of change in market prices), transaction costs and other factors. It does not benefit market participants to have complete price transparency when the result is inability to execute risk management transactions because of lack of liquidity or sudden movements as soon as a transaction is executed. Consequently, efforts to improve transparency in the OTC derivatives market must be considered in light of what effects they could have on other characteristics of this market and on its participants.

To that end, J.P.Morgan supports three of the four priorities proposed by the Administration and supported by Chairman Gensler to improve transparency. J.P.Morgan supports reporting all non-cleared transactions to a trade depository that makes the data available to regulators as well as aggregating data on OTC derivatives transactions and making it available to the public. J.P.Morgan also supports establishing stringent recordkeeping and reporting requirements for swap dealers and major swap participants and vigorously enforcing those requirements. However, while we believe post-trade price reporting can be useful in providing end users with pricing information, we do not believe that requiring cleared transactions to be moved onto exchanges would provide any additional benefits but would, rather, destroy market liquidity, disrupt efficient risk transfer and significantly affect end users' ability to transact.

Mandatory exchange-trading would require dealers to post their risk positions through the central limit order book operated by the exchange. Posting large or longer-term risk, the kind of risk that arises in OTC derivatives transactions and the kind of risk for which there is not a natural pool of liquidity on an exchange, would alert the rest of the market to a dealer's risk position and would move the market against that dealer, making it much more expensive and risky for that dealer to execute its hedging transaction. Dealers would be reluctant to put their capital at risk when hedging the OTC transaction on exchange and so would increase costs of the OTC transaction accordingly, if they were to execute the transaction at all. The result would be fewer risk management transactions executed in smaller amounts at greater cost to end-users.

In testimony, Chairman Gensler cited the presence of information deficits in the OTC derivatives market that necessitate the requirement to move OTC transactions to exchanges. J.P.Morgan agrees that information deficits for the public and regulators must be remedied through clearing and transaction reporting but disagrees that market participants have such a deficit. Although the CFTC notes the imperative of price transparency as justifying an exchange trading mandate, we are not aware of price transparency being raised as an issue in any of the testimony or publicly available letters from end-users on OTC derivatives, though they have been outspoken in expressing concerns about other elements of the legislative proposals. The OTC derivatives market is extremely competitive and the fifteen to twenty dealer institutions that Chairman Gensler notes are central to the market compete tenaciously on the basis of price. Competition between these dealers, augmented by numerous voice and electronic brokerage firms that disseminate pricing information, results in transparent price discovery. (By analogy, there are a small number of mobile phone companies in the US but tremendous price-based competition among them. Similarly, to preserve economies of scale and adequate levels of capitalization, competition ensures a balance between scale and numbers of firms competing in OTC derivatives markets). That pricing information currently is accessible to all market participants through electronic screens and pricing services that are widely available, through trade information warehouses, through advisory firms that provide execution services to end-users

and even through daily newspapers and their websites (both the Wall Street Journal and the Financial Times publish daily pricing information for OTC derivatives referencing interest rates and currencies). Simply put, the facts do not support the rationale for an exchange-trading requirement.

J.P.Morgan believes all market participants should continue to have the ability, as they currently do, to choose whether to execute their risk management transactions on exchange or OTC. Transparency can be achieved through increased reporting and monitoring without mandatory exchange trading which deprives participants of this choice. (For example, the US treasury security market, which exists entirely OTC, is an enormously transparent market.) The systemic benefits that arise from clearing are not at all enhanced by exchange trading, and in fact it is likely that mandatory exchange trading will result in overall damage to the market.

Conclusion

J.P.Morgan is committed to working with Congress, regulators and other market participants to create an appropriate regulatory framework for OTC derivatives that provides comprehensive oversight, ensures systemic stability and promotes market transparency. We support many of the proposals that have been proffered to achieve these policy objectives. Specifically, we believe in comprehensive oversight of dealers and major swap participants, reporting requirements for all transactions, mandatory clearing requirements for dealers and major swap participants with significant outstanding exposures and end-of-day position reporting to the public of the aggregate positions of dealers and major swap participants, similar to the Commitments of Traders report published weekly by the CFTC. As always, we believe regulators should have access to any information at any time and in any form.

Thank you, Chairwoman Lincoln and Ranking Member Chambliss. I appreciate the opportunity to testify, and look forward to your questions.

Testimony of Jiro Okochi
Chief Executive Officer & Co-Founder
Reval.com, Inc.

Before the U.S. Senate Committee on Agriculture, Nutrition and Forestry
On
OTC Derivatives Reform and Addressing Systemic Risk

December 2, 2009

Introduction

Good morning Chairman Lincoln, Ranking Member Chambliss and Members of the Committee. Thank you for the opportunity to testify before you today on the topic of reforming the OTC derivatives market.

My name is Jiro Okochi, and I am the CEO and Co-Founder of Reval, a company which provides a web-based solution that helps over 375 companies better manage their use of derivatives to hedge business risks. We help our clients with risk management and specialize in accounting for derivatives under US GAAP and International Financial Reporting Standards. Our clients range from the Fortune 10 with thousands of derivatives to the middle market company with a handful of OTC derivatives.

As I may be the last person to testify on the pending OTC derivative reform, I would like to take this opportunity to state that non-financial corporations using OTC derivatives to hedge business risks were not the cause of the recent financial crisis and every consideration should be given to this class of users so that they are not penalized for, in fact, exhibiting prudent risk management by using OTC derivatives. Our clients *do not* use OTC derivatives to speculate, but to lower their risk exposures to interest rates, foreign exchange and fluctuations in price across a variety of agricultural, metals and energy commodities. These businesses need the OTC derivatives market in order to hedge specific cash flows and risks and typically use very basic swaps and forwards as instruments.

The following are examples of how businesses use OTC derivatives for hedging, not for speculative gains:

- A retailer hedges the sale of its handbags in Japan by selling Japanese yen forward.
- A manufacturer hedges the risk of rising interest expense on its floating rate bank loan by swapping to a fixed rate coupon.
- A coffee company hedges the cost to procure milk for the lattes it sells to consumers.
- A beer company hedges the corn by-product as corn prices rise during an ethanol run-up.

I have divided my testimony in three areas regarding the OTC derivatives reform:

A. Key concerns that end-users have as they face pending reform
B. Clarifications on the perceived benefits to end-users
C. Potential solutions to address key concerns for a successful implementation of the reform

A. Key concerns that end-users have as they face pending reform

While a majority of our clients understand the need for better regulation of the OTC derivatives market, there are three areas of concern for corporate end-users of derivatives:

1. **The potential impact of the standardization of OTC derivative contracts.** Currently, OTC derivative contracts can be tailored to uniquely offset a company's business risk. Standardization of these OTC derivative contracts could result in mismatches between the terms of the OTC derivative and the specific terms of the business risk, resulting in improper hedging. In addition to overall poorer performance in achieving their hedge objectives, standardization may result in failing some of the hedge effectiveness testing requirements around derivative accounting under US GAAP, called FAS 133, which as a result of disqualification would lead to additional P&L volatility.

2. **Higher costs to hedge.** There is a concern that the pending legislation will result in fewer Swap Dealers and, therefore, less competition as smaller Swap Dealers and foreign Swap Dealers may find the regulations too onerous. Furthermore, additional capital and margining requirements for Swap Dealers will ultimately be passed on to the end-user, resulting in a higher cost to enter into OTC derivatives. Also, clearing firms may not see the opportunity to clear customized OTC derivatives, resulting in less liquidity and, therefore, wider bid offers.

3. **Margin requirements are costly to provide as well as to maintain.** Of course in any environment, businesses would rather use their cash for other means than posting margin, but even more so today. Companies without the liquidity to post cash margin would have to raise the cash, which would impact their balance sheets and potentially their credit ratings. The liquidity of companies with cash on hand would be impacted as most companies invest in highly liquid securities that could be sold at any time instead of being tied up in a margin account. Furthermore, the cost to manage the daily posting of collateral would be new in terms of systems and people.

   Some of the legislation to date has indeed exempted non-Swap Dealers and non-Major Swap Participants from having to clear their OTC derivatives and to post capital or margin against un-cleared trades. However, it is our concern that if Swap Dealers will be required to post capital and margin against all un-cleared transactions, then ultimately the Swap Dealers may in turn require their end-user clients to post margin to them. In such a scenario, the unintended consequence would be that end-users would have to post cash collateral to Swap Dealers instead of derivative clearing organizations, which would drive up costs.

B. Clarifications on the perceived benefits to end-users

At this point, I would like to highlight some of the reasons why end-users do not see the same benefits that would be expected from standardization, clearing and margining.

1. **End-users are less concerned about credit risk to Swap Dealers:** Most companies do not engage in OTC derivative transactions with Swap Dealers that do not lend them money. So for the most part, corporate end-users will be "net borrowers" to the Swap Dealers. It would be unlikely that a Swap Dealer would ever owe the corporate end-user in the event of a default when including netting for all borrowings and derivatives.

2. **End-users feel they have sufficient price discovery and efficiency without clearing**: Most end-users will call a minimum of three Swap Dealers before executing their OTC derivative transaction, and, for a majority of basic instruments, the pricing is very tight and efficient. The cost of posting margin or the benefit of clearing the trade does not outweigh the current transparency they are able to achieve. The creation of trade repositories as currently proposed would of course be a welcome benefit to end-users for even better transparency.

3. **Standardized derivative products that exist today demonstrate why most end-users do not see the benefits of transparency or reduced credit risk through clearing**: Corporates today have the flexibility to use many exchange-traded futures contracts to hedge; however, for the reasons mentioned earlier, they need the customization that futures contracts cannot provide, and they can enter into the custom hedge without posting initial and variation margin that futures contracts require. Also, for many companies, the futures do not result in the desired settlement, whereby financial futures are typically cash settled when companies would want the hedge to continue. For example, the Chicago Board of Trade Five Year Swap future settles for cash on expiry whereby a corporate end-user would actually want the five year swap to begin and continue for the next five years.

C: Potential solutions to address key concerns for a successful implementation of the reform

With the previous points in mind, I would like to make the following suggestions, which will benefit the end-users of OTC derivatives and help in the long-term success of implementing the reform.

1. **Define exemptions from margin and additional capital requirements for the portion of the Swap Dealer's portfolio sold to end users.** Some of the proposals to date include exemption of clearing and margining for entities that are not a Swap Dealer or Major Market Participant. As mentioned before, there could be unintended consequences where Swap Dealers would be driven to require collateral from their end-users despite the exemption under the reform. In order to avoid this, Swaps sold to end-users by the Swap Dealers should also be exempted from posting margin and, if possible, additional capital for un-cleared trades.

2. **Create a specific definition for Swap End-Users.** Much of the language to date has centered on defining Swap Dealers and Major Swap Participants, which makes sense given that these two classes of users probably use 90.2%[1] of the $604 trillion dollar swap market[2]. Rather than simply define a new class that uses OTC derivatives to hedge, most of the language that would allow for any exemptions from clearing or margin or other definitions resort to defining when the entity is "not" a Swap Dealer or Major Market Participant. As a result, there has been concern that this approach is too broad and could leave open the opportunity for spurious behavior to take advantage of any exemptions within the reform.

   The concerns of attempting to use a broad approach to describe everyone *but* Swap Dealers and Major Market Participants is that some of the proposed definitions and exemptions become less clear, and there is a general concern that it may be easier to create legislation without any end-user exemption if it becomes too tenuous to use terms like risk management and hedging under US GAAP.

   So if there is a need to narrow the scope, then one approach would be by defining the term "Swap End-User". One clear distinction is that corporate end-users do not get compensated for speculation and, not by coincidence, do not exhibit behavior that would take on leverage or large net positions because there is no benefit. In fact, they could lose their jobs if they were to speculate. Companies that hedge have risk management policies that clearly state they do not use OTC derivatives to speculate and also are required to define their hedging strategies as well as their approach to handling US GAAP for derivative use. This policy document could be used as one of the cornerstones to define a Swap End-User.

3. **Exemption for certain OTC derivative transactions less than 12 months in maturity.** Perhaps, with the exception of event-driven instruments like Credit Default Swaps and OTC derivatives with notional principal exchanges, Swaps under 12 months in maturity could be exempt since they typically would not impose real systemic risk and their future potential risk is also lower than longer-dated Swaps. I hope the Committee will not only include the exemption of foreign exchange swaps and foreign exchange forwards included in other proposals but would also consider exemption for single currency interest rate swaps and commodity swaps less than 12 months.

4. **Consider a phased-in approach.** The effort to implement the final legislation will be very challenging given the size of the market, the different agencies and regulators involved and the many different entities using OTC derivatives globally. Consider starting with the Security-Based Swaps that create greater potential systemic risks and plan a gradual phased-in approach for

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[1] Estimated from Bank for International Settlements (BIS) end-June 2009 Statistics, not including credit default swap ($36 trillion notional) or commodity data ($3.7 trillion notional)

[2] The total outstanding notional of over-the-counter (OTC) derivatives contracts according to statistics released by the Bank for International Settlements (BIS) at end-June 2009

interest rates, foreign exchange and commodity transactions. If not by instrument type, then additional time to comply should be allowed for the end-user.

Finally, I would like to reiterate and clarify that our clients understand the need for regulation of the OTC derivatives market. Their concern is primarily with retaining their ability to use customized derivatives and with avoiding any new costs associated with the transaction of these valuable instruments, which would make continued use prohibitive. Our clients feel that, given their relatively limited and simple use of derivatives, the current legislative proposals to have regulated trade repositories would alleviate the systemic risks, provide much better transparency and address the business conduct issues that are being addressed in the reform proposals.

Despite some of the negative perceptions around OTC derivatives, corporate end-users of OTC derivatives are able to lower costs of capital and increase profit margins, which is beneficial not only to shareholders but also to consumers, who otherwise would have increased, un-hedged costs and risks passed on to them instead of the risks being intermediated to the Swap Dealers by end-users.

I look forward to addressing any questions from the Committee, and thank you again for the honor of allowing me to share my thoughts and ideas with you.

Atlanta Calgary Chicago Houston London New York Singapore

WRITTEN TESTIMONY OF JOHNATHAN SHORT
SENIOR VICE PRESIDENT AND GENERAL COUNSEL
INTERCONTINENTALEXCHANGE, INC.
BEFORE THE SENATE
COMMITTEE ON AGRICULTURE

DECEMBER 2, 2009

Introduction

Madame Chairman Lincoln, Ranking Member Chambliss, I am Johnathan Short, Senior Vice President and General Counsel of the IntercontinentalExchange, Inc., or "ICE." We very much appreciate the opportunity to appear before you today to discuss the reform of financial regulation.

Background

ICE was established in 2000 as an electronic over-the-counter (OTC) market to bridge the transparency void that existed in opaque, bilateral and largely voice brokered OTC swap markets as well as open-outcry futures exchanges, which were largely member-owned organizations with limited product offerings. Since the launch of its electronic OTC energy marketplace in 2000, ICE has acquired and now operates three regulated futures exchanges through three separate subsidiaries, each with its own governance and regulatory infrastructure. The International Petroleum Exchange (renamed ICE Futures Europe) was a 20-year-old exchange specializing in energy futures when acquired by ICE in 2001. Located in London, it is a Recognized Investment Exchange, or RIE, operating under the supervision of the UK Financial Services Authority (FSA). In early 2007, ICE acquired the 137-year-old "The Board of Trade of the City of New York" (renamed ICE Futures U.S.), a CFTC-regulated Designated Contract Market (DCM) headquartered in New York and specializing in agricultural, foreign exchange, and equity index futures. In late 2007, ICE acquired the Winnipeg Commodity Exchange (renamed ICE Futures Canada), a 120-year-old exchange specializing in agricultural futures, regulated by the Manitoba Securities Commission, and headquartered in Winnipeg, Manitoba. ICE also owns and operates five derivatives clearinghouses: ICE Clear US, a Derivatives Clearing Organization under the Commodity Exchange Act, located in New York and serving the markets of ICE Futures US; ICE Clear Europe, a Recognized Clearing House located in London that serves ICE Futures Europe and ICE's OTC energy and European credit derivatives markets; and ICE Clear Canada, a recognized clearing house located in Winnipeg, Manitoba that serves the markets of ICE Futures Canada. Finally, ICE operates a limited purpose Federal Reserve regulated bank, ICE Trust, which serves as a clearinghouse for credit default swaps, as

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well as The Clearing Corporation, which is regulated by the CFTC as a derivatives clearing organization.

Throughout its history, ICE has established a track record of working with both market participants and regulators to introduce new products, heightened transparency and risk intermediation into markets. ICE pioneered the introduction of electronic trading in OTC energy markets, and importantly, the introduction of clearing for OTC energy swap contracts in 2002. Many of these innovations have been adopted by other exchanges for the betterment of the overall market. In addition, in the spring of this year, ICE became the first clearinghouse to clear credit default swaps (CDS), having cleared approximately $4 trillion in notional CDS to date and in the process taking significant risk off of bank balance sheets.

Need for Regulation of Over the Counter Derivatives

Appropriate regulation of OTC derivatives is of utmost importance to the financial system. ICE believes that increased transparency and proper risk and capital management coupled with legal and regulatory certainty are central to OTC market financial reform. Well designed reforms will bring enhanced confidence to these vital markets.

In discussing the need for OTC regulation, it is important to understand the size of the OTC derivatives markets and their importance to the health of the U.S. economy. Derivatives are commonly thought to be esoteric financially engineered products transacted between large investment banks. However, the reality is more complex. For example, as an OTC derivative can encompass anything from a simple forward contract (a promise of delivery in the future) between a farmer and a grain elevator to a highly tailored instrument such as a credit derivative or collateralized debt obligation. Derivatives are central to both the U.S. and global economies, with 94% of the world's 500 largest companies using derivatives to manage their financial risk.[1] These companies are not limited to the financial sector, but span many different sectors, including transportation, health care, manufacturing and technology. Further, use of derivatives is not confined to large corporations, as small utilities and manufacturers, farmers and municipalities also use derivatives to hedge their risk and more efficiently run their operations.

In examining the scope, complexity and importance of the OTC derivatives market, it is clear that financial market regulation must be carefully tailored to bring heightened transparency and risk intermediation to the OTC markets while allowing these markets to continue to perform their important functions within the broader economy.

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[1] Study by the International Swaps and Derivatives Association (April 23, 2009). http://www.isda.org/press/press042309der.pdf

Simply banning products, transactions or certain market participants will only create further disruptions in the market and harm U.S. businesses, potentially driving participants to use non-U.S. venues to manage their risk.

Financial regulation must be well defined, flexible and prudential. Flexibility is important, as it allows regulators to respond to future problems, not just yesterday's crises. Prescriptive laws and regulations hamper regulatory flexibility and create gaps in oversight. To be flexible, regulators must also be prudential, understanding their markets and tailoring regulation to ensure market integrity and consumer protection. Congress, the CFTC, the SEC, the Federal Reserve and other regulatory agencies have already made significant progress in examining these important issues. ICE supports congressional legislation that preserves the elements of our existing market and regulatory structures that promote competition and risk management innovation, while protecting against market abuses and lack of oversight.

Clearing and Electronic Trading

Several of the recent OTC derivatives legislative proposals mandate exchange trading and clearing for most, if not all, derivatives transactions. Clearing and exchange trading are generally beneficial to derivatives markets as both promote transparency and efficient execution. However, it is important to understand that clearing and exchange trading are not a panacea, and may not be appropriate for every OTC derivative product or transaction.

Mandated Clearing and Exchange Trading

Clearing and electronic execution and trade processing are core components of ICE's business model and ICE would clearly stand to benefit commercially from legislation that required all derivatives transactions conducted in the U.S. to be cleared and traded on exchanges or electronic trading facilities. However, provisions that mandate electronic trading and clearing may result in significant unintended consequences by attempting to force transactions that are not readily amenable to clearing into clearing houses, or by forcing commercial market participants – including those who would rather, for a price, outsource their risk management to an OTC swaps dealer – to incur the cost and expense of trading in standardized contracts that may not perfectly fit their risk management needs. In addition, many commercial market participants will be forced to post significant cash collateral to margin cleared positions when they historically have been able to use illiquid assets to back OTC bilateral swap positions that they have entered into with swaps dealers.

The critical factors for efficient clearing include not only the standardization of products, but also the availability of adequate pricing and market liquidity. Pricing is essential for the clearing house to mark open positions to market on a daily basis and to properly margin positions, which protects both the clearing house and market in the event of a clearing participant default. The depth of market liquidity and number of clearing participants or intermediaries impacts margin and guaranty fund calculations, as well as the ability to efficiently mutualize risk across enough clearing participants to make clearing economically viable. Where market depth is poor, margin and risk mutualization cost is very high and can make it uneconomic from a market perspective for a product to be cleared given the necessary conservatism on the part of a clearing house.

Thus, while ICE certainly supports clearing and exchange trading of as many standardized contracts as possible, there will always be products which are not sufficiently standardized or which do not possess sufficient market liquidity for clearing to be practical, prudent, economic or necessary. Pursuant to broad definition of "standardized swap" in many of the proposed bills, exchanges and clearing houses could be forced to offer many thinly traded instruments. This could actually increase risk to clearing houses and to the financial system in general.

Finally, forcing all derivatives transactions and all market participants to trade through exchanges and to clear through clearing houses will greatly increase cost to commercial companies and ultimately to consumers. Currently, many commercial entities address their risk management needs through trading with swaps dealers. The swaps dealers offset the risk they undertake through internal offsets, trading with other swaps dealers, or through trading on exchanges. Under these arrangements the commercial entities have the flexibility to post illiquid collateral (such as a pledge of hard assets or a pledge of future production) that could not be accepted by a clearing house. Further, forcing these transactions into clearing houses will cause these companies to post their most liquid assets, impairing their ability to operate efficiently. This will put U.S. firms at a severe disadvantage to foreign competitors.

Instead of forcing all derivative transactions to be exchange traded and cleared, Congress should focus on the segments of the markets where risk is greatest, like the inter-dealer and major swaps participant derivatives market. Mandating that inter-dealer and major swaps participant trades be cleared would eliminate the bilateral counterparty risk that was central to the liquidity crisis that occurred last year, and achieve many of the risk reduction and transparency objectives that Treasury and other regulators are seeking without impacting clearing house risk management and the competitiveness of U.S. commercial businesses. This step could be supplemented with enhanced prudential regulation of swaps dealers or major swaps participants that would allow regulators to ensure that such entities do not engage in trading conduct with other parties that poses any systemic risk.

Risk Management

Under the current regime, clearing houses handle risk management under the supervision of their respective regulator. However, some of the proposed bills pending before Congress could inhibit the clearing house's ability to control and manage risk.

Clearing houses have been some of the few institutions that have operated well in the financial markets during this time of crisis. Clearing houses perform a vital risk management function in margining derivative positions and performing real time risk management for their customers. Forcing clearing houses to take contracts from other clearing houses or to provide margin offsets with other clearing houses could present significant systemic risk issues, making it more difficult to track positions and counterparty risk exposure, and creating significant problems in the event of a default of a major market participant. To understand this risk, consider what would have happened in the real world Lehman Brothers default scenario if Lehman's positions had been spread across ten different clearing houses, none of whom may have had the full risk picture and all of whom might have been dependent on the risk management practices of the weakest link in the "offset" chain. In this regard, interconnected clearing houses might not have been very different from interconnected banks, with problems in one competing clearing house impacting other clearing houses.

Many important problems would need to be overcome to make fungible clearing and margin offsets workable. For example, what if rules at each clearinghouse are not exactly the same with respect to a default, which clearinghouses' rules would have precedent? What if one clearing house chose to adopt more stringent margin requirements than the minimum legally required – would it have to provide a margin offset for positions held at a second clearinghouse that only chose to adopt the minimum margin standards that are legally required?

It is important to note that fungible clearing is currently allowed, but not forced upon futures clearinghouses, pursuant to Core Principle E of the Commodity Exchange Act. Thus, clearinghouses have the ability to create netting and offsetting arrangements with other clearinghouses on a voluntary basis, with appropriate risk management considerations in mind.

Competition

Financial reform of the over the counter derivatives markets should protect and encourage competition. The derivatives markets, especially the exchange traded derivatives markets, are very competitive. This competition has spurred great innovation

in these markets, including new product development, electronic trading and clearing. U.S. firms have benefited through lower bid/ask spreads, lower transaction fees, and a greater ability to hedge risk. However, several proposals before Congress could inhibit competition and innovation in the derivatives markets.

Position Limits

Every financial reform proposal pending before Congress gives the CFTC the authority to set aggregate position limits across all markets: OTC, exchanges, and foreign boards of trade for contracts linked to a contract traded on a designated contract market. This is important because the current position limit regimes, both CFTC-administered and exchange-administered, are obsolete. The regimes have not been updated for many years, even though the size of the futures markets has changed considerably.

However, to change the current system into an effective regime, Congress and the CFTC should be careful to protect competition by setting aggregate limits across markets and leaving market participants with the choice to "spend" that limit in the venue of their choice. Some proposals pending before Congress would require exchanges to set position limits according to relative market size. These proposals would allow an exchange with a large percentage of market share to have a higher position limit than an exchange with smaller market share, which would only work to limit competition by inhibiting the development of liquidity in a competing market and locking in the relative market share of incumbent exchanges. New entrants to the market would never be able to attract sufficient liquidity to their markets given the lower position limits. Importantly, setting position limits as a percentage of an exchange's open interest would be contrary to the CFTC's statutory mandate to promote competition among exchanges and seek to regulate the futures markets by the least anticompetitive means available. Congress should ensure that the any new position limit regime treats all exchanges equally and preserves competition.

Appropriate Regulation

Financial reform should strike an appropriate balance in regulating the derivatives markets to ensure competition. In striking this balance, regulation should be sufficiently flexible to accommodate future changes in the derivatives markets. ICE believes that a broad set of core principles governing markets would allow regulators to work towards the common goal of protecting market integrity and reducing systemic risk.

Core principals allow financial regulators to be flexible and prudential. Flexibility is important, as it allows regulators to respond to changing market dynamics and anticipate future problems rather than living by prescriptive regulations that were

designed to address yesterday's markets and yesterday's problems. To be flexible, regulators must also be prudential, with an intimate understanding of their markets and market participants. This depth of knowledge is required to tailor effective regulation to ensure market integrity and consumer protection.

In addition, financial reform measures must endeavor to avoid dual regulation. Given the financial crisis, it may be tempting to have multiple regulators for every financial institution. However, it is important to note that several of the OTC derivatives markets at the heart of the financial crisis were in regulatory "gray areas" between two or more regulators. Regulators need certainty that they have the power to take actions to uphold the public good, which may be more difficult if jurisdiction is shared among multiple regulators. Likewise, market participants need the certainty that their business transactions will not be held to conflicting standards of conduct. Conflicting or duplicative regulation will only hamper regulators and needlessly complicate financial regulations.

Conclusion

ICE has always been and continues to be a strong proponent of open and competitive financial markets, and of appropriate regulatory oversight of those markets. As an operator of global futures and OTC markets, and as a publicly held company, ICE understands the importance of ensuring the utmost confidence in markets and welcomes the ability to work with members of Congress on this important debate.

Madame Chairman, thank you for the opportunity to share our views with you. I would be happy to answer any questions you may have.

DOCUMENTS SUBMITTED FOR THE RECORD

DECEMBER 2, 2009

The Beautiful Machine

Greed on Wall Street and blindness in Washington certainly helped cause the financial system's crash. But a deeper explanation begins 20 years ago with a bold experiment to master the variable that has defeated so many visionaries: Risk.

By Robert O'Harrow Jr. and Brady Dennis
Washington Post Staff Writers
Monday, December 29, 2008; A01

First of three parts

Howard Sosin and Randy Rackson conceived their financial revolution as they walked along the Manhattan waterfront during lunchtime outings. They refined their ideas at late-night dinners and during breaks in their busy days as traders at the junk-bond firm of Drexel Burnham Lambert.

Sosin, a 35-year-old reserved finance scholar who had honed his theories at the famed Bell Labs, projected an aura of brilliance and fierce determination. Rackson, a 30-year-old soft-spoken computer wizard and art lover, arrived on Wall Street with a Wharton School pedigree and a desire to create something memorable.

They combined forces with Barry Goldman, a Drexel colleague with a PhD in economics and a genius for constructing complex financial transactions. "Imagine what we could do," Sosin would tell Rackson and Goldman as they brainstormed in the spring of 1986.

The three men had earned plenty of money through short-term deals known as interest-rate swaps, a clever transaction designed to protect banks, corporations and other clients from swings in interest rates that threw uncertainty into the cost of borrowing the money necessary for their business operations.

They believed their revolution could never happen if they stayed at Drexel. Swaps in those days typically lasted no longer than two or three years. The trio envisioned deals lasting decades that would lock in profits and manage risks with unprecedented precision. But the junk-bond firm's inferior credit rating sharply raised its borrowing costs, making it a dubious and risky partner for such long-term deals.

Sosin and his team needed the backing of a company with deep pockets, a burnished reputation and the very top credit rating, a Triple A institution as unlikely to default as the U.S. Treasury itself. One name topped their wish list that fall: American International Group, or AIG, the global insurance conglomerate considered one of the world's safest bets.

They would find a partner for their venture. They would create an elegant and powerful system that earned billions of dollars, operating in the seams and gaps of the market and federal regulation. They and their firm would alter the way Wall Street did business, particularly in the use of derivatives, and eventually test Washington's growing belief that capitalism could safely thrive with little oversight.

Then, they would watch in disbelief as their creation -- by then in the hands of others -- led to the most costly rescue of a private company in U.S. history, triggering a federal investigation into AIG's near-collapse and making AIG synonymous not with safety and security, but with risk and ruin.

Over the past two decades, their enterprise, AIG Financial Products, evolved into an indispensable aid to such investment banks as Goldman Sachs and Merrill Lynch, as well as governments, municipalities and corporations around the world. The firm developed innovative solutions for its clients, including new methods to free up cash, get rid of debt and guard against rising interest rates or currency fluctuations.

Financial Products unleashed techniques that others on Wall Street rushed to emulate, creating vast, interlocking deals that bound together financial institutions in ways that no one fully understood and contributed to the demise of its parent company as a private enterprise. In the panic of mid-September's crash, the Bush administration said that AIG had grown too intertwined with the global economy to fail and made the extraordinary decision to take over the reeling giant. The bailout stands at $152 billion and counting -- almost 10 times as large as the rescue for the American auto industry.

Many of the most compelling aspects of the economic cataclysm can be seen through the story of AIG and its Financial Products unit: the failure of credit-rating firms, the absence of meaningful federal regulation, the mistaken belief that private contracts did not pose systemic risk, the veneration of computer models and quantitative analysis.

At the end, though, the story of Financial Products is not about math and financial formulas. It is a parable about people who thought they could outwit competitors and market forces alike, and who behaved as though they were uniquely positioned to sidestep the disasters that had destroyed so many financial dreams before them.

2: 'We Are The Tide'

Sosin, Rackson and Goldman could hardly contain themselves as they labored over a business plan at Sosin's kitchen table in his apartment on Manhattan's Upper East Side. Their timing happened to be exquisite. The staid Wall Street of their fathers' generation was gone, replaced by an anything-goes culture that applauded the kind of path they were charting during the final months of 1986.

Their plan fit perfectly with another revolution they saw unfolding in Washington. Ronald Reagan's unwavering belief in free markets -- and his distaste for regulation that put hurdles in the way of entrepreneurs -- had steadily spread through the government. "The United States believes the greatest contribution we can make to world prosperity is the continued advocacy of the magic of the marketplace," Reagan told a U.N. audience that fall.

As eager as the three dreamers were, they had to confront certain realities. They had no backing, no inside track to the top levels of the corporate world that controlled the money they needed.

They had passed AIG headquarters at 70 Pine St., a few blocks from Drexel's offices, many times. Now, they wanted an entrée to the 18th floor, where legendary 61-year-old chairman and chief executive Maurice "Hank" Greenberg presided over the nation's largest insurance company, with operations in scores of countries. Greenberg was proud and protective of his company's AAA credit rating, one of only a handful in the world.

The AAA, awarded after an examination by the bond-rating firms, sent a resounding signal to clients that they could always sleep well at night, that AIG was in no danger of failing. The more secure a company, the more cheaply it could borrow money -- a fact that would be pivotal to Financial Products' success.

AIG's roots went back to 1919 and Shanghai, where founder Cornelius V. Starr built a business around a lucrative, relatively untapped insurance market. Starr's company later received an unorthodox boost when he worked with the U.S. Office of Strategic Services during World War II to create an intelligence unit that gleaned information from insurance documents.

When Greenberg took the reins in 1968, AIG was a privately held company. Greenberg, a compactly built son of a taxi cab driver, eventually became a figure in both New York and Washington, where he counted Henry Kissinger and Reagan CIA director Bill Casey among his confidantes. The World War II and Korean War veteran had a temper, a gift for growth and a restless mind. He had transformed AIG into a global titan and now wanted to do more.

Few people thought of AIG as a financial innovator. Greenberg kept his stockholders happy by striving for an annual 15 percent increase in profits. He instructed his deputy, vice chairman Edward E. Matthews, to explore how AIG could get more involved in Wall Street's realm.

"This is never going to get any better than it is today," Greenberg told Matthews. "We're so big, we're never going to swim against the tide. We are the tide."

3: 'It Wasn't The Money'

At the law offices of Kaye Scholer in Midtown Manhattan, former Sen. Abraham Ribicoff had a match to make.

Sosin had come to the firm -- where the 76-year-old Ribicoff was a senior adviser -- seeking guidance on how to leave Drexel. As he mentioned his interest in getting AIG's backing for a new venture, a Kaye Scholer lawyer told him to see Ribicoff, an old Greenberg friend.

Ribicoff was happy to introduce the inventive Sosin to the ambitious Greenberg, and let them figure out whether they could do business together. But he warned Sosin that any partnership, no matter how productive, can sour. "I'll only call Greenberg if you let us plan your divorce while we're planning your marriage," Sosin remembers Ribicoff saying.

Sosin came to the negotiation with conditions. He wanted the kind of autonomy that Greenberg rarely granted. Greenberg wanted assurances that Sosin's venture would do nothing to harm the gold-plated rating he had spent two decades building.

Greenberg had little extra time for the nuts-and-bolts details that Sosin sought to negotiate. "I don't really know much about this," he told Matthews. "You go talk to these people."

The morning after AIG and Sosin signed their joint venture agreement, Jan. 27, 1987, word spread rapidly through Drexel's trading floor in lower Manhattan: Sosin, Rackson and Goldman were leaving. Discreetly, the three men had invited some of their colleagues to a recruitment meeting. Ten eventually signed up for the ride.

Michael Milken, the junk-bond king who was Drexel's star trader, tried to stop the breakaways. But the pull of innovation, and the promise of even greater pay, was too strong.

At Drexel, Sosin, Rackson and their band of brainy followers didn't have much say in how bonuses were doled out. At Financial Products, they would keep 38 percent of the profits, with Greenberg and AIG getting 62 percent. (Greenberg remembers AIG's share as 65 percent.)

Their revolution began with a whisper. They set up shop in a windowless, makeshift room at an accounting firm on Third Avenue. Until the rental furniture arrived, they sat on cardboard boxes. When it finally showed up, someone had made a mistake and so for a short time, they perched on children's chairs and worked at tiny tables. When Matthews escorted Greenberg there for a visit, the chief executive chewed him out. "You can't have them in such terrible quarters," Greenberg said.

Sosin and Rackson hoped that everyone would get rich, but they had their sights set on something more. They wanted to tear down walls they saw as impediments to innovation, the "fiefdoms" that were standard practice at other Wall Street firms. Their vision required a collaborative culture and a computer system that no one else had. For six months, the group worked on constructing "the position analysis and storage system," or PASS. They called it simply "the system."

It enabled Financial Products to bring a rare discipline to complex trades. By maintaining market, accounting and transaction details in one place, Sosin and his people could track the constantly changing value of a trade's components in a way no other firm could.

Put more simply, they could see opportunities in the marketplace for taking on risk that others couldn't, squeeze out profits where no one had before and protect themselves in the process.

They exploited the developing realm of derivatives, financial jargon for a contract settling in the future that is based on something trading now. A futures contract is a common derivative: A farmer might agree to sell wheat next spring for a price set today. If the price goes up, the farmer misses out on greater profits; if it goes down, the farmer is protected against loss. Essentially, the contract guarantees enough money to keep the farm going.

For its clients, Financial Products found ways to create more lucrative and longer-term derivative deals tied to all sorts of underlying assets, neutralizing the constant gyrations of prices in stocks, currencies and commodities. Behind each transaction was the cushion of AIG's AAA rating.

Precision was the key to tamping down the risk of these derivatives to the firm. Using another computer program to monitor the minute fluctuations in various rates, Financial Products could place offsetting trades on all sides of a transaction, so it almost didn't matter what the markets did. That was the beauty of their evolving machine: The firm won either way, as long as it stuck to its commitment to keep hedging its bets.

But it took more than technology to realize their vision. It took a culture of skepticism. The firm set up a committee to examine all transactions at the end of each workday, searching for flaws in logic, pricing and hedges. "Everyone kind of understood what the nature of the game was. . . . This was not a company that involved speculating," said Tom Savage, a mathematician from Drexel who joined the firm in 1988. "So it was everybody's job to criticize and double-check other people's opinions about what was appropriate business and what wasn't."

Sosin and his colleagues worked to create a finely balanced system that married technology, intelligence, verve and cultural discipline.

"We were all kind of artists," Rackson said recently. "The excitement of it wasn't the money. The money was the scorecard. The drive behind it was creating something new."

4: 'We Regret to Inform You . . .'

In July 1987, Sosin phoned Ed Matthews at his vacation house in the Adirondacks, where the AIG executive often went to escape Manhattan's summer heat. It was a phone call both would remember for a long time.

Financial Products was about to close its first significant deal, a $1 billion interest-rate swap with the Italian government, 10 times larger than the typical Wall Street swaps deal in those days.

The elements of the transaction might seem arcane to those outside the financial world. The contract involved an exchange of floating and fixed rates that gave Italy advantages in how it paid bondholders. Financial Products engaged in a separate set of transactions to offset the risk it was taking on. As Sosin explained to Matthews, the firm made money, over the life of the contract, on the spread between the cost of the deal and the cost of its hedge.

This one swap, Sosin told him, would pay the firm more than $3 million -- as much as AIG's two other small financial operations each earned in a year.

"I was stunned," Matthews said.

That first year, Financial Products brought in millions for the company -- $60 million in the first six months alone, as Sosin recalls. He and his team left behind their ad hoc digs for a swanky Madison Avenue address, a temporary stop en route to their eventual headquarters in suburban Connecticut.

Competitors hustled to keep pace. Sosin pressed to find niches where others weren't playing and provide cost-saving solutions for clients. Standard interest-rate swaps were no longer enough. The firm moved into more exotic deals, involving stocks, currency and municipal bonds.

By 1990, Financial Products had offices in London and Tokyo. It would soon set up a small bank in Paris to improve its image and lower the cost of some European deals.

As in the Italian deal, the transactions were hedged and, if necessary, hedged again. The hedges involved precisely calibrated transactions, including the purchase of Treasury bonds or other swaps, that brought a cash flow in almost direct proportion to the money going out.

But with success came tension. Greenberg's love of his joint venture's revenue could not overcome his desire for greater control. He chafed at the deal, worrying that he had given Sosin too much freedom.

One detail in particular nagged at Greenberg. Under the joint-venture agreement, Financial Products received its profits upfront, even if the transactions took 30 years to play out. AIG would be on the hook if something went wrong down the road, not Sosin and his team, who took their pay immediately.

Greenberg's uneasiness grew into distrust, and not just about the numbers. Greenberg was a wink-and-handshake guy, while Sosin relied on the written agreement as his Bible. If Greenberg asked for something that wasn't stipulated, Sosin wouldn't comply.

"We ran our company very openly," Greenberg said. "Our word was our bond."

For his part, Sosin said the agreement gave both sides a clear understanding of the arrangement.

Early in 1990, Greenberg summoned Sosin to his office. Drexel had just imploded amid allegations of fraud and insider trading, and Greenberg had recruited several executives to start an AIG unit specializing in currency trading. That was a problem: Sosin interpreted the joint agreement as giving his firm exclusive rights to that business. Greenberg disagreed, and hoped to finesse the conflict.

"Howard, I'm sure you won't mind," Greenberg said.

"Mr. Greenberg, I mind very much," Sosin said.

"Howard, that isn't wise," Greenberg responded.

Days later, on March 13, 1990, Matthews sent Sosin a letter on Greenberg's behalf announcing their intention to terminate the agreement. "We regret to inform you. . . " the letter began.

Under the agreement, Sosin could take a duplicate of his computer system and his team with him. He began looking for backing from another AAA company. Greenberg heard about Sosin's efforts and got cold feet. After a series of meetings, including one at Greenberg's Florida retreat

in Ocean Reef, they patched it back together, reasoning that there was too much money still to be made.

Greenberg's next letter had a different tone. "It is with great pleasure that, with this letter, we revoke any and all of our prior notices of termination," he wrote on May 31, 1990.

The peace wouldn't last.

5: 'Cave or Terminate'

In late 1992, Greenberg once again summoned Sosin to AIG headquarters. He was livid over two recent Financial Products deals with entities controlled by the Edper Group, a giant Canadian holding company owned by billionaires Edward and Peter Bronfman.

The first involved the purchase of bonds, which amounted to a loan to one of the Edper entities. The firm occasionally ventured into such credit deals as part of larger transactions, but only with highly rated companies and with provisions that opened an exit ramp if the bonds started to default. "We want to be the first rat to leave the sinking ship," Sosin told his troops, reflecting his unease with credit deals, which their system couldn't tame.

When this particular ship sank, Financial Products sold out as quickly as it could, but not before it lost $100 million. The second deal, involving a swap with extra layers of complexity, was going fine. But the $100 million loss in the first deal and the intricate machinations in the other had spooked Greenberg.

Sitting in an anteroom to his office, in a favorite red leather chair, Greenberg demanded that Sosin stop doing some of the deals that had made Financial Products a Wall Street darling.

Greenberg handed Sosin a document that would change the terms of their joint venture. Greenberg was daring Sosin to flinch. Instead, Sosin walked out.

He visited his lawyer, Ronald Rolfe, at Cravath Swaine & Moore in New York.

"I said, 'What can I do?' And he said, "Cave or terminate.' "

6: No Reconciliation Possible

Under the agreement, either man had the right to terminate the joint venture. Sosin notified Greenberg that he wanted out.

Greenberg knew that Sosin's departure could cost him and AIG millions. But that wasn't his main concern. He didn't have a thorough understanding of how Sosin's system worked, and he wasn't going to let him get away without finding out.

In March 1993, as the two sides commenced a bitter arbitration battle, Greenberg formed what came to be known as a "shadow group." It verged on a covert operation. The group included

AIG's auditors, now known as PricewaterhouseCoopers, which set up an office near Financial Products -- now in Connecticut -- and built a parallel computer system to track the firm's trades. Greenberg also held surreptitious conversations with some of Sosin's colleagues, recruiting them to stay.

Years later, Greenberg and Matthews still chafe visibly at the mention of Sosin. "One of the most difficult individuals I have ever dealt with in my entire life. Hands down," Matthews said. "Howard was in it for Howard."

Sosin, too, remains sensitive about what happened. "Greenberg took this very personally," he said. "He likes to be able to step in at any point and change things at his whim."

In Sosin's view, Greenberg and Matthews were envious of the profits that he and his colleagues were keeping for themselves. "It was peculiar to have something go so well," Sosin said, "and for him to have such suspicion."

In August 1993, with no reconciliation possible this time, the AIG board of directors installed a new leadership team. Sosin and Rackson took some employees with them to start another firm. Sosin later settled with AIG for a reported payout of more than $150 million; Rackson later received a share of the settlement.

Greenberg and AIG gained control of Financial Products and the beautiful machine. In the coming years, the firm would accelerate its profit-making ability, while forging into uncharted -- and ever riskier -- financial territory.

7: 'Honor the Trust'

Tom Savage stood before a room of anxious colleagues at the Four Seasons resort in Dallas, eager to reassure them that Greenberg was not going to pull the plug on their money-making machine.

Savage, a 44-year-old Midwestern math whiz, had just been named the new president of Financial Products. With the honor came explicit expectations, which Greenberg made clear: "You guys up at FP ever do anything to my Triple A rating, and I'm coming after you with a pitchfork."

It was spring 1994 and, on the surface, nothing much had changed since Sosin left the previous summer. Financial Products had come a long way from the days of sitting on cardboard boxes. The Dallas meeting was opulent in a way that had become customary for the firm: Lavish meals, open bars, luxurious rooms and rounds of golf, which was Savage's particular passion. Dallas's international airport allowed dozens of associates to fly direct from the firm's far-flung outposts.

The employees couldn't understand why there was any doubt about the firm's future. In just seven years, it had grown into a 125-person operation with annual profits comfortably above $100 million.

Like his predecessors, Savage knew the enterprise could not thrive without AIG's AAA rating, which continued to provide the leverage it needed to stay ahead.

"AIG has given us the license to work," Savage told his colleagues that day. "We have to honor the trust they have given us."

The catch? Financial Products would have to take more direction than ever from Greenberg.

8: 24 Hours A Day

Greenberg called Savage most days that first year. "I'd be changing a diaper at home," Savage recalled. "He'd say, 'What are you doing?' I'd say, 'Changing the diaper.' He'd say, 'Well, I don't think I can help you with that.' But he would say, 'What are you thinking about? What's going on?' He was always taking my temperature."

Savage knew that Greenberg hadn't been 100 percent sure about his ability to run Financial Products. Greenberg had told him as much when they sealed the deal at a Vermont ski resort that AIG owned in Stowe. "I don't know if you have all the buttons for this job," the AIG chairman had said. Greenberg managed the company by both charming and intimidating his subordinates. He said of himself recently, "I suffer fools very badly."

Greenberg also had no patience for anyone who didn't share his relentless work ethic. "You don't build a company like AIG from nine to five, five days a week. It just doesn't happen," Greenberg said recently. "And you've got to surround yourself with a group of people who share the same values, the same aspirations that you do. When I traveled, I could call somebody, I don't care what time it was, maybe two, three in the morning. As far as I'm concerned, I'm working 24 hours, they're working 24 hours."

Savage understood that, but he came at the job with a mathematician's love of the numbers and how they worked. He was among a growing number of "quants" -- short for quantitative thinkers -- who had worked their way into the heart of Wall Street. With a PhD from Claremont Graduate University in California, Savage had started his career at First Boston in 1983, where he wrote computer models for a then-arcane type of security called a collateralized mortgage obligation, or CMO. It is the kind of asset-backed security at the core of the current meltdown.

Savage respected Sosin, but saw no reason to follow Sosin and Rackson out the door. "I think what was clear was that, however things should work out, there was a business at AIG Financial Products and Sosin didn't need to be there for it to be successful," Savage said.

Immediately after Sosin's ouster, Savage and three others -- soon dubbed the Gang of Four -- ran Financial Products on an interim basis, with Matthews assigned to keep tabs on them. Savage remained committed to running the place under the same rigorous, risk-reducing code that Sosin's group had cultivated.

But not everything stayed the same. Under a new operating agreement imposed by Greenberg, AIG owned Financial Products as a subsidiary, and the parent company received 70 percent of the profits, up from 62 percent.

Greenberg also wanted to change the way Financial Products' employees divvied up its share of the profits. Under the previous arrangement, Sosin and his crew had the right to book immediate profits on the long-term deals. Greenberg thought there was a powerful incentive to go after millions of dollars in short-term gains while leaving AIG and its shareholders responsible for potential losses for years to come.

Savage agreed with Greenberg that Financial Products employees should defer half of their compensation for several years, depending on the length of the deals being done -- an arrangement that would still yield hefty paychecks as the firm's profits soared in the coming years.

Savage said he welcomed Greenberg's input. "I would give Greenberg a lot of deference," Savage said. "Hank Greenberg's a great man. And I'm willing, when I talk to him, to say, you know, I'm in the presence of a great man and that's worth something."

9: 'We're Not Hiding Anything'

Financial Products found its profit margins shrinking on some transactions as competitors succeeded in duplicating its services. Like Sosin, Savage urged his talented team to devise ever more complicated transactions, often in untapped areas.

Financial Products was becoming a chameleon, taking on the coloration of whatever problem it was solving for its diverse clients. The firm pushed further into structured investments, hedge fund deals and guaranteed investment contracts, or GICs. The GIC deals involved loans from municipalities that had temporary surpluses of cash. Financial Products reckoned that it could borrow that cash, pay state and local governments more than they could make otherwise and then use the money for lucrative deals for itself, somewhat like a bank.

The firm also began applying its complex formulas to the movement of single stocks. Using such structured finance enabled clients, such as Microsoft, to better manage their stock prices. It also helped Financial Products to more than double its profits in three years -- to $323 million in 1998, from $140 million in 1995.

A new unit, called the Transaction Development Group, did its part by taking advantage of gaps between securities regulation and tax laws in the United States as well as in other countries. Financial Products associates noticed, for instance, they could make money by exploiting differences between the U.S. and British definitions of stocks and bonds. A security that met the definition of stock in Britain could pay tax-free dividends to shareholders. The same security in the United States was regarded as a bond that provided tax-deductible payments. A Financial Products client would get both tax breaks. The firm used the capital raised from that line of business, in part, to finance other operations.

"We're the guys there who are going to try to exploit that," Savage said. "We dot our i's, we cross our t's, we tell everybody what we're doing. We're not hiding anything. . . . However, we're getting different treatments in different jurisdictions and we're making money as a result."

But even as Financial Products experimented, Savage said, he continued to stress the need to minimize risk. "That was one of the things that really marked this company, was the rigor with which it looked at the business of trading. . . . There was an academic rigor to it that very few companies match," he said.

"It was Howard Sosin who said, 'You know, we're not going to do trades that we can't correctly model, value, provide hedges for and account for.' "

Though the language of caution was the same, the firm's drive toward novel and ever more lucrative deals led down the path of greater risk. The beautiful machine was about to crack.

Tuesday: The dangerous fork in the road

Staff writer Bob Woodward contributed to this report.

A Crack in The System

By 1998, AIG Financial Products had made hundreds of millions of dollars and had captured Wall Street's attention with its precise, finely balanced system for managing risk. Then it subtly turned in a dangerous direction.

By Brady Dennis and Robert O'Harrow Jr.
Washington Post Staff Writers
Tuesday, December 30, 2008; A01

Second of three parts

For months, several executives at AIG Financial Products had pulled apart the data, looking for flaws in the logic. In phone calls and e-mails, at meetings and on their trading floor, they kept asking themselves in early 1998: Could this be right? What are we missing?

Their debate centered on a consultant's computer model and a new kind of contract known as a credit-default swap. For a fee, the firm essentially would insure a company's corporate debt in case of default. The model showed that these swaps could be a moneymaker for the decade-old firm and its parent, insurance giant AIG, with a 99.85 percent chance of never having to pay out.

The computer model was based on years of historical data about the ups and downs of corporate debt, essentially the bonds that corporations sell to finance their operations. As AIG's top executives and Tom Savage, the 48-year-old Financial Products president, understood the model's projections, the U.S. economy would have to disintegrate into a full-blown depression to trigger the succession of events that would require Financial Products to cover defaults.

If that happened, the holders of swaps would almost certainly be wiped out, so how could they even collect? Financial Products would receive millions of dollars in fees for taking on infinitesimal risk.

The firm's chief operating officer, Joseph Cassano, had studied the model and urged Savage to give the swaps a green light.

"The models suggested that the risk was so remote that the fees were almost free money," Savage said in a recent interview. "Just put it on your books and enjoy the money."

Initially, the credit-default swaps business would amount to a fraction of the half-billion dollars in Financial Products' revenue that year. It didn't seem to them like a major decision and certainly not a turning point.

They were wrong. The firm's entry into credit-default swaps would evolve into insuring more volatile forms of debt, including the mortgage-backed securities that helped fuel the real estate boom now gone bust. It would expose AIG to more than $500 billion in liabilities and entangle dozens of financial institutions on Wall Street and around the world.

When the housing market tanked, a statistically improbable chain of events began to unfold. Provisions in the contracts kicked in, spurring collateral calls on swaps linked to $80 billion in questionable assets, requiring the firm and AIG to come up with billions of dollars in cash. They scrambled for almost a year to stave off the calls, but there were too many deals with too many counterparties.

In September, the Bush administration concluded that AIG's position at the nexus of the deals meant that it could not be allowed to fail, triggering the most expensive rescue of a private company in U.S. history. So far, the government has invested $152 billion in its efforts to save AIG. Federal investigators are sifting the carnage.

Credit-default swaps exemplify the contradictions of modern finance. At a basic level, they serve as insurance, but they aren't regulated as such. They have allowed companies to free up untold amounts of capital that otherwise would be tied up as collateral for loans. They were sold both to reduce risk and, in some cases, to give clients room to take on more risk -- a key component to making money on Wall Street.

But in the end, neither the buyers nor sellers truly understood the enormous risks they were creating. Anyone could sell such a swap, and anyone could buy one, even if he had no stake in the transaction. Some buyers used them to bet against failing companies, prompting a debate among state regulators about whether this type of swap was a form of gambling.

The very nature of credit-default swaps put Financial Products at odds with itself, requiring it to deviate from the disciplined system that had made it a pathbreaker. Everything about the company -- its technology, its people, its rigorous culture of transparency and caution -- was designed to minimize the various risks that it shouldered while solving problems for clients.

That meant hedging whenever possible, a Wall Street term for making offsetting trades to balance risk. For transactions involving credit and loans, it also meant building an escape route so that the firm could get out early if it saw a deal going bad.

With credit-default swaps, there was no way out, and the risk was so minute that hedging was considered unnecessary, as well as problematic. Savage remembers discussions about whether the firm's vaunted computer system could even come up with the proper values needed for the trades that hedging relied on.

All of that made Savage and the others wary. Skepticism was hard-wired into the company's culture, part of its mantra: Hedge if you can. Don't make speculative trades. Above all, protect AIG's reputation and its top-drawer Triple A credit rating, which gave Financial Products credibility and the ability to borrow money at the cheapest rates. The rating was the fuel for Financial Products' innovation and success.

AIG's chairman, Maurice "Hank" Greenberg, had once warned Savage that he would come after him "with a pitchfork" if Financial Products did anything to harm AIG's AAA rating. No one saw credit-default swaps as anything on that scale. After conversations that included AIG

executives, Greenberg blessed the new line of business. "There was a long discussion about it," Savage recalled recently, "and he said it was fine."

Greenberg said recently, "I don't think going into it in '98 was wrong." During his tenure, he said, he and his risk managers kept close watch on the swaps and the exposure they created.

Savage retired from Financial Products in 2001. When he left, credit-default swaps were still a small portion of the firm's business. Not long ago, in the dining room of his golf club in Florida, he reflected on the significance of the decision that he and his colleagues made in 1998.

Like his bosses at AIG, he still thinks it made perfect sense to give swaps a try. "The credit derivative business had just begun and because of our role in the derivatives business, it was very natural for us to have some minimal participation," he said.

Savage says he now sees that the decision sent Financial Products down a path at odds with its guiding principles. The firm's success had been built on assessing data daily, recalibrating assumptions constantly, counterbalancing one risk against another and making the hedges. The credit-default swaps didn't require that sort of attention.

"The different nature of those trades from any other trades that FP had done," Savage said, "opened the door to all the problems that came about."

He added later: "In retrospect, perhaps those deals should never have been done."

2: 'A Watershed Event'

One of the firm's biggest advocates for credit-default swaps was Joseph Cassano.

Cassano, the feisty, hardworking son of a Brooklyn cop, did not have the pedigree of Financial Products' three founders, who hailed from places such as Bell Labs and the Wharton School. Cassano had worked with the trio at the junk-bond firm of Drexel Burnham Lambert, and had been one of 10 original recruits who left Drexel to start Financial Products.

A Brooklyn College graduate, the 42-year-old Cassano was not one of the "quants" who had mastered the quantitative analysis and risk assessment on which the firm had been built. He had no expertise in the art of hedging. But he had excelled in the world of accounting and credit -- the "back office," as it is known on Wall Street.

The founders of Financial Products made him the firm's chief financial officer. From the start, Cassano gained respect, in part because he and his team rarely made mistakes processing trades. He was smart and aggressive -- sometimes too aggressive, some executives thought. He had a mercurial temper, occasionally screaming at an underling. He swore, berated and moved on, sometimes leaving hard feelings in his wake.

"He was very, very good," recalled Edward Matthews, AIG vice chairman. "But he was arrogant."

He also was ambitious. He made plain to his bosses that he wanted more than the back office.

In 1994, Cassano got a chance.

The firm's founders had left in a bitter dispute with Greenberg, and Savage had taken the reins. He put Cassano in charge of the Transaction Development Group, a new unit hunting for business involving energy products and tax credits in the United States and abroad. He was also made chief operating officer.

Cassano's portfolio included deals involving credit, so he played a key role in the credit-default swap debate going on inside the company. In 1998, when the investment bank J.P. Morgan came to Financial Products, seeking a credit-default swap arrangement, Cassano was among the most interested. After studying the proposals, he passed on the first deal. But he soon became a leading proponent.

J.P. Morgan wanted to package a variety of debt on its books and resell it. The debt would be turned into bond-like securities, and layered like a wedding cake so that investors in the top tiers were first to get their money back in case of default. Investors in lower tiers earned a higher interest rate for taking greater risk.

The "structured" deal had an unwieldy name, the Broad Index Secured Trust Offering, so it was called "Bistro" for short. Because the debt in Bistro was diverse, the investment was considered exceedingly safe; if one kind of debt went into default, it was unlikely other kinds would go under at the same time. As an extra measure of safety, the Bistro organizers wanted Financial Products to write credit-default swaps on the top tiers to further reassure skittish investors.

As private contracts, deals like Bistro could be financed with greater amounts of borrowed money than regulators would allow if the deals were publicly traded. This high degree of leveraging would come back to haunt the industry later.

The structure was an early form of collateralized debt obligations. CDOs were a hit almost from the start. It would take several years and a housing bubble for CDOs backed by mortgages to catch on. At Financial Products, the credit-default swap was only one of many innovations in play, but Cassano was passionate about how it could help the firm.

"It was a watershed event in 1998 when J.P. Morgan came to us, who were somebody we worked with a great deal, and asked us to participate," Cassano told an investment banking conference in 2007. "These trades were the precursors to what's become the CDO market today."

Even as Cassano spoke, the housing market was collapsing, the lack of diversity of the CDO debt was being exposed, and the risk for Financial Products was rising.

3: 'It's the Hardest Thing'

By summer 1998, after four years as president, Savage found himself thinking even harder about risk, particularly credit risk. It was often difficult to quantify the likelihood that someone would pay back a loan.

Savage kept his distance from developing trades, with the idea that he could better maintain his objectivity about potential pitfalls. He sometimes wondered whether Cassano's enthusiasm for the credit deals colored his ability to assess them. Cassano's lawyer, F. Joseph Warin, said in a recent interview that Cassano took care to follow procedures that minimized risk.

Greenberg, too, kept at Savage about the risk, even while keeping on the pressure for greater profits. On Wall Street, investment banks and other financial institutions were mad for private contracts called derivatives, Wall Street's jargon for a contract based on something trading now, but settling in the future. (A credit-default swap is a kind of derivative in which one company takes on the future credit risk of another.)

Derivative contracts accounted for more of the world's financial activity by the day. Some in Washington had taken notice, and thought investors and regulators needed to know more about these privately arranged deals that were cloaked from outside scrutiny and clouded by complexity.

Brooksley Born, the 57-year-old head of the Commodity Futures Trading Commission, argued forcefully for a public debate about whether derivatives posed an unknown and growing risk to the world's financial system. She testified at least 17 times before Congress on the subject.

Her campaign gained no traction. More powerful regulators, including Federal Reserve Chairman Alan Greenspan, Treasury Secretary Robert E. Rubin and Securities and Exchange Commission Chairman Arthur Levitt, opposed Born. They and others said her agency had no authority over derivatives and that her call for action was casting a "shadow of regulatory uncertainty over an otherwise thriving market."

Greenspan, in particular, argued a free-market view. He saw derivatives as a mechanism that unlocked efficiency, allowing dormant capital to flow into the system, greasing the gears of the world's economy. The Clinton administration and many congressional Democrats endorsed the notion that too much regulation stymied growth.

Greenspan pushed the idea that the marketplace was self-correcting, a view that he often espoused in speeches at economic conferences around the world. He invited Greenberg to attend one such meeting in Basel, Switzerland. Greenberg couldn't go, so he arranged for Savage to go. Chief executives of banks, investment firms and insurance companies, as well as U.S. and German regulatory officials, filled the room.

Greenspan, already celebrated as an economic guru, commanded attention every time he spoke. The question he posed that day resonated with Savage for a long time.

"Do you folks find that you have enough information to make credit decisions in your businesses?" Greenspan asked.

Mathis Cabiallavetta, chairman of the board for the giant Swiss bank UBS, responded that his company knew well what it was up against.

Not well enough, as soon became clear.

In September 1998, Long Term Capital Management, a heavily leveraged hedge fund with mountains of derivatives, told Federal Reserve officials that it could not cover $4 billion in losses. Russia, swept up in an Asian economic crisis, had defaulted on its debt, and Long Term was besieged with calls to put up more collateral for its investments. The collapse threatened the fortunes of investors from tycoons to pension funds.

UBS lost hundreds of millions of dollars. Cabiallavetta lost his job.

The exchange in Switzerland, and the Long Term debacle, fueled Savage's unease. His mind kept turning over the problem of how to calculate the risks of credit.

"I've always thought about that," he said. "At the highest level of finance, this is a question of interest. Are you getting enough information about the loans that you're making to corporations? It's the hardest thing. . . . You have to look beyond the credit-rating agencies and make your own decisions."

Savage recalled something that Greenberg had once told him.

"He said to me, 'I want you to understand that no matter what the credit rating is, no matter what other things you might understand, when a CEO owes you $100 million and is supposed to pay you on Friday, sometimes he just doesn't do it.' "

4: Exploiting A Seam

Financial Products' drive to keep ahead of its competitors took the firm in unexpected directions. It developed a reputation as an innovator with one of the most diverse toolboxes in the derivatives business.

That's how Cassano and his Transaction Development Group found coal.

For a group of financial wizards, the coal business seemed an odd turn. But it was a logical extension of what the firm had been doing all along: discovering gaps in regulations and markets.

A 1980 law, generated by the Carter administration, offered tax credits to companies as incentives to design and use synthetic fuel systems. The aim was to reduce U.S. dependence on foreign oil.

Associates at the Transaction Development Group had discovered that many energy companies were not making enough money to benefit from the tax breaks. But Financial Products' profitable parent, AIG, could use those credits to reduce its tax bill.

"One thing AIG had was ample income," Savage said. "So what we did is, we went out and we bought synthetic coal facilities."

The firm had no intention of becoming coal processors. Instead, it arranged to install the equipment -- bought for more than $225 million, as Savage recalls -- at coal facilities and power plants. The facilities leased and operated the machines at a discount, while AIG got millions in tax credits.

Financial Products hedged aspects of the deals and checked with government officials to make sure the arrangements qualified for the breaks. Savage said the idea was bold as well as clever. "We had the gumption to go out and take seven of these plants that were sitting around doing nothing," he said. "We carted [the machines] off to where they could be used, and it went on."

Greenberg, too, was taken with the gambit. "It was opportunistic," he said recently. He once joked that he wanted to ride shotgun in the truck carting the machines around, Savage said.

Over the next several years, AIG reaped $875 million in benefits from the deals. It was a coup for Cassano and his group. Although it wasn't Cassano's idea, Savage said, he guided it from concept to reality.

"He says he thought about it for six months," said Savage, who came to appreciate Cassano's single-minded focus. "He made a lot of money for the company."

5: 'It Would Be Joe'

In fall 2001, Savage decided to call it quits. He had moved his family to Florida and briefly considered whether he could manage the commute. The Sept. 11 attacks made that sort of arrangement seem impossible. He told Greenberg of his plan to leave.

Cassano emerged as Greenberg's candidate to take over. Some colleagues questioned his qualifications to manage a team that was heavily dependent on quantitative skills. Though he was the firm's chief operating officer, some colleagues thought he wasn't as conversant with the complex calculations of risk that remained at the heart of its business. Beyond that, few liked his chip-on-the-shoulder demeanor.

Greenberg had come to know Cassano through board meetings over the years. Cassano had won Greenberg's confidence. The two shared a number of qualities. Both were strong-willed, and both disliked criticism. Greenberg knew that, like him, Cassano had made AIG the center of his life. He knew about Cassano's temper, but he appreciated his grit and drive to make money in the derivatives field, which was becoming more crowded with competition.

Cassano had one other virtue that helped him land the top job: He followed directions from Greenberg and Matthews, the parent company's leaders.

"He told us that in no uncertain terms, that he was -- that all of his people up there were -- smarter than anybody we had at AIG," Matthews said. "And he made it clear that he listened only to two people: He listened to Hank Greenberg and he listened to me."

Cassano would need all the smarts he could muster. He was taking the reins at a challenging juncture. Financial Products was now a $1 billion operation with 225 employees working on a multitude of derivatives deals for clients, involving hundreds of billons of dollars in obligations. But in early 2002, when he replaced Savage, the derivatives industry was coming under a shadow.

A high-flying financial company called Enron was just starting to melt down. Because Enron had systematically abused derivatives as part of its fraudulent corporate accounting, some kinds of derivatives became the focus of regulatory scrutiny and fell out of favor. Structured deals for corporations were a large part of Financial Products' business.

The firm would need to make up lost revenue. "The response to Enron really reduced the toolbox for Financial Products," Savage said. "It wasn't at all clear to me where the profits were going to come from."

Under Cassano, Financial Products would grow, take on more risk and become more top-down than before. The culture that had characterized the firm from the outset -- one that relied on informed skepticism in which just about anyone could question dubious aspects of a trade -- would change, according to people who worked at the firm.

Cassano disputes the notion that the culture had changed, according to Warin, his lawyer. "FP worked closely and had healthy discussions with its internal auditors so they would fully understand the business and investments," Warin said. "Mr. Cassano encouraged this oversight, review and open communication."

6: Clearing The Way

In 2002, the regulatory debate over one of those lines of business, credit-default swaps, was going nowhere. The swaps had fierce critics. Some saw them as insurance deals that ought to be subject to the same regulation that governed the writing of homeowners' policies or car insurance. Others saw certain swaps as gambling: Because anyone could buy a swap, even someone who had no stake in a particular asset, some critics thought those swaps were like a poker game in which spectators placed bets among themselves on who would win the hand.

Some regulators had a hard time seeing the financial value in certain swaps -- especially in deals used to remove debts from a corporation's books.

But those regulators were fighting a lost cause. In the waning days of the Clinton administration, Congress had passed the Commodity Futures Modernization Act, which preempted derivatives from oversight under state gaming laws and excluded certain swaps from being considered a "security" under SEC rules.

While some regulators had expressed concerns about the act, President Clinton's economic team had agreed that derivatives should not be regulated. Clinton signed the measure, which was part of a larger bill.

"By ruling that credit-default swaps were not gaming and not a security, the way was cleared for the growth of the market," Eric Dinallo, the superintendent of New York State's insurance department, told a Senate committee during recent hearings on the role of derivatives in triggering the financial crisis. "None of this was a problem as long as the value of everything was going up and defaults were rare. But the problem with this sort of unregulated protection scheme is that when everyone needs to be paid at once, the market is not strong enough to provide the protection everyone suddenly needs."

7: 'We Made Some Mistakes'

In August 2002, one Financial Products' innovation caught the attention of federal investigators. The year before, Financial Products had been pitching a new way for companies to shed bad debts, and it had found a customer in PNC Financial Services Group, which had $762 million in underperforming assets it wanted to unload.

Ordinarily, the bank would need to account for the falling value of those assets, which would mean a hit to its profits. Associates at Financial Products, working with accountants, thought they had found a way to solve PNC's problem: Create "special-purpose entities" to take on the unwanted assets.

Federal investigators alleged, however, that the deals were a sham. To make the transactions look legitimate, Financial Products had set up a company to "invest" in the entities, while receiving an equivalent amount in the form of fees, according to the investigators. Structuring the deal this way violated securities laws, FBI agent Randy Tice asserted in an affidavit filed in federal court as part of the simultaneous settlement of a criminal case and an SEC civil complaint.

AIG and two Financial Products subsidiaries agreed to pay an $80 million fine and give back $39.8 million in the fees that it had earned, plus $6.5 million in interest. PNC paid a $115 million fine.

The government announced the settlement on Nov. 30, 2004. In the wake of Enron, the investigators were sending a message. "We are pleased that AIG has accepted responsibility," said Christopher Wray, an assistant U.S. attorney general. "There is no place in our markets for financial transactions that lack economic substance."

But authorities demanded more. The settlement also required AIG "to implement a series of reforms addressing the integrity of client and third-party transactions." A group of senior AIG executives would review complex transactions from the previous few years, working with an independent monitor chosen by the Justice Department, the SEC and the company.

In other words, the government had concluded that Financial Products' internal controls -- the disciplined system that had once made the company different from its competitors -- had faltered.

Cassano, who had not arranged the transactions but signed the settlement for Financial Products, later described the PNC deals as an anomaly. "We made some mistakes in those transactions, and we suffered dearly for that," he said in 2007 at an investors conference. "And we've gone to great lengths to correct the things that allowed the transactions to occur."

Greenberg said recently that Financial Products had consulted its legal and accounting experts before going forward with the special entities. The board of directors also had looked it over, Greenberg said. "We thought it was proper," he said.

The settlement is still a source of grief for the former AIG chief executive, who had to swallow the costly settlement and the independent monitor. "I took a bullet for them," he said. "I went out in front. I didn't have to do that. It was their deal."

But the case had another consequence for Greenberg. It brought AIG into the sights of another skeptical investigator: New York Attorney General Eliot L. Spitzer.

8: Foot Faults

After the PNC case became public, a tipster approached Spitzer's office. Insurance companies, the tipster said, were selling policies known as "finite insurance." The tipster thought the policies were a fraud.

Done right, finite insurance expressly limits the losses an insurer can suffer. Done wrong, it isn't insurance at all because neither side takes any risk. Instead, it's an accounting trick that can help both parties improve the appearance of their balance sheets.

The tipster urged Spitzer's office to examine finite insurance and suggested several companies for scrutiny, including AIG and Gen Re, another large insurance company. Spitzer's office sent subpoenas to companies, seeking more information. Not long after, a black binder from another tipster arrived at Spitzer's office in Lower Manhattan. Four inches thick, the binder held confidential documents from Gen Re. The documents appeared to show that Greenberg had arranged bogus transactions with Gen Re that made it look as if AIG had $500 million more in insurance revenue than it had actually earned.

Spitzer and his people could not believe their luck. It was a case on a silver platter. They decided to question Greenberg right away, instead of the usual approach of working slowly toward such a big potential target.

On Feb. 9, 2005, Spitzer told his people to begin work on a Greenberg subpoena.

That afternoon, coincidently, Greenberg announced AIG's latest earnings in a conference call with industry analysts and others. During the call, he complained indirectly about Spitzer's

investigation of the insurance industry, suggesting that the probe was overkill and Spitzer was wasting his time.

"When you begin to look at foot faults and make them into a murder charge, then you have gone too far," Greenberg said.

Greenberg's remarks were reported online that afternoon and Spitzer happened to see them. Irked, he asked a deputy how soon the Greenberg subpoena could go out.

That evening, Spitzer was to speak at a dinner with senior executives at Goldman Sachs, in an elegant conference room at the investment bank's headquarters. Among those in the audience: Henry Paulson, then Goldman's chairman and chief executive. The next year, he would become Treasury secretary and head to Washington, where he eventually assumed the central role in dealing with AIG's near-collapse.

As Spitzer waited to deliver his remarks, a deputy came in and whispered into his ear: The Greenberg subpoena had been faxed to AIG. A few minutes later, Spitzer alluded to Greenberg's comments earlier in the day.

"These are not foot faults," Spitzer recalls saying. "But second, too many foot faults and you lose the match."

9: 'No Choice'

The end of Greenberg's reign at AIG came with a phone call March 13, 2005. He was in a private jet on his way back to New York from a visit to Key Largo, Fla. The AIG board of directors had called a meeting that Sunday to consider allegations from Spitzer that Greenberg had been personally involved in the fraudulent deal with Gen Re.

The board had asked Greenberg to call. Frank Zarb, a veteran Wall Street executive and board member, told Greenberg that Spitzer had issued an ultimatum: Greenberg had to resign.

"I had no choice," Greenberg said recently. "No choice."

Earlier this year, four Gen Re executives and an AIG executive were found guilty on federal fraud charges. Later, AIG restated earnings from 2000 to 2004.

Greenberg, referred to anonymously in federal documents as an unindicted co-conspirator, maintains that what "we did, from AIG's perspective, was perfectly proper." In a recent interview, he tore into Spitzer: "He destroyed a company. And for what?"

Spitzer said recently that the activities at AIG were too important to ignore. Events have solidified his view. "AIG, as we have now all seen," he said, "was at the center of the web of the entire financial system."

Greenberg blames others for his company's downfall. He says his forced departure left AIG without the strong hand it needed to protect against future excesses. He said AIG and Financial Products were prepared to hedge any transaction "if we thought there was going to be a potential problem."

Matthews put it this way: "What bothers us about this is we had a climate of risk management which seems to have evaporated after we left."

By then, though, the company had already taken a deeper dive into credit-default swaps, including an expansion into the subprime mortgage market that would eventually trigger the improbable.

The crack in the Financial Products system was about to get a lot wider.

Wednesday: Downgrades and downfall.

Staff writer Bob Woodward contributed to this report.

Downgrades And Downfall

How could a single unit of AIG cause the giant company's near-ruin and become a fulcrum of the global financial crisis? By straying from its own rules for managing risk and then failing to anticipate the consequences.

By Robert O'Harrow Jr. and Brady Dennis
Washington Post Staff Writers
Wednesday, December 31, 2008; A01

Third of three parts

The contracts were flying out of AIG Financial Products. Hardly anyone outside Wall Street had ever heard of credit-default swaps, but by early 2005, investment banks were snapping them up to insure all kinds of deals in case of default, fueling one of the great financial booms in U.S. history.

During twice-monthly conference calls that originated from the company's headquarters in Wilton, Conn., president Joseph Cassano would listen as marketing executive Alan Frost listed the latest swap transactions for associates in the firm's offices in London, Paris and Tokyo.

Once a small part of the firm's business, the increasingly popular contracts had helped boost the company's profits to record levels. The company's computer models continued to show only a minute chance that the firm would ever pay out a dime on the contracts, and it turned down deals that didn't meet its standards. After their reviews, Cassano and his team would consult with AIG executives, sometimes including chairman and chief executive Maurice "Hank" Greenberg. "We rode pretty tight rein on them," Greenberg recalls.

But the swaps also exposed Financial Products and its parent AIG, the global insurance titan, to billions of dollars in possible losses. By spring 2005, some Financial Products executives were questioning the surge in volume. Among them was Cassano, an early advocate for the swaps business who ran the firm from its London office.

"How could we possibly be doing so many deals?" one executive recalls Cassano asking Frost, the firm's liaison with Wall Street dealers, during one conference call.

"Dealers know we can close and close quickly," Frost said. "That's why we're the go-to."

Efficiency wasn't the only reason. Frost didn't have to say aloud what everyone at the firm already appreciated. Financial Products had become the "go-to" for credit-default swaps in part because of its knowledge and reliability, but also because it had AIG's backing. The parent company's top-drawer, Triple A credit rating and its deep pockets assured customers that they could rest easy.

Their comfort turned out to be illusory. The credit-default swaps became a primary force in the disintegration of AIG as a private enterprise and a massive government rescue aimed at

preventing catastrophic damage to the world's financial system. Never in U.S. history has the government invested so much money trying to save a private company.

Even as Frost spoke, trouble was brewing for AIG. On March 14, 2005, Greenberg stepped down amid allegations about his involvement in a questionable deal and accounting practices at AIG. The next day, the Fitch Ratings service downgraded AIG's credit rating to AA. The two other major rating services, Moody's and Standard & Poor's, soon followed suit.

The initial fallout came swiftly, as AIG's annual report to federal regulators disclosed. The downgrades had triggered provisions in Financial Products' existing transaction, the report said, requiring its parent company to post $1.16 billion in collateral for the deals.

The company also warned that the downgrades could erode confidence in Financial Products, a crucial element in the unit's phenomenal success. "Historically, AIG's triple-A ratings provided AIGFP a competitive advantage. The downgrades will reduce this advantage and [some] counterparties may be unwilling to transact business with AIGFP except on a secured basis," AIG reported to the Securities and Exchange Commission in May 2005.

The swaps business had bound Financial Products to hundreds of counterparties in New York and Europe. Wall Street firms such as Goldman Sachs and Merrill Lynch favored the credit-default swaps as an extra layer of protection for mortgage-backed securities, one of the many investment by-products helping to fuel the overheated housing boom. European banks liked them because they could treat the swaps as a form of collateral, which freed up cash that the banks would ordinarily have to set aside as protection against losses.

The interlocking, complex nature of these contracts would speed their downfall. When the housing market began to unravel in 2007, it set off a chain of events that would prove disastrous: downgrades in the ratings of securities that Financial Products had insured; demands by Financial Products' counterparties for billions of dollars in collateral; AIG's desperate search for cash to meet the collateral calls; a panicky weekend of negotiations in New York and Washington; and, finally, Treasury Secretary Henry M. Paulson's conclusion that AIG could not be allowed to collapse.

The taxpayer rescue of AIG stands at $152 billion, including $60 billion in loans, a $40 billion investment in AIG preferred stock and a $52 billion purchase of troubled AIG assets that the government hopes to sell off to recoup its investment.

Meanwhile, federal investigators are examining statements made last year by the company and its executives to determine whether shareholders received misleading information. Several investors have filed civil lawsuits, alleging that executives at AIG and Financial Products hid the extent of their credit-default swap troubles.

Whether that turns out to be the case, there's no doubt that Cassano's concern in spring 2005 did not slow the firm's mounting involvement in the credit-default swap business for several months. The deals mounted and the risks grew.

Even after Financial Products stopped writing the credit-default swaps at the end of 2005, it maintained a public veneer of confidence that the contracts it had on its books were fine and that their computer models were sound. As Cassano told investors in a December 2007 webcast, "Our fundamental analysis says this is a money-good asset. We would not be doing the shareholders any benefit by exiting this right now and taking that loss."

2: Playing Catch-Up

By 2005, the world of debt had changed dramatically since Financial Products wrote its first credit-default swap in 1998. Back then, the swaps involved corporate debt, essentially the bonds that corporations use to finance their operations. There was a wealth of historical data about corporate debt, which gave Financial Products' executives a high degree of confidence in consultant Gary Gorton's computer models.

Gorton, a Yale business professor with a PhD in economics, had written scores of intricate papers about corporate finance, banking and the history of financial panics. Cassano saw Gorton as a valuable asset. "Gary has helped us tremendously in helping us organize our procedures, organize our modeling effort, developing the intuition," Cassano said during the December 2007 webcast for investors.

By then, Gorton had worked as a consultant for Financial Products for nearly a decade. At that same investor conference, Gorton explained how he saw the analysis that he and his colleagues had been doing. "These models are guided by a few very basic principles, which are designed to make them very robust and to introduce as little model risk as possible," he said. "No transaction is approved by Joe if it's not based on a model that we built."

Financial Products had built itself on data, analysis and a culture of healthy skepticism. Even as the firm grew to about 400 in 2005 from 13 employees in 1987, it sought to maintain its discipline. At Financial Products, God had always been in the details, and the details were always rooted in the math.

Over the years, the firm had stayed ahead of competitors by finding innovative ways to manage and minimize the risks it took on for clients. Financial Products executives made fortunes, some taking home tens of millions of dollars a year, as the firm created markets in untapped areas -- such as buying synthetic coal equipment to capitalize on energy tax breaks.

On credit-default swaps, the firm adapted as the market evolved. By 2004, Wall Street investment banks were discovering how to turn consumer debt into a moneymaker, churning out bond-like securities backed by mortgages and other assets. Credit-default swaps helped attract institutional investors to these mind-bendingly complex deals, known in Wall Street jargon as collateralized debt obligations, or CDOs.

CDOs defined a revolution in corporate finance called "securitization." Wall Street saw any income stream as a candidate for securitizing: mortgages, credit card payments, car loans, even student loans. The investment banks would bundle these loans, and the monthly payments that

came with them, into a new security for investors looking for steady but higher yields than Treasurys or corporate bonds.

CDOs had been around for years, but the real estate boom suddenly made mortgages one of the hottest investments on Wall Street. The mortgage industry turned into the equivalent of a giant assembly line, lubricated by fees from one end to the other. New lenders sprung up by the month, offering loans to first-time buyers as well as existing homeowners who wanted to move up to more square footage. For people with shaky credit, the industry provided subprime loans, with higher rates that some homebuyers now cannot repay.

Banks packaged and resold the mortgages in pools, which became the basis for mortgage-backed securities. Wall Street scooped them up. The CDO market took off, ballooning to $551 billion issued in 2006 from $157 billion in 2004.

The CDO structure depended on the concept of layered risk. The securities in the "super senior" top tier were considered low risk and attracted the highest ratings. In return for their safety, these bonds paid the lowest interest rate. The reverse was true at the other end: The lower tiers absorbed the first losses in the case of loan defaults. For accepting extra risk, investors in these tiers earned a higher interest rate.

Financial Products made its money by selling credit-default swaps only on the super-senior tier. It seemed a safe bet: Cassano once defined super senior as the portion of the deal that was safe even "under worst-case stresses and worst-case stress" assumptions.

The mortgage-backed CDOs were also thought to be safe because of the geographic diversity of the underlying loans. Surely, investment bankers reasoned, people in different parts of the country would not default on their home loans at the same time. The real estate market was strong and showed no sign of faltering.

Financial Products executives said the swaps contracts were like catastrophe insurance for events that would never happen.

Hedging, the firm's hallmark, seemed largely unnecessary. "Given the conservatism in that we've built these portfolios, we haven't had to do a huge amount of hedging over the years," Andy Forster, the firm's global head of credit trading, said at a May 2007 presentation to investors in New York.

Cassano also emphasized that both Financial Products and AIG had a review role. "Each and every one of our transactions," he told investors listening to the December 2007 webcast, "passes through the same careful process. We don't have any short-cuts. . . . So there's always two eyes, two teams reviewing our business. There is not one dollar of this business that's been done that hasn't gone through that double-review check."

But there were provisions in the swap contracts that the computer simulations hadn't adequately addressed, as later events showed. There were also tremors in the mortgage industry that would

convince one Financial Products executive that the company should get out of the credit-default swap business -- fast.

3: The Subprime Threat

In fall 2005, Eugene Park was asked to take over Alan Frost's responsibilities at Financial Products. Frost had done exceedingly well in marketing the credit-default swaps to Wall Street, and was getting a promotion. He would now report to Cassano directly on other strategic projects.

Park had been at the firm for six years and ran the North American corporate credit derivative portfolio. Taking on that swaps business would boost his already handsome compensation.

But he wanted no part of it. He was worried about the subprime component of the CDO market. He had examined the annual report of a company involved in the subprime business. He was stunned, he told his colleagues at the time.

The subprime loans underlying many CDOs formed too large a part of the packaged debt, increasing the risk to unacceptable levels. Those loans could default at any time, anywhere across the country because the underwriting processes had been so shoddy. The diversification was a myth -- if the housing market went bust, the subprimes would collapse, like a house of cards.

Park spelled out his reasoning in meetings and conversations with colleagues over the next several weeks. It was as if he had scratched the needle across an old record album at full volume.

Cassano agreed the firm should dig deeper. Over the next few weeks, Financial Products executives worked with researchers from investment banks to examine the subprime threat.

They discovered that the subprime exposure had been growing since early 2004, when the composition of the CDOs were increasingly dominated by mortgages rather than other kinds of consumer debt.

Cassano decided it was time to stop. Gorton explained the decision to investors during the December 2007 webcast: "We stopped writing this business in late 2005 based on fundamental analysis and based on concerns that the model was not going to be able to handle declining underwriting standards."

By then, the firm had $80 billion worth of existing CDOs that included subprime mortgages as underlying assets. About half had been issued before Greenberg's ouster, Nicholas J. Ashooh, an AIG spokesman, said this week. Greenberg said in a recent interview that his research shows only $7 billion in swaps were issued on CDOs with subprime assets during his tenure.

Either way, the exposure would prove significant. If additional downgrades occurred, either in AIG's credit rating or in the CDO ratings, Financial Products would have to come up with tens of billions of dollars in collateral it did not have.

4: 'Not a Lot Of Risk'

In May 2007, Cassano stepped before a crowd of entrepreneurs in Manhattan.

Financial Products was itself an entrepreneurial success story, with the numbers to prove it: an investment portfolio in excess of $50 billion; a trading operation that dealt in dozens of currencies, 18 commodities and a host of credit and equity services; a reputation for finding innovative ways to assess and manage the risks in interest rates, equities and other deals for its clients.

"And who are our clients?" Cassano asked. "It's a broad global swath of mostly high-grade institutions, mostly high-grade entities around the world and it includes banks and investment banks, pension funds, endowments, foundations, insurance companies, hedge funds, money managers, high-net-worth individuals, municipalities and sovereigns and supranationals."

Cassano went on. "My colleagues and myself have $500 million invested in the company," he said. "And so we've become very, very good caretakers of the value of the company."

As a company with billions of dollars riding on arcane financial transactions such as derivatives, Financial Products certainly faced challenges, Cassano said. He then alluded to the debate within the firm over credit-default swaps.

"Credit risk is the biggest risk our group has. It's the single biggest risk that we manage," he said. "But with a AA plus/AA credit portfolio, there's not a lot of risk sitting in there. And so while it is the largest risk, it's not by any stretch a risky business."

Three months later, in a conference call with investors, AIG chief executive Martin Sullivan struck a different note, acknowledging the growing unrest over defaults in the U.S. mortgage market.

The 52-year-old Sullivan had taken the reins at AIG after Greenberg's ouster in March 2005. He was an AIG veteran, with more than 35 years at the company, primarily on the insurance side. His rise to the top was an exclamation point on a career that began at 17, when he joined AIG's London office as a clerk.

Cassano joined Sullivan on the call. Asked by a Goldman Sachs analyst about the stability of Financial Products' huge portfolio of credit derivatives, Cassano responded with calm and confidence.

"It is hard for us, without being flippant, to even see a scenario within any kind of realm of reason that would see us losing $1 in any of those transactions," Cassano said.

Sullivan added: "That's why I am sleeping a little bit easier at night."

5: Collateral Calls

After Sullivan's comment to investors, a wave of collateral calls would begin, swamping AIG.

The first came from Goldman Sachs, the venerable Wall Street investment bank and one of Financial Products' biggest counterparties. Citing the plummeting value of some subprime assets underlying securities that Financial Products had insured, Goldman demanded $1.5 billion to help cover its exposure.

The 2005 downgrade of AIG to a AA company now came into play. Under the swaps contracts, AIG had to post more collateral than in its Triple A days.

AIG disputed the amount but had no choice but to negotiate. It agreed to post $450 million.

As if AIG didn't have enough problems, the rapidly crumbling real estate market was causing the ratings services to downgrade the securities in CDOs, including the top layers that investors had been led to believe were safe. Those downgrades also made AIG more vulnerable under the swaps contracts.

In October, Goldman came calling again, demanding $3 billion. AIG balked once more, but agreed to provide another $1.5 billion.

These and other events sent AIG's stock price tumbling. In six weeks, between early October and mid-November, it fell more than 25 percent, contributing to the perception that AIG was in trouble.

The collateral calls also set off alarms at PricewaterhouseCoopers, AIG's outside auditing firm. The auditors told Sullivan on Nov. 29 that they had found serious oversight problems and "that AIG could have a material weakness" relating to risk management. More ominously, they said, no one knew whether the value that Financial Products placed on its portfolio of derivatives was accurate. That meant the losses in market value could be much worse.

About the same time, the SEC required companies like AIG to adopt an accounting standard known as "mark-to-market," designed to give investors a better sense of the current values of a company's assets. As the housing market declined, and the rate of defaults increased, the swaps looked at greater risk. That allowed counterparties to ask for more collateral.

Greenberg questioned the merits of the rule. "Mark-to-market accounting, I would argue, probably caused a great deal of the trauma that the financial industry is in today," he said.

On paper, the value of the credit-default swaps was sliding. In November, the company reported the portfolio had lost $352 million. At the December 2007 webcast for investors, Cassano reported a higher number, $1.1 billion.

Sullivan, Cassano and others at the company remained bullish on their ability to weather the calls, and in the long run, even recover the collateral they had posted. "But because this business is carefully underwritten," Sullivan said, "we believe the probability that it will sustain an economic loss is close to zero."

AIG's chief risk management officer, Robert E. Lewis, reminded investors of the company's culture. "If you look at AIG's history," Lewis said, "I think you can realize that AIG in its culture does not have an appetite for undue concentrations of risk."

Cassano made the case that Financial Products would survive the storm because it had one of the world's best companies behind it.

"Clearly this is a time where it's a huge benefit to be part of the AIG family," he told the investors. "It's these crises and these points in time that give us the wherewithal right now to stand here with you and say on the back of giants, on the back of everybody at AIG who has built the capital that AIG has, the AIGFP unit is able to withstand this aberrant period."

Federal investigators are examining the December 2007 webcast as part of their effort to determine whether Cassano, Sullivan and others at the company misled investors about how dire the situation had become.

Two months later, on Feb. 11, AIG disclosed that its auditors had found the company "had a material weakness in its internal control over financial reporting and oversight relating to the fair value valuation of the AIGFP super-senior credit-default swap portfolio." On Feb. 28, AIG announced that its estimate of paper losses had spiraled to $11.5 billion. The company also acknowledged that its collateral postings had reached $5.3 billion.

The next day, Sullivan announced that the Cassano era was over. The Financial Products president had resigned, effective March 31. Sullivan did not reveal that Cassano would get $1 million a month as a consultant. That fact came out months later during congressional hearings on AIG's near-collapse. AIG had also provided a record of Cassano's compensation history to the committee, showing that he received $43.6 million in salary and bonuses in 2006, and $24.2 million in 2007.

"Joe has been a very valuable member of the AIGFP senior management team for over 20 years," Sullivan said in making the announcement. "He has had a great career with us, and we wish him the very best in the future."

The worst was still to come.

6: A Deep Hole

The urgent phone call that alerted Eric Dinallo to the extent of the financial meltdown came Friday, Sept. 12, as he drove to his family's weekend home in the Hudson Valley, north of Manhattan.

Dinallo, head of New York state's insurance department, got a briefing about AIG, where panicked executives were desperately trying to come up with a huge infusion of cash. They had heard the bond-rating agencies were going to downgrade the company's already ailing credit grade, which would trigger more collateral calls. "And if downgraded -- even like one notch -- they didn't have sufficient liquidity" to meet the calls, Dinallo said recently.

Dinallo recognized the danger. AIG had operated for so long at the center of the world's financial web, with so many counterparties, that its collapse would be felt in every corner of the globe. As insurance superintendent, Dinallo was aware of the previous calls. But he was still taken by surprise. "I never realized things were as bad as they were," he said. "I didn't realize how deep the hole was they had created."

AIG was going to try selling some of its life insurance affiliates. AIG officials also made a pitch for a $20 billion loan from the state insurance department. "They said, 'We will pay this loan quickly,' " Dinallo recalled.

Dinallo cut short his weekend plans and headed back to Manhattan early Saturday. By noon he had assembled a small team at AIG headquarters. Working on the 18th floor, not far from where Greenberg once reigned, Dinallo and his crew pored through AIG's books, looking for ways to raise money.

Meanwhile, Goldman Sachs and J.P. Morgan set to work on a $75 billion bridge loan from a syndicate of major financial institutions, which was intended to give AIG cash until it could sell enough assets to bail itself out.

The urgency and tension were palpable. New York's governor, David A. Paterson, called in. So did Timothy Geithner, head of the New York Federal Reserve. Geithner was swamped that day with the imminent collapse of Lehman Brothers, but he wanted constant updates.

By Sunday night, no solution emerged, and AIG executives were worried that the company's stock price would take another hit when the market opened on Monday.

On Monday morning, Paterson announced he would relax insurance regulations so that AIG could borrow up to $20 billion from its subsidiaries to cover operating expenses. Meanwhile, the Goldman-J.P. Morgan effort on the bridge loan wasn't coming together.

Hour by hour, it became clear that AIG was far more exposed by Financial Products' commitments than anyone realized. The next day, sensing disaster, the Federal Reserve Board, with the backing of the Treasury Department, stepped in and took control of what had been one of the most successful private enterprises ever.

"The Board determined that, in current circumstances, a disorderly failure of AIG could add to already significant levels of financial market fragility and lead to substantially higher borrowing costs, reduced household wealth, and materially weaker economic performance," the Federal Reserve said.

7: 'An Unacceptable Situation'

In October, SEC chairman Christopher Cox appeared at a roundtable discussion that the agency was hosting at its Washington headquarters. He delivered a tough, grim message: The federal government had failed taxpayers by not regulating the swaps market.

"The regulatory black hole for credit-default swaps is one of the most significant issues we are confronting in the current credit crisis," Cox said, "and it requires immediate legislative action."

He tried to put the regulatory failure into context. "The market for CDS is barely 10 years old. It has doubled in size since just two years ago," he said. "It has grown between the gaps and seams of the current regulatory system, where neither the commission nor any other government agency can reach it. No one has regulatory authority over credit-default swaps -- not even to require basic reporting or disclosure."

He went on: "The over-the-counter credit-default swaps market has drawn the world's major financial institutions and others into a tangled web of interconnections where the failure of any one institution might jeopardize the entire financial system. This is an unacceptable situation for a free-market economy."

8: Recriminations

The question of what went wrong at AIG and its Financial Products unit provoked some finger-pointing in recent interviews with former executives.

Greenberg, the ousted AIG chairman, says that the responsibility rests with the people who ran the company after his forced resignation in 2005. He said that Cassano, the man he appointed to run Financial Products in 2001, never would have been allowed to do anything untoward under his leadership. "No. No," Greenberg said. "Because he was controlled."

His longtime deputy, former AIG vice chairman Edward Matthews, also blamed their successors. "When Hank and I left," he said, "those chains that bound Joe Cassano were off."

Cassano doesn't agree. Through his lawyer, F. Joseph Warin, he maintained that "every single super-senior CDS investment was authorized by AIG corporate."

Warin said, in a statement: "Regardless of what Mr. Greenberg says today, the facts speak for themselves: Mr. Cassano decided on his own, after Mr. Greenberg left AIG, to stop writing CDS [credit-default swap] protection. Mr. Cassano instructed his team to analyze the mortgage underwriting standards and then made the decision to exit the business in late 2005, all within months of Mr. Greenberg leaving the company."

As for the allegations that Cassano and others made misleading statements in December 2007, Warin has said, in a statement, his client acted lawfully and is cooperating with investigators. "He provided full and complete information to investors, his supervisors and auditors," Warin said.

Howard Sosin and Randy Rackson, two of Financial Products' founders, left the company in 1993 after a bitter dispute with Greenberg. Sosin lives in Connecticut, not far from Financial Products' headquarters. He traces the roots of the firm's demise to Greenberg's decision to force him out.

"We did really well with it. AIG did really well with it," Sosin said, adding that recent events could have been avoided with more attention to the firm's "core values." "It did not have to be this total failure of control."

In his brownstone on Manhattan's Upper West Side, Rackson said, "You put something together that was good, and then somebody takes the controls and drives it into the ground."

9: Epilogue

On Nov. 11, Gerry Pasciucco pulled open the front door of AIG Financial Products headquarters in Wilton, Conn. For much of Pasciucco's career on Wall Street, Financial Products had drawn some of the smartest, most ambitious people in the business, while doing pioneering work.

Now, it was in ruins.

Just weeks before, the 48-year-old Pasciucco, a vice chairman at Morgan Stanley, had heard from colleagues working with federal authorities that AIG was looking for someone to end Financial Products. He spoke with current AIG chief executive, Edward Liddy, who invited him to the Manhattan headquarters of the hemorrhaging insurance giant. Sullivan was gone; he had resigned as of July 1 with a $47 million severance package.

As Liddy and Pasciucco sat in the office once occupied by Greenberg, Liddy spelled out what he needed from Pasciucco: To identify Financial Products' outstanding obligations, resolve those transactions as profitably and quickly as possible, and then close the doors and turn out the lights.

Pasciucco had worked at Morgan Stanley for 24 years in capital markets and risk assessment. He had once been filmed by Harvard Business School for a case study on how to manage in a fast-paced financial market. But even with that background, he wondered whether he had the chops to sort out Financial Products' problems.

"How solvable is it?" Pasciucco recalled asking Liddy. "I'm up for a challenge, but there has to be a chance."

Liddy told Pasciucco to think about it. Back in his Morgan Stanley office, overlooking Times Square, Pasciucco did more homework. The organization was in desperate need of leadership and a game plan for unwinding its enormous book of transactions. Pasciucco came to believe that he could make a difference and decided to take the job, in part because he saw it as a chance to pitch in on the great economic crisis of his time.

Now, in Wilton for his first day on the job, Pasciucco knew from the demeanor of new colleagues that it was going to be even rougher than he thought. Their faces looked glum, their arms were crossed, and they seemed unsure of what to do.

He dove into the company's books. The story he found in the numbers was fascinating and daunting: Financial Products had $2.7 trillion worth of swap contracts and positions; 50,000

outstanding trades; 2,000 firms involved on the other side of those trades; and 450 employees in six offices around the world. The majority of the firm's trades had been hedged, essentially along the lines that Sosin, Rackson and others had laid out two decades before.

"The place made sense when I got here," Pasciucco said last week. "They were very, very smart."

But Pasciucco soon found evidence of a fatal miscalculation. It seems that as Financial Products ramped up its credit-default swap business, its leaders assumed that its parent, AIG, would always be as strong as it was the day it backed the firm's first big trade in 1987. He said they had failed to prepare for the possibility of a downgrade in AIG's credit rating.

The executives who had pushed or approved the credit-default swap business had placed too much faith in the math that told them the worst would never happen, that AIG and its deep pockets would be there to usher them through the trouble.

"When the unexpected happens and you have the biggest credit crisis since 1929, you have to be prepared to deal with it, and they weren't," Pasciucco said. "There was no system in place to account for the fact that the company might not be a Triple A forever."

QUESTIONS AND ANSWERS

DECEMBER 2, 2009

Senate Committee on Agriculture, Nutrition & Forestry
Over-the-Counter Derivatives and Addressing Systemic Risk
Questions for the Record
Mr. Peter Axilrod
December 2, 2009

Chairman Blanche L. Lincoln

1) What is your opinion about the proposal that a percentage cap should be put on dealer ownership of clearing entities?

Senate Committee on Agriculture, Nutrition & Forestry
Over-the-Counter Derivatives and Addressing Systemic Risk
Questions for the Record
Mr. Terrence Duffy
December 2, 2009

Chairman Blanche L. Lincoln

It has been suggested that exchanges such as CME should separate out their clearing functions from their exchange trading and that all cleared contracts, whether cleared on your or any other platform, be fungible and portable to any exchange platform.

1) Do you support or oppose this move and if this were to be required, what would be the challenges to moving to an open access system? What would be the benefits, if any, to the financial market oversight system? To consumers?

2) How would common clearing change your business model? Would this result in any efficiencies to the markets or to consumers?

Senate Committee on Agriculture, Nutrition & Forestry
Over-the-Counter Derivatives and Addressing Systemic Risk
Questions for the Record
Treasury Secretary Timothy Geithner
December 2, 2009

Chairman Blanche L. Lincoln

1) What is your opinion about the proposal that a percentage cap should be put on dealer ownership of clearing entities?

2) During our December 2nd hearing, Senator Conrad asked you a question regarding the Farm Credit Administration (FCA) and the Farm Credit System (FCS) being included in Administration and House and Senate efforts toward financial regulatory reform. You stated you were not aware that the FCA or the FCS was part of any such efforts, and that you were in consultation with Secretary Vilsack and he had expressed no concerns regarding the matter.

   The FCA is an independent Federal agency responsible for examining and regulating the FCS. The FCS, a Government Sponsored Enterprise (GSE), is a nationwide network of borrower-owned lending institutions and specialized service organizations that provide credit and related services to farmers, ranchers, agricultural cooperatives, and other eligible borrowers. The Agriculture Committees of the Congress have jurisdiction over the FCA and the FCS.

   The House Consumer Financial Protection Agency Act (CFPA) and Financial Stability Improvement Act (FSIA) have provisions that can affect the FCS and, therefore, impact FCA. In fact, last week the House Parliamentarian granted the House Agriculture Committee referral with regard to the CFPA provisions.

   Furthermore, there were discussions in November between the Treasury Department and the FCA regarding the House Financial Services Committee's FSIA that was reported out of committee today. It is also our understanding that Treasury staff has agreed to language that expressly excludes the FCA and the FCS from the FSIA.

   The Senate and House efforts on regulatory reform impact FCS and FCA in four areas. First, provisions that establish an agency over financial stability contain a definition for financial companies that would include FCS institutions. As a result, the FCS could come under the oversight of the agency for financial stability, even though an FCS institution is not a large, complex, interconnected financial entity. To address this matter, the Treasury drafted an amendment to modify the definition of financial company used in title I of the FSIA put forth by the House. Essentially, this amendment excludes FCS institutions from the definition of financial company. Can you confirm the Treasury's position is FCS institutions should be excluded from the definition of financial company?

3) The financial regulatory reform provisions for enhanced resolution authorities contain a broad definition of financial company that includes FCS institutions. Therefore, an FCS institution could be subject to the enhanced resolution processes even though the resolution of FCS institutions is clearly addressed in the Farm Credit Act of 1971, as amended (Farm Credit Act). To address regulatory confusion and avoid duplicate resolution authorities, the Treasury drafted an amendment to eliminate FCS institutions from the definition of financial company for enhanced resolution purposes. Can you confirm the Treasury's position is FCS institutions should be excluded from the definition of financial company?

4) The financial regulatory reform provisions on credit retention for securitization activities would affect FCS institutions, particularly the Federal Agricultural Mortgage Corporation (Farmer Mac). Farmer Mac provides a secondary market for agricultural mortgages, rural home loans, and rural utility loans made by cooperatives. The proposed credit retention requirements create conflicts with the Farm Credit Act, with respect to Farmer Mac securitization authorities and confuse the regulatory oversight authorities of the FCA. The House bill was amended to specifically exclude FCS institutions, including Farmer Mac, from the credit retention provisions. Does the Treasury support an amendment of this nature in the Senate bill?

5) The Consumer Financial Protection Agency has board authorities to regulate any consumer lending transaction, including examination and enforcement authorities. While consumer protection is critical, the reach of the CFPA could inadvertently extend beyond consumer loans. With respect to FCS institutions, farm and other farmer-related business loans would ordinarily not be considered a "consumer loan" but that is not made clear in the bill. In fact, such farm loans are subject to strong borrower rights protections provided under the Farm Credit Act. On the other hand, the CFPA would have clear authorities over the FCS as it relates to any true "consumer loans" including rural housing loans it may make. Do you concur that the scope of the CFPA authorities was not meant to include farm loans of the type made by FCS institutions under their statutory authorities?

6) Under current law, the System is subject to several consumer statutes such as the Truth in Lending Act (TILA), Equal Credit Opportunity Act (ECOA), and the like. Presently FCA is the enforcing agency with respect to TILA and ECOA, but not for some other consumer protection laws such as the Fair Credit Reporting Act and the Home Mortgage Disclosure Act. The FCA has been an effective regulator in ensuring compliance with consumer lending requirements on the few consumer loans held by FCS institutions. We note that the House CFPA bill exempts GSEs regulated by the Federal Housing Finance Agency and financial institutions regulated by the Commodities Future Trading Commission and Securities Exchange Commission. Can you explain why FCS institutions that are regulated by FCA should not have a similar exemption?

Senator Debbie Stabenow

1) Should the government assume the responsibility for operating a trade repository so that it is in possession of all trade data for over-the-counter derivative contracts?

2) Do you expect that exchanges and clearinghouses would experience any additional financial burden if Congress mandates that all derivative trades must be reported to a repository?

3) It's my understanding that derivatives are integral to the securitization process. What will be the impact of your proposed reforms on the use of derivatives in securitization? How will you ensure that the securitization market will not be adversely affected?

Senator Sherrod Brown

1) With a well-regulated derivatives market, do you think new regulations would increase transparency and price discovery to the point where businesses would see lower costs for derivatives transactions?

2) New proposals envision clearinghouses as the main instrument in which the transactions – and risks – of counterparties are concentrated. How do we make sure that we do not witness the rise of clearinghouses that are too big to fail?

3) If regulations exempt some end users from oversight, could this lead to a situation in which large financial institutions can exploit loopholes and place our entire financial system at risk?

4) What role has the deregulation of derivatives – and subsequent explosion of the over-the-counter market – played in increasing the prices and volatility of energy commodities? If this is the case, shouldn't increased transparency serve the interests of end users such as manufacturers, small businesses, and consumers?

Senator Pat Roberts

1) Mr. Secretary, we have heard from numerous non-financial companies who are concerned about the scope of some of the legislative proposals on systemic risk and the fact that the proposals go well beyond large banks and financial companies that played a part in the last year's financial crisis. The Administration has sold financial regulatory reform in the context of cleaning up Wall Street and preventing another financial market meltdown. According to the Dodd and Frank proposal, companies that indirectly engage in activities that are financial in nature may be subject to systemic risk legislation. Wouldn't this broad definition capture any large company that hedges or manages their energy risk? Wouldn't this definition include agriculture, transportation, energy, and heavy manufacturers? If so, why should Congress focus on companies that had nothing to do with last year's financial meltdown and who have suffered because of the credit freeze and economic downturn? Does this proposal penalize these non-financial companies and in turn possibly increase their risk?

Senator Chuck Grassley

1) A little over a year ago, you, as President of the New York Federal Reserve, presided over the bailout of AIG. Apparently, according to many, letting AIG fail would have posed too great a risk to the financial system. Please identify what criteria you used last year to determine that AIG was too big to fail? Is this the same criteria you would use today to identify entities that are too big to fail?

2) As you know, for the last year Treasury has owned billions of dollars of AIG preferred stock purchased with TARP funds. And as I noted in my letter to you yesterday, on the first of November AIG missed its fourth quarterly preferred stock dividend payment. That means AIG has not made a single preferred stock dividend payment to the government. I understand that Treasury now has the authority to appoint 20% of the AIG Board of Directors. How many Directors are you authorized to appoint and when do you anticipate that the new Directors will be in place? Will one of their tasks be to ensure that AIG finally begins making dividend payments? Please explain how you intend to dispose of the AIG preferred stock so that the taxpayers are repaid in full?

3) As I stated in my letter to you and NY Fed President Dudley yesterday, I am still concerned that all the taxpayer money used to shore up AIG, both through the Maiden Lane entities and from TARP, will be lost. Do you still believe that purchasing AIG's troubled assets and paying off its credit default swap counterparties was the right decision? Do you believe that those dollars will be returned? And if so when?

4) The three big credit rating agencies also played a significant part in AIG's demise. They had every incentive to provide AAA ratings to AIG. Do you agree that these rating agencies and that their conflicts of interest with those they are rating should be subject to transparency and oversight? What should be the responsibilities of a systemic risk regulator in such oversight?

5) There are numerous examples of existing federal regulators failing to do their jobs. The SEC's enforcement division failed to adequately examine Madoff's ponzi scheme, despite repeated reviews. Employees at the Office of Thrift Supervision allowed backdating of contributions when banks may have failed to meet their capital requirements. How would new federal agencies or offices prevent conflicts of interest between regulators and those they are supposed to be regulating? How would you ensure that regulators remain independent?

6) On November 5th I asked why the Special Inspector General for TARP noted that the Treasury only partially implemented the recommendation that "Treasury requires all TARP recipients to report on the actual use of TARP funds." In response you indicated that you intend to issue expanded reports that you believe will adequately address the transparency issues raised by SIGTARP. Secretary Geithner—can you please tell me the position of the SIGTARP with regard to the proposal set forth in your November 24, 2009 letter to me? Madam Chairwoman, I would also like to put both my November 5th and Secretary Geithner's November 24th letters in the record. *(Letters attached)*

Senate Committee on Agriculture, Nutrition & Forestry
Over-the-Counter Derivatives and Addressing Systemic Risk
Questions for the Record
Ms. Blythe Masters
December 2, 2009

Chairman Blanche L. Lincoln

1) Would you support setting up a division between the research and trading arms of Swap Dealers and Major Swap Participants?

2) Should we require clearinghouses and counterparties segregate customer funds such as margin and collateral? How important is segregation of initial and variation margin to mitigating counterparty and systemic risk?

Senator Chuck Grassley

1) You stated in your testimony that entities that are not dealers or major swap participants should be exempt from the clearing mandate, because the vast majority of those entities would be commercial end users. However, you didn't say they would "all" be end users. Can you describe to me who you believe might also fall outside the category of dealers or major swap participants? Do you believe it's a better approach to include anyone who is a dealer or major swap participant OR set specific exemptions for end users?

2) Your testimony reflects that you don't believe it's possible to define the characteristics of a standardized transaction. Chairman Gensler has stated as recently as two weeks ago in our hearing, that if a transaction can be cleared and accepted by a clearinghouse, it should be considered standardized. Do you believe this definition is problematic? Why or why not?

Senate Committee on Agriculture, Nutrition & Forestry
Over-the-Counter Derivatives and Addressing Systemic Risk
Questions for the Record
Mr. Jiro Okochi
December 2, 2009

Chairman Blanche L. Lincoln

1) If Congress were to craft an end-user exemption, what additional requirements, if any, should be developed to ensure that we do not simply create another regulatory loophole?

Senate Committee on Agriculture, Nutrition & Forestry
Over-the-Counter Derivatives and Addressing Systemic Risk
Questions for the Record
Mr. Johnathan Short
December 2, 2009

Senator Chuck Grassley

1) Your testimony includes support for a trade repository that would assist regulators. Chairman Gensler voiced his support for this same concept in his testimony before this committee two weeks ago. Can you expand on who and how this repository should be administered? How will this be kept independent from market players?

Senate Committee on Agriculture, Nutrition & Forestry
Over-the-Counter Derivatives and Addressing Systemic Risk
Questions for the Record
Mr. Peter Axilrod
December 2, 2009

Chairman Blanche L. Lincoln

1) What is your opinion about the proposal that a percentage cap should be put on dealer ownership of clearing entities?

On behalf of the Depository Trust & Clearing Corporation (DTCC), thank you for the opportunity to share our opinion on this very important issue. We appreciate the Senate Agriculture Committee taking a fresh look at over-the-counter (OTC) derivatives markets and ways to mitigate systemic risk in light of the lessons learned during the past year's financial crisis. We share your goals of ensuring more transparent markets for regulators, who must oversee market stability and mitigate systemic risk, while protecting the public and ensuring that innovation and risk mitigation that are trademarks of the OTC business continue to exist.

Summary

We are concerned with any proposal that would impose a percentage cap on dealer ownership of clearing entities in the name of combating potential conflicts of interest. The unintended consequences of such a restriction would negatively impact market safety and soundness as well as the U.S. economy generally. There are better ways of addressing the narrow conflict of interest concerns without creating the unintended negative consequences that would result from ownership caps.

Background

Since Congress mandated the establishment of a national securities clearance and settlement system in 1975, the United States has increasingly entrusted these critical responsibilities to highly regulated, user-owned and governed utilities that operate on a not-for-profit basis. Since the early part of the last decade, these utilities have been consolidated into The Depository Trust & Clearing Corporation (DTCC), a single user-owned and governed industry utility that serves as the post-trade infrastructure for all equity and fixed income trading markets for instruments issued by the U.S. Government, government-sponsored entities, state and local governments and corporations to raise capital.

As DTCC serves virtually the entire U.S. financial industry, from broker/dealers to banks to insurance carriers to mutual funds to hedge funds, our governance structure represents the entirety of the marketplace. DTCC currently has 360 individual shareholders, and no single shareholder holds more than a 6% interest in the company (though major swap dealers do, in the aggregate, own more than 20% of our shares). We allocate shares based entirely on usage, and roughly every three years we reallocate these shares to realign our governance.

Our shares cannot be traded among our members. This prevents any one firm or group of firms from attempting to gain control of our Board of Directors. More importantly, since we operate on a not-for-profit basis, the primary concern of our Board of Directors has consistently been mitigating risk and protecting market safety and soundness – not profit.

Throughout DTCC's (and its predecessor organizations') 36-year history, the safety, soundness and resiliency of its infrastructure has been repeatedly tested. For example, it functioned continuously and without problem during the crash of 1987, the aftermath of 9/11 and the financial crisis of 2008, during which DTCC successfully liquidated over $500 billion of Lehman Brothers' unsettled securities transactions without impact on the markets and without any loss or taxpayer burden. It is not an exaggeration to say that no other clearing infrastructure in the world has been tested to this degree with such good results.

Unintended Consequences

Adverse Effects on Market Safety and Soundness

Requiring that clearing entities not be user-owned or governed would effectively prevent industry utilities (where rights to vote for directors generally depend on degree of use) from providing clearing services.[1] This would legislatively clear the decks for commercial entities, whose primary concern is shareholder profits (as required by corporate law) rather than risk mitigation and market safety and soundness.

Nor would legislative language exempting existing utility infrastructures from ownership and/or governance limitations effectively mitigate this concern. Like any business, clearing is evolving, and clearing organizations are constantly re-evaluating risk management practices and the efficient use of collateral. Attempting to preserve utility participation in market infrastructure through a grandfathering provision would stifle the existing utility infrastructures' ability to manage to changing market dynamics by (a) precluding utilities from combining complementary services in joint ventures to solve new market problems, and (b) precluding the creation of new utilities or other ventures that leverage existing highly regulated, resilient and proven utility infrastructures. The Federal Reserve Bank of New York, in a recently issued report, recognized the importance of such developments and cautioned against constraints on clearing infrastructures, stating that "regulations should not impede the ability of market participants to consolidate the clearing of different products within the same CCP whenever that is economically efficient and safe. Regulations should not promote inefficient methods of clearing or unnecessarily costly margin and participation arrangements for market participants." (FRBNY Staff Report No. 424, January 2010.)

[1] Examples of industry utilities include, in addition to DTCC, The Options Clearing Corporation (OCC), which clears all of the U.S. listed options markets, and, while owned by options exchanges, is user governed and operates on a not-for-profit basis, as well as LCH.Clearnet, a London-based user owned and governed utility that happens to clear a large portion of the U.S. interest rate swap market.

Adverse Effect on the U.S. Economy

Any proposal that would impose a percentage cap on dealer ownership of clearing entities would also negatively impact U.S. competitiveness in global markets in the area of clearance and settlement. As we have seen in the past, financial activity will flow to the most efficient and lowest cost markets that also offer a fair and reasonable balance between regulatory oversight and the cost of compliance. Unduly burdening U.S. market operations by eliminating user owned and governed infrastructures would likely result in a loss of financial transactions, capital and jobs to our European and Asian competitors, creating a drag on our economy and the loss of jobs.

Conclusion – Alternative Methods of Addressing Potential Conflicts of Interest

We understand that the intent of an ownership restriction is to prevent conflicts of interest by prohibiting a relatively small number of market participants (the major swap dealers) from dominating the clearing infrastructure in a way that would inure to their benefit at the expense of other market participants and overall safety and soundness.

Any fair discussion of this issue should take note of the fact that, whether or not major dealers have a significant ownership stake in, or voice in the governance of, clearing entities, it is almost universally the case that their assets are the most at risk in the event insufficient margin is collected by any clearing entity. This is because they are invariably the largest contributors to default funds and stand to contribute the bulk of clearing member assessments that typically protect against insufficient margins. It is this potential for loss sharing that focuses the mind of the largest potential sharers in the loss, especially in the utility context where there is no financial upside in clearing. It is thus hard to see how any other potential owners would have their interests any more aligned with safety and soundness.

In that regard, it is also worth noting that exchange owners of clearing entities arguably have the opposite incentive. Since the bulk of the loss sharing typically goes to the largest clearing members, exchange owners may be motivated to look more at attracting market share, perhaps resulting in a race to the bottom in terms of margin requirements. Adequate regulatory oversight has been rightfully viewed as the appropriate check in the inherent conflict of interest in that structure. The same remedy should be adequate with respect to dealer ownership of clearing entities.

To the extent that concern remains about the degree of dealer control over clearing entities in the OTC derivatives markets, perhaps because it may be at the expense of other market participants or other parties legitimately having an interested in clearance and settlement, we suggest charging regulators with ensuring a governance structure that would avoid these issues. For instance, Section 17A of the Securities Exchange Act of 1934 (as amended) requires "fair representation" of participants in the governance of registered clearing agencies and provides the Securities and Exchange Commission with the authority to enforce this. It may be that some more specific language is needed in the case of the OTC derivatives markets where there are clear divisions in market participants between dealers and the "buy-side", particularly hedge funds and traditional investment managers.

We would be pleased to meet with you or your staff to discuss our concerns, and potential alternative solutions, in greater detail and to address any questions you may have. We are committed to leveraging our expertise to help the Committee ensure that this significant and comprehensive legislative effort does not create unintended consequences in the marketplace.

DTCC stands ready to work with the Congress, Administration, global regulators and market participants to help accomplish our shared vision of greater transparency, risk mitigation and resiliency in this dynamic market. Thank you.

The Honorable Terrence A. Duffy
Executive Chairman

January 20, 2010

The Honorable Chairman Blanche Lincoln
Senate Committee on Agriculture, Nutrition & Forestry
328A Senate Russell Office Building
Washington, D.C. 20510

Chairman Lincoln:

CME Group Inc. ("CME Group") is pleased to have this opportunity to discuss the important issues raised by the perennial demand that the U.S. government force futures exchanges to give away their valuable clearing operations in order to effectuate government mandated common clearing of exchange traded derivative contracts.

As a preamble, let us underscore our continued, deep commitment to serve the needs of the futures trading community, including our important clearing member firms and their customers. We clearly recognize that the interests of the Exchange must be aligned with the interests of our customers not only to assure our mutual prosperity, but also to preserve the deep and liquid markets necessary for reliable price discovery, which benefits all consumers and which will ensure that the price discovery function for global commodities and financial instruments remains in the U.S. Moreover, for the benefit of U.S. and global economies, it is imperative to preserve a clearing structure that has proven to be the model of risk management excellence in the face of a global financial crisis. Thus, this response is offered in the hopes of promoting a full appreciation of the intent and strategies of CME Group to achieve a more complete alignment and to preserve a clearing structure that reduces and contains systemic risk. Our answers to your questions follow.

PREAMBLE: "It has been suggested that exchanges such as CME should separate out their clearing functions from their exchange trading and that all cleared contracts, whether cleared on your or any other platform, be fungible and portable to any exchange platform."

QUESTION (1) "Do you support or oppose this move and if this were to be required, what would be the challenges to moving to an open access system? What would be the benefits, if any, to the financial market oversight system? To consumers?"

ANSWER (1). The question and preamble treat open access, fungibility and common clearing as if the three concepts were identical and as if the separation of clearing from the exchange is necessary to accomplish any of them. Open access, fungibility and common clearing are three separate issues. Moreover, open access and fungibility can be achieved, in certain cases without separating clearing from the exchange. Common clearing has, in at least one instance, also been achieved without divorcing the clearing house from an exchange.

OPEN ACCESS FOR OTC CONTRACTS: CME Group opposes fungibility and common clearing for futures contracts. This answer will be explained in detail below.

CME Group is amenable to a system of open access to its clearing system for OTC transactions. This means that CME clearing will accept matched trades of clearable OTC contracts, regardless of the platform on which the contracts were matched, if the matched trade is presented by accredited clearing members of the CME clearing house. CME Group is not the creator or maintainer of OTC contracts and is not responsible for their terms or conditions. Providing open access to its clearing house for such contracts does not impair CME Group's ability to innovate or comply with the core principles of the CEA in respect of its underlying business of operating a futures market and being responsible for the terms of its futures contracts and the financial integrity of the clearing of those contracts. All cleared OTC contracts with identical terms and conditions that are resident at the same clearing house will be fungible. This system permits continued competition among clearing houses for this business, does not stifle innovation and does not place the government in the untenable position of forcing a legitimate business to divest itself of an important part of its enterprise, without compensation.

BENEFITS TO THE FINANCIAL MARKET OVERSIGHT SYSTEM: It is frequently claimed, by proponents of common clearing, that forcing all positions through a single clearing house makes it easier for regulators to understand the net positions and risks of those firms that present the greatest danger to the financial stability of the system. This claim is illusory and ignores the robust systems currently in place for the sharing of information among clearing houses. The claim is illusory because it assumes that all risks of each significant firm will be in a single clearing house. This is false. The major banks carry positions in every significant jurisdiction, on every form of asset and through dozens of clearing houses and by means of bi-lateral credit arrangements. Common clearing for derivatives in the U.S. will not consolidate these wide ranging positions in a single venue. The current system of information sharing among clearing houses and reporting of open positions and risk metrics to responsible regulators is the only way to create a picture of overall enterprise risk. Moreover, the forced concentration of risk in a single clearing house raises significant regulatory concerns, including the creation by government fiat of a "too big to fail" utility.

BENEFITS TO CONSUMER: There are at least two classes of consumers of clearing services. First are the major banks and brokerage firms, which, are members of the clearing houses and clear trades for their own accounts and for the accounts of their customers. Second are the customers of those clearing members. The banks and

brokerage firms favor common clearing because in every sustainable model of common clearing, control of the clearing house is transferred to those banks and brokers who then are able to manage the clearing process to their own advantage. We do not believe that the customers would benefit by turning over control of the clearing house to those banks and brokers. The independence of the risk assessment system and collateral setting function is threatened by transfer of control of the clearing house to banks and brokers. Similarly, the freedom of the clearing house to innovate and clear products threatens the outsized profits of the banks gained from trading in un-cleared, opaque markets.

End users and other consumers who rely on competitive pricing of commodities and an efficient and accurate price discovery mechanism could experience greater costs as a direct result of separating the clearing function from the exchange. Certainly, the efficiencies and cost effectiveness achieved through the vertical clearing model, which currently benefit consumers, would be lost.

QUESTION (2): "How would common clearing change your business model? Would this result in any efficiencies to the markets or to consumers?"

ANSWER (2): As more fully described below, common clearing of futures contracts would destroy our business model, stifle innovation and simply transfer power from the shareholders of a public corporation to the very banks whose inability to manage their own internal risk management systems almost brought down our economy.

Introduction - CME Group operates a vertically integrated business model, housing all functions from product and marketplace development, promotion, trade execution, clearing and settlement under one roof. The clearing model that your questions ask us to discuss is the antithesis of the successful system operated by CME. The common clearing model fragments front-end functions amongst a number of trading platforms, each of which loses important control over its operations, the financial integrity of its markets and its ability to innovate. We believe, and will discuss below, the advantages of CME Group's vertically integrated model. We also believe that there is value in permitting diversity among business models – not mandated homogeneity. Diversity is the keystone to true competition in any industry. The CME Group's vertically integrated model should be permitted to compete alongside any other business models that may be devised – including the security industry model featuring a "horizontally" aligned, utility, common clearing facility.

The CME Group's model offers customers trading and clearing in a competitively priced package, and allows CME to compete more effectively against others in the market who offer either a similar model or different models. Maintaining CME Group's trading/clearing model is critical to maintaining competition in the market for risk management. Federal policy should not pick winners and losers or restrict trading/clearing models; rather, federal policy should allow

competitors to freely choose their business model and either rise or fall on its ability to appeal to customers.

The explosion of alternative risk management tools — OTC instruments, swaps, other domestic and international trading platforms — and the explosion of competitors in the global risk management market in which CME Group must operate, makes it clear that there is no lack of competitors to CME's model. Any customer who desires to utilize a competitor's services is free to do so. Mandating that CME offer fungible clearing would cripple CME as a competitor in this extremely competitive market for risk management services.

Mandated common clearing is extremely risky; Congress should not "fix" something that is not "broken". The current system, which allows CME Group to offer its trading and clearing as a package, is a huge benefit to the nation and was a major reason that the economic tsunami the nation has endured for the last year was not far worse. Throughout the meltdown of the insurance, equity and other financial markets, the US futures trading and clearing system operated flawlessly and continued to allow risk to be managed and prices to be discovered efficiently in the face of market turbulence of historic proportions. Mandated common clearing is virtually guaranteed to weaken valuable aspects of our financial system and worsen the very economic problems that the Congress urgently needs to rectify.

Mandated common clearing is anti-competitive and exacerbates concentration of economic power. The CFMA allows and encourages entities with different trading and/or clearing models, including those who might want fungible clearing, to enter the market and compete for risk management customers. CME Group does not object to competing with such models, and we believe that customers will patronize the competitor that provides the best service and value. CME Group is prepared to compete with all comers, but it is anti-competitive from a public policy perspective to require CME to alter its chosen business model and dictate that it must give up its clearing house or allow fungible clearing. Such a mandate to change CME Group's model is particularly unfair since it will inevitably cause an uncompensated transfer of technology and income by government fiat from CME to other private sector entities, primarily the few large commercial banks that dominate domestic and international finance.

Finally, mandated fungibility would facilitate anticompetitive internalization of order flow by large financial players. It would effectively consolidate the economic power that those large financial players have at the expense of their competitor, the CME Group.

Diversity of Contract Designs – Unlike a security, which exists independently and apart from any securities exchange, a futures contract is a non-generic, constructed product. It is typically designed by the staff of a futures exchange and is often unique in terms of its particular attributes, potentially invoking intellectual property issues. Because futures products are designed in such a way as to enhance the exchange value proposition, typically, competing products in nascent markets are created with non-generic terms that reflect the exchange's unique judgment regarding market utility.

The impact of forced common clearing on diversity of contract design is clearly observed in the stock option marketplace. Exchange traded stock option contract terms and conditions are

generic, despite the significant number of "competing" option exchanges. Stock option design standards are set by the Rules and By-Laws of The Options Clearing Corporation ("OCC") which is the common clearing organization for the stock option industry and which technically issues stock options. It is fair to consider whether competition based on product advancements within that industry might have benefited consumers in the absence of this "back-end" driven model.

Consider, for example, the recent competitions for agency and swap futures. The Chicago Mercantile Exchange ("CME") and the Chicago Board of Trade ("CBOT") developed agency and swap futures at roughly the same times – but with contract designs that diverged just a bit – in the case of agency futures – or quite significantly – in the case of swap futures.[1] Of course, the deployment of divergent contract designs based upon a common underlying risk precludes the possibility of fungibility.

Any attempt to force exchanges to adopt common design standards in the interest of fungibility detracts from competition based upon product innovation. It is not just new contracts that compete based on innovations in specification, the contract terms and conditions of even the most successful, established contracts are often refined and modified. We believe that compelling an exchange to coordinate any such modifications with its competitors to promote fungibility is anticompetitive and destructive of consumer welfare.

Innovation – Exchanges – like any other business including brokerage firms – must be free to tinker and experiment in order to develop and refine products which will serve customers to the fullest extent, *i.e.,* to innovate. In this regard, CME Group's record is clear. We invented financial futures in 1972, we developed the first cash-settled contracts, leading to the development of structured derivatives on intangible assets not readily deliverable and we created the world's first successful stock index futures markets. More recently, we have innovated new risk management markets in areas such as weather and residential real estate indexes. Apart from our R&D investments and calculated risk taking, we invest considerable resources in education, training and marketing of our new innovations. In securities markets, the issuer invests in marketing and developing its own brand in order to attract investors and traders. In derivatives markets, it is the exchanges that must promote awareness and interest among market users.

Fungibility implies that exchanges share their design advancements with competitors and possibly forgo any benefits accruing thereby – the antithesis of innovation. At a minimum, enforced fungibility slows the pace of innovation. At its worst, it raises the question - why innovate? We believe that continued innovation and calculated risk taking will suffer in a single monopoly CCP system where all exchange competitors can freely usurp the innovations and investments of market leaders. Common clearing by an industry utility stifles innovation to the

[1] The CME and CBOT agency futures contracts diverged slightly in terms of the conversion factor standards employed – the CME contract was based upon a 6.5% standard while the CBOT contract was based upon a 6% standard. The CME and CBOT swap futures differ much more significantly. The CME contracts are quoted per the "IMM Index" – or 100 less the quoted rate. CBOT swap futures are quoted in percent of par akin to CBOT Treasury futures contracts.

extent that a common clearing organization may be disinclined to devote resources to develop systems to support new and different contract design features. To the extent that a utility is established to serve the needs of the community, it may turn away any one member of the community that has even minimally unique needs.

Liquidity and Transparency –Liquidity is a nebulous concept that is difficult to define but easy to recognize – measured in terms of a market's tightness, depth, immediacy and resiliency. It is likewise difficult to achieve – appearing to depend upon mustering some critical mass of interest, participation and price competition by a diverse group of liquidity providers, commercial and public participants.

CME Group's business model represents a time tested method of marshalling that critical mass of liquidity necessary in support of a successful futures contract – and on a transparent basis. Still, we cannot reduce the process to a fixed formula – for every market we have introduced successfully, we have unsuccessfully attempted to introduce many more. The nebulous nature of liquidity is such that we continue – and will always continue – to experiment with and refine the formula in an attempt to build liquidity to a higher crescendo. There is no specific evidence that forced fungibility – a measure that could serve to fragment the marketplace – may be more effective in promoting price competition.

Financial Integrity – Note that Core Principle 11 of Section 5(d) of the CEA requires Designated Contract Markets ("DCMs") to provide for the financial integrity of its contracts by establishing and enforcing rules "providing for the integrity of any contracts traded on the contract market (including the clearance and settlement of the transactions with a derivatives clearing organization)." In this we have been highly successful as CME has never experienced even a single default – a statement that many horizontally aligned clearing houses cannot make. As such, we have been a bulwark for the highest principles under the CEA – "the reduction of systemic risk, the protection of customers, and the efficient operation of the markets." [2]

We recognize that the Commission allows for the retention of independent DCOs for these purposes. But in the final analysis, it is CME Group's considered belief that it can best discharge its responsibilities to insure the financial integrity of the marketplace by operating an integrated execution, clearing and settlement facility "so that at all times ... [we may monitor] ... the pulse of the entire marketplace." [3] Clearly, it would be counterintuitive to compel an exchange to assume responsibility for the operations of an independent clearing organization whose actions it cannot control or whose activities it cannot monitor closely.

Costs – There is no compelling evidence that vertically integrated operations do not achieve cost savings on a level equal to or surpassing any other model in practice today. "On a

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[2] Statement of Mr. John P. Davidson, Managing Director, Morgan Stanley Dean Witter, "Public Hearing on the CFTC Study of Potential Changes in the Regulation of Intermediaries," June 6, 2002. Note that Mr. Davidson serves on the CME Risk Committee.

[3] Statement of Mr. Leo Melamed, Chairman Emeritus, Chicago Mercantile Exchange, "Federal Reserve Bank Roundtable on the Institutional Structure of Financial Markets," February 15, 2002.

post-netted basis, the different domestic settlement organizations in Europe ... [which are vertically integrated within exchanges] ... are as cost-efficient as the ... DTCC ... [whose operations vastly exceed the scope of these European settlement organizations] ... A centralized agency is thus not necessarily cheaper than competing organizations."[4] In fact, we believe that a vertically integrated model actually reduces costs by diffusing the cost of overhead resources, facilities and software licenses.

Control - In the final analysis, this discussion is about control of the central source of value in any transactional equation – *the bid-offer spread.* We share the concerns of Former SEC Chairman Arthur Levitt regarding the consequences of permitting the banks and broker dealers to control the clearing function at the expense of their customers: "the Commission is concerned about certain broker-dealer practices – internalization and payment for order flow – that substantially reduce the opportunity for investor orders to interact ... Reduced order interaction, if pervasive, may hamper price competition, interfere with the process of public price discovery, and detract from the depth and stability of the markets ... Price matching dealers thereby take advantage of the public price discovery process provided by other market centers ... but need not contribute to the process of price discovery ... This creates disincentives for vigorous price competition, which, if extensive, could lead to wider bid-asked spreads, less depth, and higher transaction costs. If these occur, all orders could receive poorer executions, not just the ones that are subject ... [to] ... internalization and payment for order flow arrangements." [5]

Similar controversies have erupted in European securities markets where ... "[t]he whole debate, disguised ideologically, is nothing else than an understandable dispute about the redistribution of the industry profit between the investors and issuers on the one side, and the intermediaries on the other side, with the ... [exchanges] ... being the turntable, market organization being the instrument of change, and the bid/offer spread being the desired target." [6] It is indeed unfortunate that the central issue has been obfuscated under the thin veil of enhanced competition.

Exchange Governance – CME has demutualized, thereby transforming itself from a membership organization to a for-profit corporation, which should serve to broaden the ownership in the corporation. Like any corporation, we have responsibilities to serve the interests of our shareholders. We must also serve the interests of our customers. As such, we are guided by an unforgiving market discipline requiring that we serve the interests of our customers in order to forward the interests of our shareholders. Accordingly, our policy is to emphasize an intense customer focus.

Holdup and Double Mark-up – Futures trading and clearing are marked by strong network effects. Volume and liquidity draws traders to the most liquid trading pool and

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[4] "The Securities Settlement Industry in the EU," Lannoo & Levin, CEPS Research Report, December 2001.

[5] Testimony of Former SEC Chairman Arthur Levitt before the Senate Committee on Banking, Housing and Urban Affairs on Preserving and Strengthening the National Market System for Securities in the U.S., May 8, 2000.

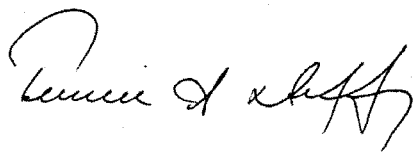
[6] "Managing Growth in the Securities Process Chain," Prof. Dr. Werner Seifert.

significant netting and portfolio margining opportunities draw customers to a single clearing house. Of course, if common clearing is mandated, the impacts of network effects on clearing become insignificant. The potential for concentration of trading and clearing on separate platforms creates a bilateral monopoly problem. This bilateral monopoly structure has two potentially adverse consequences. First, it may lead to double marginalization. Double marginalization refers to the situation where two players which operate at different levels of the value chain enjoy market power and have a profit-maximization motive. The price they will charge will eventually be relatively high, because both players seek to maximize profits and both choose a mark-up over their own costs. Each firm fails to take into account the effect that its pricing has on the other firm. Thus, the pricing behavior of vertically separated entities gives rise to a negative externality. In sum, users pay too high a price and both firms are punished for this because sales are less than optimal. If the two merge into a single entity the latter would be able to charge a lower price, which would allow the entity to earn profits that would exceed the combined pre-integration profits. This clearly argues in favor of the CME Group's vertical clearing model.

The bilateral monopoly problem raises the possibility of holdup and opportunism as the monopoly trading platform and the separate Horizontal Monopoly CCP attempt to capture the quasi rents that arise due to specialized investments in clearing and trading infrastructures. If there is considerable market power in trade execution, a Horizontal Monopoly CCP will not only not appreciably reduce exchange or trading platform costs, it will likely raise holdup inefficiencies, creating a "lose-lose" proposition. Integration is a well-known and usually efficient way to mitigate both the double markup and holdup problems.

Conclusion - The dual prescriptive remedies of fungibility and common clearing are appealing only if the costs of: circumscribing innovation; forcing standardization of derivative contract design; reducing efficiencies and encouraging holdup and double markups; and eliminating competition among business models are ignored.

Sincerely,



Memorandum

To: Senate Agriculture Committee

Cc: Senator Kirsten Gillibrand

From: Terry Duffy
Executive Chairman, CME Group

Date: December 15, 2009

Subject: **CME Group Response to Questions Posed by Sen. Gillibrand for the Record**

I understand the importance of position limits on commodity futures in an effort to curtail significant volatility and excessive speculation or market manipulation in key commodity sectors. To the extent we implement position limits domestically, do we not risk driving these markets overseas? While these overseas markets would not be able to effect domestic physical delivery of commodities, they certainly would be attractive to institutional investors and influence price discovery. How do you view this issue? How do we prevent the market exodus overseas? Can we ensure international coordination on position limits?

CME Group and many others have repeatedly expressed concerns that if Congress and/or the regulatory agencies (expressly, the Commodity Futures Trading Commission (CFTC or Commission) implement restrictive position limits on U.S. trading – particularly, on exchange traded markets – there will be a substantial flight of these markets to other, less restrictive trading venues. The markets could flee either to the over-the-counter market (depending on how limits are implemented in the OTC market) or certainly to foreign markets – exchange traded and OTC – where position limits are not imposed.

Indeed, we've already begun to witness the flight of business from exchanges, as I noted in my testimony. CME Group recently sent the attached letter to the CFTC detailing examples of instances in which Commission proposals and discussion concerning position limits have effectively driven business from regulated futures markets into foreign and OTC markets. For example, earlier this year, the U.S. Natural Gas Fund, a natural gas ETF, temporarily stopped issuing new units "due to current and anticipated new regulatory restrictions and limitations." Not long thereafter, the company began offering new units on a limited basis, following a rebalancing that shifted 20 to 25% of its futures positions into OTC natural gas total return swaps. Additionally, in August, CFTC staff withdrew longstanding "no-action" letters, including one to Deutsche Bank (DB), which effectively withdrew the company's relief from complying with speculative position limits for soybeans, corn and wheat on their index products. Without the no-action relief, DB was forced to reduce its positions in CME's fully regulated agricultural contracts to comply with the CFTC mandate. As a result, DB shifted its positions to the Euronext-Paris milling wheat contract.

It is important to realize that these markets, whether financial, agricultural or energy, are global. Market participants trade where there is liquidity. If the U.S. imposes undue position limits, without appropriate hedge exemptions from the limits, and without parallel limits imposed by foreign jurisdictions, we certainly will see business move to overseas markets. The shift may be gradual, but as liquidity in those markets grows, the movement of business will increase until the U.S. no longer retains its rightful place as the pricing benchmark for many of these markets. The market is watching this debate closely and positioning itself to respond swiftly to any U.S. imposed limits.

While international coordination and cooperation among regulators is critical, we have heard and read reports that suggest that it is highly unlikely that the UK, European Union or Asia will follow the U.S. and adopt stringent position limits. In fact, we learned that at the International Regulator's meeting recently held in Burgenstock, the prevailing view was quite the opposite. CFTC Commissioner Mike Dunn reportedly told members of a CFTC Advisory Committee in September that he had found "...no other regulator in the world that is sympathetic to setting position limits." The Commissioner raised his concerns about what impacts doing so would "have on our markets here in the United States if we do this unilaterally."

To conclude, it is important to recognize that the intended role of position limits in the marketplace is to guard and protect against manipulation. Unfortunately, position limits have been viewed as a political tool to be used to limit participation in the market by non-commercial participants and control prices by limiting participation by speculators. In many cases the proposed limits would restrict legitimate financial hedging, in addition to much needed participation by speculators who provide the liquidity needed for vibrant and robust markets. Deep and liquid markets are essential to provide the most effective hedging and price discovery functions for U.S. and global business needs. It is clear to many economists and those in the industry that the only predictable impact of eliminating speculators is that the costs of hedging increase and the price discovery function is impaired. If Congress determines to impose position limits on U.S. markets, CME Group urges that:

(1) Position limits be applied simultaneously across exchange and OTC markets;
(2) When applied on an exchange, they should be set and administered by the exchange, and hedge exemptions should also be determined and administered by the exchange in consultation with the CFTC;
(3) Each regulated exchange should set position limits and/or accountability levels for all months combined, single months and the delivery period based on traditional considerations, focusing on the exchange's open interest and deliverable supply; and
(4) The CFTC should establish a system for reporting end-user OTC positions, and after gaining the authority to impose aggregate limits that include OTC positions, be responsible for ensuring an end-users' combined on-exchange and OTC speculative positions do not exceed the aggregate total market position limit.

We would be happy to discuss these issues with you in more detail and to provide any additional information that you may need as your deliberations on the matter evolve.

October 20, 2009

The Honorable Gary Gensler
Commodity Futures Trading Commission
1155 21st Street, NW
Washington, D.C. 20581

Dear Chairman Gensler:

In our discussions with you and others over the CFTC's proposals concerning position limits, we have explained our concern that these proposals will have the effect of driving business away from regulated futures markets and into foreign and OTC markets. The CFTC has created the impression in the market that it intends to impose a stringent position limit regime and curtail participation by swap dealers and index funds in the futures markets for energy and other commodity products. This impression, coupled with participants' concerns about how much further the CFTC may go, has already influenced multiple funds to change their investment decisions, reducing their use of US futures products. Described below are recent examples of this shift away from fully-regulated US commodity futures toward foreign futures products and the OTC markets.

We must repeat that restrictive position limits are being promoted despite the lack of empirical evidence to show that such limits would reduce volatility in commodity prices. As we have testified to Congress and the Commission, and as noted in our recent paper, "Excessive Speculation and Position Limits in Energy Derivatives Markets", economists studying the problem, including the GAO and those at the CFTC itself, have generally found little or no evidence of a causal relationship between speculation by futures markets participants and changes in commodity prices.

While we welcome continued study and analysis of the issues, we are dismayed that the CFTC's public statements about position limits and other controls that it intends to impose on so-called speculative activity in the futures markets are already driving liquidity away from these markets, changes that ultimately will damage the efficient price discovery function and global stature of US commodity futures markets.

1. Deutsche Bank and Gresham No Action Letters. On Aug 19, the CFTC withdrew long-standing no-action letters to DB and Gresham Investment Management, re-imposing speculative position limits for soybeans, corn and wheat on their index products. Consequently, both firms will need to reduce their positions in CME's fully-regulated agricultural contracts to comply with the

change. DB has announced that it will begin shifting positions to the Euronext-Paris milling wheat contract.

2. United States Natural Gas Fund Reductions. In August, this natural gas ETF temporarily stopped issuing new units "due to current and anticipated new regulatory restrictions and limitations." Recently UNG began offering new units on a limited basis, following a rebalancing that shifted 20 to 25% of its futures positions into OTC natural gas total return swaps.

3. US Fund Company to Start Foreign Crude Fund. In September United States Commodity Funds LLC announced that it would launch an ETF based upon Brent Crude Oil, the European benchmark crude oil product. Before now, this company's crude oil ETFs have been based upon the more liquid US crude oil futures markets.

4. Deutsche Bank Rebalances Commodity Funds in Favor of Foreign Markets. In September DB announced a rebalancing of two commodity funds that would begin shifting positions from CME's US markets to Intercontinental Exchange's UK-regulated futures markets.

5. Standard & Poor's Accelerates Foreign Commodity Index. In September S&P announced that it would accelerate the launch of a new index based on non-US commodities. Although S&P previously expressed concerns about the low liquidity in foreign markets, it has renewed its efforts to establish a credible index because of demand from US-based customers concerned about pending regulatory impact on US markets.

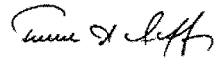
6. Thomson Reuters / Jeffries Group Launches Commodity Stock ETF. In an effort to offer investors an opportunity to invest in commodities markets without using commodity futures, investment bank Jeffries launched an ETF based on 147 common stocks of companies involved in agriculture, metals and energy.

CME Group is deeply concerned that the redirection of business from regulated US futures markets toward foreign futures markets and OTC markets will only accelerate amid concerns about restrictive position limits and other controls that legislative proposals or the CFTC may employ to drive "speculators" out of US futures markets.

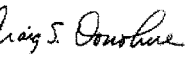
Speculation and market-making by financial institutions play integral roles in market dynamics. If market participants that provide an essential source of liquidity through their willingness to take and manage risk are driven out of regulated futures markets, they may well shift their activities to foreign and OTC markets without any noticeable impact on commodity prices. Instead, such shifts may simply reduce the liquidity of futures markets and thereby limit public price transparency as well as US regulators' visibility into information about market participants' trading activities. Fair competition ultimately benefits market participants and consumers alike. But US policymakers must be mindful that in a global environment, poorly formulated reform measures can have substantial negative consequences for the competitiveness of US markets.

Today regulated US futures markets are, for the most heavily-traded commodities, the world's most efficient and transparent price discovery mechanism. That function will be impaired if futures markets cease to be the venue of choice for key groups of market participants. The fairness and competitiveness of US futures markets is a core strength of our financial system, and we urge the CFTC and Congress to carefully consider the negative impacts that could flow from the many regulatory changes currently under consideration.

Respectfully,



Executive Chairman



Chief Executive Officer

Chairman Blanche L. Lincoln

1) **What is your opinion about the proposal that a percentage cap should be put on dealer ownership of clearing entities?**

   We support the underlying goal of attempting to preserve competition in the clearing and trading of derivatives. We favor limiting conflicts of interest and improving the governance of clearinghouses and exchanges, especially in light of the large amount of trading and clearing that we expect to migrate to the clearinghouses and exchanges once a bill is passed.

2) **During our December 2nd hearing, Senator Conrad asked you a question regarding the Farm Credit Administration (FCA) and the Farm Credit System (FCS) being included in Administration and House and Senate efforts toward financial regulatory reform. You stated you were not aware that the FCA or the FCS was part of any such efforts, and that you were in consultation with Secretary Vilsack and he had expressed no concerns regarding the matter.**

   The FCA is an independent Federal agency responsible for examining and regulating the FCS. The FCS, a Government Sponsored Enterprise (GSE), is a nationwide network of borrower-owned lending institutions and specialized service organizations that provide credit and related services to farmers, ranchers, agricultural cooperatives, and other eligible borrowers. The Agriculture Committees of the Congress have jurisdiction over the FCA and the FCS.

   The House Consumer Financial Protection Agency Act (CFPA) and Financial Stability Improvement Act (FSIA) have provisions that can affect the FCS and, therefore, impact FCA. In fact, last week the House Parliamentarian granted the House Agriculture Committee referral with regard to the CFPA provisions.

   Furthermore, there were discussions in November between the Treasury Department and the FCA regarding the House Financial Services Committee's FSIA that was reported out of committee today. It is also our understanding that Treasury staff has agreed to language that expressly excludes the FCA and the FCS from the FSIA.

   The Senate and House efforts on regulatory reform impact FCS and FCA in four areas. First, provisions that establish an agency over financial stability contain a definition for financial companies that would include FCS institutions. As a result, the FCS could come under the oversight of the agency for financial stability, even though an FCS institution is not a large, complex, interconnected financial entity. To address this matter, the Treasury drafted an amendment to modify the definition of financial company used in title I of the FSIA put forth by the House. Essentially, this amendment excludes FCS institutions from the definition of financial company. Can you confirm the Treasury's position is FCS institutions should be excluded from the definition of financial company?

During the legislative process with the House Financial Services, my staff engaged with staff from the Farm Credit Administration and together drafted legislative language that would make clear that the Farm Credit System (FCS) should not be included in the definition of a financial company for the purposes of the regulatory authority of the Financial Services Oversight Council. Given the important role that the FCS plays, the clearly delineated activities that Farm Credit institutions can engage in, and the existing regulatory structure to oversee the FCS, the Treasury Department was supportive of efforts to clarify the continuing role of the FCA in primary regulation of the FCS institutions.

3) **The financial regulatory reform provisions for enhanced resolution authorities contain a broad definition of financial company that includes FCS institutions. Therefore, an FCS institution could be subject to the enhanced resolution processes even though the resolution of FCS institutions is clearly addressed in the Farm Credit Act of 1971, as amended (Farm Credit Act). To address regulatory confusion and avoid duplicate resolution authorities, the Treasury drafted an amendment to eliminate FCS institutions from the definition of financial company for enhanced resolution purposes. Can you confirm the Treasury's position is FCS institutions should be excluded from the definition of financial company?**

During the legislative process with the House Financial Services, my staff engaged with staff from the Farm Credit Administration and together drafted legislative language that would make clear that the Farm Credit System (FCS) would not be subject to the enhanced resolution authority that the Administration has proposed for failing non-bank institutions that could pose a threat to financial stability. Given that the Farm Credit Administration already has statutory authority to resolve any farm credit institution, including Farmer Mac, the Treasury Department was supportive of efforts to clarify that the FCA's resolution regime would continue to operate for all farm credit institutions.

4) **The financial regulatory reform provisions on credit retention for securitization activities would affect FCS institutions, particularly the Federal Agricultural Mortgage Corporation (Farmer Mac). Farmer Mac provides a secondary market for agricultural mortgages, rural home loans, and rural utility loans made by cooperatives. The proposed credit retention requirements create conflicts with the Farm Credit Act, with respect to Farmer Mac securitization authorities and confuse the regulatory oversight authorities of the FCA. The House bill was amended to specifically exclude FCS institutions, including Farmer Mac, from the credit retention provisions. Does the Treasury support an amendment of this nature in the Senate bill?**

During the legislative process with the House Financial Services, my staff engaged with staff from the Farm Credit Administration and together drafted legislative language that would make clear that the Farm Credit System (FCS) would not be subject to the risk retention requirements as proposed under the House bill. However, I believe that risk retention requirements are a very important tool for aligning incentives in securitization markets and to maintain underwriting standards in markets that have significant securitization activities. My understanding is that, at one time, risk retention requirements did apply to Farmer Mac and that those requirements have since been lifted. I look forward to working with you and your

committee to examine whether reinstating some form of risk retention requirements would be appropriate in the FCS.

5) **The Consumer Financial Protection Agency has board authorities to regulate any consumer lending transaction, including examination and enforcement authorities. While consumer protection is critical, the reach of the CFPA could inadvertently extend beyond consumer loans. With respect to FCS institutions, farm and other farmer-related business loans would ordinarily not be considered a "consumer loan" but that is not made clear in the bill. In fact, such farm loans are subject to strong borrower rights protections provided under the Farm Credit Act. On the other hand, the CFPA would have clear authorities over the FCS as it relates to any true "consumer loans" including rural housing loans it may make. Do you concur that the scope of the CFPA authorities was not meant to include farm loans of the type made by FCS institutions under their statutory authorities?**

   The CFPA will not have authority over farm loans. The CFPA will have authority only over those loans that are to be used by a consumer primarily for personal, family or household purposes.

6) **Under current law, the System is subject to several consumer statutes such as the Truth in Lending Act (TILA), Equal Credit Opportunity Act (ECOA), and the like. Presently FCA is the enforcing agency with respect to TILA and ECOA, but not for some other consumer protection laws such as the Fair Credit Reporting Act and the Home Mortgage Disclosure Act. The FCA has been an effective regulator in ensuring compliance with consumer lending requirements on the few consumer loans held by FCS institutions. We note that the House CFPA bill exempts GSEs regulated by the Federal Housing Finance Agency and financial institutions regulated by the Commodities Future Trading Commission and Securities Exchange Commission. Can you explain why FCS institutions that are regulated by FCA should not have a similar exemption?**

   In general, Farm Credit System (FCS) institutions are authorized to provide financial products and services for agricultural and related business purposes. They are also allowed limited authority to provide loans to rural consumers primarily for personal, family, or household purposes, and they provide such loans at de minimis levels, on both an absolute basis and as a proportion of their overall activities. In addition, we understand that the Farm Credit Administration (FCA)—a federal agency—supervises FCS institutions to assure that they adhere to high standards when providing consumer loans. Given these facts, the limited consumer lending activities of FCS institutions should not rise to a first order issue under the CFPA jurisdiction.

Senator Debbie Stabenow

1) **Should the government assume the responsibility for operating a trade repository so that it is in possession of all trade data for over-the-counter derivative contracts?**

   We believe that it is appropriate to permit private entities to operate derivatives trade repositories. Our view is based on the notion that a private entity is best equipped technically to assume such operations and can do so most efficiently. We believe that competition among private sector repositories will produce the best services at the lowest prices to the financial markets. What is crucial is that the appropriate Federal financial regulatory agencies regulate such private sector trade repositories, have authority to determine the content of the information retained by such repositories about each OTC derivatives trade, and have broad access to the information contained in such repositories. The Administration's proposals and the current House and Senate financial regulatory reform bills contain exactly these provisions to protect the public interest.

2) **Do you expect that exchanges and clearinghouses would experience any additional financial burden if Congress mandates that all derivative trades must be reported to a repository?**

   Neither the Administration's proposals nor the existing House and Senate bills on derivatives would require exchanges or clearinghouses to report derivatives transactions to a trade repository. Existing legislation would require only that the counterparties to non-centrally cleared derivatives transactions to report the transactions to a trade repository. Accordingly, we do not anticipate that exchanges and clearinghouses would experience a material financial burden from such a statutory requirement. Clearinghouses and exchanges would be expected to retain comprehensive information about derivatives trades executed on or through the facility, but the information would be the sort of information that such entities already possess.

3) **It's my understanding that derivatives are integral to the securitization process. What will be the impact of your proposed reforms on the use of derivatives in securitization? How will you ensure that the securitization market will not be adversely affected?**

   Derivatives are integral to the efficient conduct of financial and commercial businesses in countless ways, including securitizations. We do not anticipate that users of derivatives, including sponsors of securitizations, will be adversely affected in any material way by our proposed reforms for the regulation of derivatives. Instead, we anticipate that end users in particular will benefit from this regulation by being able to participate in a more transparent and efficient market, where dealers are adequately capitalized and better rules are in place to prevent dealers from engaging in self-dealing and other unsafe practices.

Senator Sherrod Brown

1) **With a well-regulated derivatives market, do you think new regulations would increase transparency and price discovery to the point where businesses would see lower costs for derivatives transactions?**

   It is our expectation that new regulations requiring the trading and execution of derivatives through exchanges and reporting of those trades will increase transparency and result in lower execution costs for users of derivatives.

2) **New proposals envision clearinghouses as the main instrument in which the transactions – and risks – of counterparties are concentrated. How do we make sure that we do not witness the rise of clearinghouses that are too big to fail?**

   Clearinghouses use multilateral clearing as a system for settling trades. Multilateral clearing is far more effective at reducing risk than the current system for handling over-the-counter derivatives – bilateral clearing, where the two sides to a single transaction retain credit exposure to each other throughout the term of the transaction. While multilateral clearing is preferable to bilateral clearing for reducing systemic risk, it by definition leads to a concentration of the remaining risk in the clearinghouse. Our proposals contain four main mitigants to this concentration of risk. First, our proposal is premised on the presence of multiple clearinghouses that will operate independently of each other. Second, we propose to put in place a robust system of oversight by the SEC and CFTC for all derivatives clearinghouses. The SEC and CFTC will be required to promulgate and administer regulations to ensure that all derivatives clearinghouses are operated effectively and prudently, with appropriately strict membership requirements and margin requirements, and appropriately sized guarantee funds and capital buffers. Third, we have proposed to give the Federal Reserve back-stop authority to issue tighter prudential regulations for all clearinghouses whose failure could pose a threat to financial stability. Finally, we propose to give the Federal Reserve authority to provide back-stop liquidity to such systemically important derivatives clearinghouses to prevent instability.

3) **If regulations exempt some end users from oversight, could this lead to a situation in which large financial institutions can exploit loopholes and place our entire financial system at risk?**

   Under the Administration's proposals, all major derivatives market participants – regardless of whether they characterize themselves as end users rather than dealers -- would be subject to central clearing requirements, trading requirements, strong prudential oversight, and tough business conduct rules. We strongly believe that any end user exceptions from provisions of the new regulatory regime for derivatives must be narrowly tailored to prevent the emergence of systemic risk.

4) **What role has the deregulation of derivatives – and subsequent explosion of the over-the-counter market – played in increasing the prices and volatility of energy**

commodities? If this is the case, shouldn't increased transparency serve the interests of end users such as manufacturers, small businesses, and consumers?

It is difficult to say precisely what role derivatives, regulated or unregulated, have played in increasing energy price levels and the volatility of energy prices. The CFTC is currently examining that precise question. We believe that increased transparency benefits end users and the markets as a whole by increasing confidence in the efficiency and integrity of the markets.

Senator Pat Roberts

1) **Mr. Secretary, we have heard from numerous non-financial companies who are concerned about the scope of some of the legislative proposals on systemic risk and the fact that the proposals go well beyond large banks and financial companies that played a part in the last year's financial crisis. The Administration has sold financial regulatory reform in the context of cleaning up Wall Street and preventing another financial market meltdown. According to the Dodd and Frank proposal, companies that indirectly engage in activities that are financial in nature may be subject to systemic risk legislation. Wouldn't this broad definition capture any large company that hedges or manages their energy risk? Wouldn't this definition include agriculture, transportation, energy, and heavy manufacturers? If so, why should Congress focus on companies that had nothing to do with last year's financial meltdown and who have suffered because of the credit freeze and economic downturn? Does this proposal penalize these non-financial companies and in turn possibly increase their risk?**

   The Administration has proposed to prudentially regulate and supervise any financial firm whose failure could pose a threat to financial stability. We believe that expanding the scope of regulation in this manner is crucial to reducing systemic risk and preventing the emergence of weakly regulated financial giants such as AIG, Lehman Brothers and Bear Stearns. Our proposal would give regulators substantial discretion in the determination of which non-bank financial firms would become subject to prudential regulation because of the threat they pose to financial stability. We would expect, however, that such firms would have to engage in financial activities to a very significant extent to be made subject to prudential regulation under this new authority.

   In the derivatives context, we have proposed to require prudential regulation of all major derivative market participants. We included in our legislative proposals, however, a provision to permit nonfinancial companies that use derivatives for bona fide hedging purposes to avoid prudential regulation as a major swap participant. Nonfinancial companies that use derivatives to hedge the risks of their commercial operations generally do not pose a material risk to the financial system.

Senator Chuck Grassley

1) **A little over a year ago, you, as President of the New York Federal Reserve, presided over the bailout of AIG. Apparently, according to many, letting AIG fail would have posed too great a risk to the financial system. Please identify what criteria you used last year to determine that AIG was too big to fail? Is this the same criteria you would use today to identify entities that are too big to fail?**

2) **As you know, for the last year Treasury has owned billions of dollars of AIG preferred stock purchased with TARP funds. And as I noted in my letter to you yesterday, on the first of November AIG missed its fourth quarterly preferred stock dividend payment. That means AIG has not made a single preferred stock dividend payment to the government. I understand that Treasury now has the authority to appoint 20% of the AIG Board of Directors. How many Directors are you authorized to appoint and when do you anticipate that the new Directors will be in place? Will one of their tasks be to ensure that AIG finally begins making dividend payments? Please explain how you intend to dispose of the AIG preferred stock so that the taxpayers are repaid in full?**

3) **As I stated in my letter to you and NY Fed President Dudley yesterday, I am still concerned that all the taxpayer money used to shore up AIG, both through the Maiden Lane entities and from TARP, will be lost. Do you still believe that purchasing AIG's troubled assets and paying off its credit default swap counterparties was the right decision? Do you believe that those dollars will be returned? And if so when?**

Below I address each of your questions regarding government support for AIG. First, I answer your questions in items 1 and 3 regarding why the government provided assistance to AIG and why facilitating the purchase of AIG's troubled assets and counterparty payments was the right decision for taxpayers. Next, I address your questions in item 2 regarding dividends and Treasury's authority to elect directors to AIG's Board. Next, I answer your questions in items 2 and 3 regarding the outlook for the government's investments in AIG. Finally, I explain how the Administration's proposals for financial reform address the moral hazard challenges posed by large, interconnected financial institutions that have been labeled as "too-big-to-fail," which you raise in item 3. In addition to the responses below, I refer you to my recent testimony before the House Committee on Oversight Government Reform on AIG issues.[1]

The Decision to Support AIG and Counterparty Negotiations

In the fall of 2008, a near-complete collapse of our financial system was a realistic possibility. Americans were starting to question the safety of their money in the nation's banks, and a growing sense of panic was producing the classic signs of a generalized run. Peoples' trust and confidence in the stability of major institutions, such as AIG, and the capacity of the government to contain the damage was vanishing. Lehman Brothers filed for bankruptcy just a few days after AIG alerted Federal authorities that its problems had become

[1] Timothy Geithner, Secretary of the Treasury, Written Testimony Before the House Committee on Oversight and Government Reform, Jan. 27, 2010, available at http://www.treas.gov/press/releases/tg514.htm.

acute. In the wake of Lehman's failure major institutions such as Washington Mutual and Wachovia experienced debilitating deposit withdrawals, eventually collapsed, and were acquired by competitors. Money market funds also suffered a broad run, threatening what was considered one of the safest investments for Americans and severely disrupting the commercial paper market, a vital source of funding for many businesses.

In this chaotic environment, the Federal Reserve and Treasury concluded that AIG's failure could be catastrophic. At the time, the failure of a large, global, highly-rated financial institution that had written hundreds of billion dollars of insurance on a range of financial instruments could have tipped an already weak and fragile financial system and economy into the abyss. The company's failure would directly threaten the savings of millions of Americans to whom it had provided financial protection through investment contracts and products that protect participants in 401(k) retirement plans. AIG was one of the largest life and property/casualty insurance providers in the United States. The withdrawal of such a major underwriter at the time risked creating a void for millions of households and businesses for basic insurance protection. And doubts about the value of AIG life insurance products could have generated doubts about similar products provided by other life insurance companies, feeding the panic that was crippling the economy.

Because of the scale of AIG's losses and its financial needs, and because of the force of the storm enveloping the rest of the financial system, there was no capacity for a consortium of private firms to find the resources necessary to solve AIG's problems without government assistance. It was also impossible at that time to find a private buyer for such a large and complex company, given the uncertainty of the value of AIG's assets and the severe financial stress experienced by potential buyers.

There was no effective existing mechanism to contain the damage of an AIG failure. There was no legal tool comparable to the Federal Deposit Insurance Corporation's authority to manage the orderly wind-down of a troubled bank. In particular, the government did not have the ability to quickly separate the stable underlying insurance businesses from the complex and dangerous financial activities carried out primarily by the parent holding company. Experts suggested that achieving that separation would take several years.

Bankruptcy was not a viable option. If the AIG parent holding company had filed for bankruptcy protection, it would have resulted in immediate default on over $100 billion of debt and trillions of dollars of derivatives. Further, the bankruptcy filing would have caused insurance regulators in the United States and around the world to take over AIG's insurance subsidiaries, potentially disrupting households' and businesses' access to basic insurance. And since many of the insurance products that AIG sold were a form of long-term savings, the seizure by local regulators of AIG's insurance subsidiaries could have delayed Americans' access to their savings, potentially triggering a run on other institutions.

The Federal Reserve, under the law, had no role in supervising or regulating AIG. Instead, the company was subject to a patchwork of regulators, none of whom was adequately aware of the risks that AIG had assumed, and none of whom had the tools to address the company's funding needs or to provide for its orderly resolution. However, Congress gave the Federal

Reserve authority to provide liquidity to the financial system in times of severe stress, and it acted to fulfill that responsibility with respect to AIG.

Aware that the Federal Reserve was the only institution capable of acting, and convinced that the failure of AIG could be catastrophic for a financial system already in free fall, the Federal Reserve and Treasury determined that it was in the best interests of the United States to support AIG in order to slow the panic and prevent further damage to our economy. On the afternoon of September 16, 2008, the Federal Reserve extended AIG an $85 billion line of credit, secured by a substantial proportion of the assets of AIG. In designing the intervention, the government made sure that there were appropriately tough conditions that put the burden of failure on AIG's existing equity holders and management and started the process of designing a comprehensive restructuring plan. Taxpayers received an approximately 80 percent ownership stake in what was still the world's largest insurance company, thereby substantially diluting existing shareholders. The government also required AIG's CEO to step down and immediately began the process of changing the Board of Directors.

From the beginning, it was clear that AIG needed a durable restructuring of its balance sheet and operations. Although the government faced escalating and unprecedented challenges on many fronts of the financial storm in September and October, it continued to work to address AIG's challenges. Falling asset prices generated both substantial losses on the company's balance sheet and increases in required payments to AIG's counterparties under the terms of its credit protection contracts. The insurance companies also experienced significant cash outflows related to a securities lending program, as the value of residential mortgage-backed securities they had purchased and loaned against cash collateral continued to fall. These factors undermined market confidence in AIG and put its investment-grade credit rating again at risk.

Understanding the counterparty negotiations discussed in your third question requires an understanding of the role of the rating agencies in AIG's businesses. Avoiding further downgrades of AIG's credit rating was absolutely essential to sustaining the firm's viability and protecting the taxpayers' investment. Under credit protection contracts that AIG had written and the terms of various funding arrangements, AIG was required to make additional payments to its counterparties if its credit rating was downgraded. A downgrade (to below a certain level) also constituted an event of default or termination under many contracts. In addition, rating downgrades of the AIG parent holding company would have significantly undermined confidence in its insurance subsidiaries. People do not buy insurance products from firms they do not believe have the financial capacity to make good on those commitments over the long term – firms that they do not believe will pay out a life insurance policy or compensate a business if a factory burns down. Credit ratings are central to how people judge that viability.

On November 10, 2008, the Federal Reserve and Treasury jointly announced a package of actions designed to address the vulnerabilities in AIG's balance sheet that threatened its viability and the stability of its credit ratings. To address AIG's need for capital and to reduce its leverage, Treasury agreed to invest $40 billion in senior preferred stock of AIG

under the authority recently granted by the Emergency Economic Stabilization Act of 2008 (EESA). This investment provided new equity capital to AIG, a tool not available to the U.S. government at the time the initial credit line was provided in September 2008. The proceeds of this investment were used to repay part of the FRBNY credit facility. In addition, the FRBNY helped establish and fund two new companies to purchase troubled assets that AIG had either acquired or insured, and to manage those assets for the benefit of the taxpayer. Purchasing those assets removed significant exposure from AIG's balance sheet and helped insulate the company from further liquidity drains, thereby preventing the company from being downgraded and failing. One company, Maiden Lane II LLC, purchased assets from AIG's insurance subsidiaries. The other company, Maiden Lane III LLC (ML III), purchased securities insured by AIG's Financial Products subsidiary and owned by third parties.

AIG's Credit Default Swap Exposure – Simplified Example

While the financial contracts involved were complex, AIG had basically agreed to insure the value of certain risky securities called multi-sector CDOs. The value of these securities was tied to pools of other assets, mostly subprime mortgages. As the financial crisis intensified, the value of the securities fell sharply. AIG incurred losses on these contracts and had to post collateral or make payments on the insurance.

To help understand this kind of contract, imagine AIG had provided insurance on the value of a tangible asset, such as a house, to the homeowner. If the price of the house fell, AIG would be required to post collateral, or essentially make a payment to the owner, equal to the decline in the value of the house. So, if the house was originally worth $200,000 and fell to $125,000, AIG had to give $75,000 to the homeowner as collateral and would incur a loss of the same amount. In addition, AIG would have to post more collateral if the credit rating of the house fell, because it would signal that that the home's value was in jeopardy. Finally, if AIG's credit rating fell, it would have to post even more collateral because the homeowner would be concerned about whether AIG could ultimately pay on the insurance.

The problem was AIG had written billions of dollars of such insurance without sufficient capital. AIG was fine as long as the prices of the assets they were insuring -- housing prices, in the example -- didn't fall, the credit rating of the assets didn't fall, and AIG's own credit rating didn't fall. But if any of those events happened, it would be in trouble. In the fall of 2008, each of these events occurred. The value of the assets, their credit rating, and AIG's own credit rating all fell, bringing AIG to the brink of bankruptcy.

The counterparty/homeowner was fully protected and had all the leverage. If AIG failed to pay on the insurance, the counterparty could keep the collateral and the asset (house) and sue AIG for damages. Further, if AIG had failed to pay or threatened not to pay, it would have been downgraded and collapsed—threatening the economy. If the government had guaranteed the insurance, as some have suggested, and asset prices fell, the counterparty could demand more collateral and keep the asset (house). Therefore, the government funded ML III to buy the asset (house) at fair market value ($125,000). The counterparty kept the collateral ($75,000) in exchange for tearing up the insurance. As a result, the counterparty received par ($200,000), but the taxpayer gained the opportunity to benefit from recovery in asset prices—as has occurred. The transaction supported AIG's viability and credit rating, removing a substantial threat to the economy at the crisis's peak.

The counterparty negotiations discussed in your third question were conducted in connection with the formation and funding of ML III. Before the Federal Reserve became involved with AIG, the company had entered into credit default swap (CDS) contracts with various third parties to protect the value of certain risky securities, called multi-sector CDOs, in exchange for periodic premium payments. The value of these securities was tied to pools of other assets, mostly subprime mortgages. The contracts required AIG to provide its counterparties collateral as the market value of the underlying CDOs, the credit rating of the assets behind the CDO, or AIG's credit rating declined. As the financial crisis intensified, each of these events occurred. As of November 5, 2008, AIG had already posted approximately $37

billion in collateral against these exposures in accordance with the terms of the contracts, and these collateral calls contributed significantly to the $25 billion in losses that AIG reported for the third quarter of 2008.

To remove the persistent threat that these contracts posed to AIG's continuing viability, ML III purchased the underlying CDOs from the counterparties at their then fair market value. The counterparties received $27 billion in payment from ML III, retained approximately $35 billion in collateral previously provided by AIG, transferred the CDOs to ML III, and terminated the CDS contracts. Thus, the counterparties essentially received the "par" value of $62 billion, consistent with the terms of their insurance contracts with AIG. ML III's purchase was funded by a $24 billion loan from the FRBNY and $5 billion equity contribution by AIG.

In designing and implementing this transaction the FRBNY's objective was, as it always is, to protect the taxpayer. The FRBNY made judgments about these transactions carefully with the advice of outside counsel and financial experts. As they had done when establishing the lending facility in September, the FRBNY and its advisors reviewed a range of materials, including details regarding AIG's exposure to each counterparty under the CDS contracts.

However, the FRBNY faced significant constraints. The CDS contracts entitled the counterparties to full or par value. The FRBNY could not credibly threaten not to pay without being willing to follow through on that threat and put AIG into bankruptcy. At the time, the government was working desperately to rebuild confidence in the financial system. Any suggestion that it might let AIG fail would have worked against that vital aim. The FRBNY could not risk a protracted negotiation. AIG's financial position was deteriorating rapidly, and the prospect of a further ratings downgrade was imminent. AIG was scheduled to report a $25 billion loss for the third quarter on November 10, and the ratings agencies had informed AIG that, absent a parallel announcement of solutions to its liquidity and capital problems, they would downgrade the company yet again. Such a downgrade would have led to AIG's failure and triggered the same catastrophic consequences the government had been trying to avoid since September 2008. Moreover, a bankruptcy would have entitled the counterparties to terminate the CDS contracts and keep the collateral that AIG had previously posted, as well as the underlying CDOs that AIG had insured.

The Special Inspector General for the Troubled Asset Relief Program (SIGTARP) has suggested that the FRBNY should have used its regulatory authority, or some other means, to coerce AIG's counterparties to accept concessions.[2] This was not a viable option for several reasons. First, if the FRBNY had tried to force counterparties to accept less than they were legally entitled to, market participants would have lost confidence in AIG leading to the company's failure. Once a company refuses to meet its full obligations to a customer, other customers will quickly find other places to do business. Second, the counterparties could have refused to grant such concessions, kept the collateral they had already received, kept the CDO securities that AIG had insured, and sued AIG for breach of contract. This would have

[2] Factors Affecting Efforts to Limit Payments to AIG Counterparties, Nov. 17, 2009, available at http://www.sigtarp.gov/reports/audit/2009/Factors_Affecting_Efforts_to_Limit_Payments_to_AIG_Counterparties.pdf.

increased the taxpayer's potential exposure and precluded them from benefiting from any recovery in the value of the CDOs, which has in fact happened.

Third, if the FRBNY had attempted to use its regulatory authority to coerce or extract concessions from AIG's counterparties, that attempt would likely have led to a further downgrade of AIG's ratings, precisely the result that all of the government's actions were intended to avoid. An "investment grade" credit rating is the rating agencies' judgment that creditors will likely be repaid in accordance with the terms of their contracts, not according to a hypothetical government-coerced discount. If the FRBNY had attempted to force counterparties to accept less than they were legally entitled to, then AIG would not have met the ratings agencies' standards for "investment grade" status, and it would likely have lost its "investment grade" rating. Such a downgrade could have led to the company's collapse, threatened government efforts to rebuild confidence in the financial system, and meant a deeper recession, more financial turmoil, and a much higher cost for American taxpayers.

In addition, the SIGTARP has stated that Treasury and the Federal Reserve "were fully prepared to use their leverage as regulators to compel the nine largest financial institutions (including some of AIG's counterparties) to accept TARP funding." The SIGTARP suggests that the government should have similarly compelled concessions from AIG's counterparties. First, I disagree with the SIGTARP's characterization of the government's discussions with the initial recipients of TARP funds. Second, the circumstances and authority in that situation were fundamentally different from what existed in the ML III transaction. Congress granted the Federal Reserve and, through EESA, Treasury with the responsibility to ensure the safety and soundness of the financial system. In the Federal Reserve's case, that authority was limited to providing liquidity and regulating bank holding companies. In Treasury's case, it was limited to purchasing or guaranteeing assets. Consistent with that responsibility and authority, in the midst of the financial crisis the government encouraged nine banks to accept additional capital. They were not forced to forfeit contractual rights for the benefit of another financial institution. The latter would have been an abuse of the authority granted by Congress, violated private parties' contractual rights, and undermined confidence in the government's strategy to stabilize the U.S. financial system.

The SIGTARP has also stated that the AIG situation was similar to negotiating concessions from creditors of Chrysler and GM. Again, the situations were fundamentally different. Those concessions were negotiated in the context of a sale governed by bankruptcy law in proceedings supervised by a U.S. Bankruptcy Court. As I stated above, bankruptcy was not a viable option for AIG. Further, the government lacked the authority to seize, dismantle, and wind down AIG in a way that would allow for such negotiations.

Operating with these constraints, the FRBNY and AIG initiated discussions with the major counterparties about whether they would be prepared to accept concessions on the prices of the securities. The FRBNY knew that the likelihood of success of such a negotiation was modest, especially given the imminent deadline and the bargaining constraints under which it was operating. Not unexpectedly, the FRBNY discovered that most firms would not, under any condition, provide such a concession. One counterparty (UBS) said that it was willing, but only if every other counterparty would agree to equal concessions on their prices.

In the end, the prices paid for the securities were their fair market value, and because the counterparties retained the collateral they had previously received from AIG, they all received an aggregate amount equal to par value of their securities. In return, the insurance contracts were terminated, and the counterparties transferred the securities to ML III. All counterparties were treated the same.

Since ML III purchased the CDOs, they have generated significant cash flows that have been used to pay down the FRBNY's loan by more than 25 percent. The Federal Reserve and Treasury expect that those cash flows will enable ML III to pay the FRBNY back in full and to generate a substantial profit for U.S. taxpayers. The FRBNY is not only the senior creditor to ML III. It also has a right to two-thirds of any profits from the portfolio, once its loan has been repaid. Moreover, because ML III can hold the CDOs to maturity, it is largely immune from trading prices and liquidity needs, and is therefore in a better position to maximize the value of the portfolio. However, the government's return on ML III should be considered in the context of the overall return on its support for AIG. As discussed in detail below, Treasury currently expects that some of its investments in the company will generate losses.

I strongly believe that the strategy that the Federal Reserve pursued in establishing ML III will generate a better outcome than any alternative. In particular, attempting to coerce concessions risked making the U.S. taxpayer significantly worse off.

Dividends and Election of Directors

The decision of whether to pay dividends rests with AIG's Board of Directors. As is generally the case for preferred shares, dividends on Treasury's preferred shares are payable if, as, and when declared by AIG's Board. However, Treasury is first in line when dividends are declared. AIG cannot pay dividends on any junior securities or common stock unless it first pays full dividends on Treasury's preferred shares for that quarterly period.

As you note in your question, the documents governing Treasury's preferred shares in AIG provide that as of November 3, 2009, Treasury obtained the right to elect up to three directors to AIG's Board. This election will likely occur at the annual meeting (likely to be scheduled in May or June 2010) or at a specially convened meeting. In coordination with the Nominating and Governance Committee of AIG's Board, Treasury has retained Korn/Ferry, an executive search firm, to assist it in identifying qualified candidates to serve as additional directors for AIG. The search has focused on identifying individuals with experience in one or more of the business segments in which AIG operates: insurance, financial services, aircraft leasing and consumer finance. Because of the difficulties in attracting and retaining senior management at AIG, the company's Board has taken on more direct oversight and coordination of the company's businesses than is typical. As a result, identifying potential directors with specific experience in one or more AIG's business segments has been an important element of the search process. We expect the search to be completed shortly and will then finalize the process for the election of the new directors.

Restructuring the Government's Investment To Maximize Taxpayer Returns

In March 2009, AIG announced a plan that could allow it to repay the FRBNY and Treasury investments over time. A central element of that plan is to protect and enhance the value of its key businesses, and to give AIG time to sell several of those businesses, along with other company assets, in an orderly manner. Doing so increases the likelihood that the company will obtain fair value for its businesses and assets. AIG intends to use earnings and proceeds from those sales to repay taxpayers.

To facilitate the orderly completion of the company's divestiture plan, the government simultaneously announced that it would restructure its investments in AIG to enhance the company's capital and liquidity. The government believes that this restructuring, and subsequent steps taken by AIG in consultation with Treasury and the FRBNY, maximize the likelihood that taxpayer funds committed to the company will be repaid.

As part of this restructuring Treasury exchanged its cumulative Series D preferred shares for non-cumulative Series E preferred shares. This exchange was necessary to minimize the adverse impact of future dividend accruals on the company's income, which threatened AIG's "investment grade" credit rating. As I discussed above, maintaining an "investment grade" rating is critical to the ability of AIG's valuable insurance subsidiaries to remain competitive in the marketplace. In addition, a ratings downgrade would generate significant demands for AIG to post collateral on various financial contracts with other institutions. Preserving the company's credit rating was therefore necessary to allow the company to complete an orderly restructuring, maximize returns to taxpayers, and prevent the negative impact of a failure of AIG on the economy.

To account for accrued, but then unpaid dividends on the Series D preferred shares, Treasury received additional Series E preferred shares that have a greater aggregate liquidation preference.

AIG Today and Outlook for Government Investments

Prospects for AIG and its ability to repay taxpayer investments have improved over the past year. The company's insurance subsidiaries are generating positive returns. AIG recently announced that it reached an agreement to sell a large insurance subsidiary, AIA Group Ltd., and that it will use $25 billion in cash from the sale to pay down the Federal Reserve credit facility. The government anticipates that AIG will generate substantial proceeds from the sale of other entities in the near term. Under the terms of the government's support, net proceeds from any sales of AIG's subsidiaries will first be used to repay the government's loans to AIG.

AIG has also made substantial progress in winding down its Financial Products subsidiary, the division where AIG's problems were concentrated. The gross value of the subsidiary's derivatives positions are down by more than half since September of 2008, and it actually generated a profit in the last two quarters for which public information is available.

However, the government is still exposed to substantial risk of loss on its investments in AIG. On the one hand, the Federal Reserve will likely be repaid in full and earn a positive return on its financial support of AIG, including the FRBNY Credit Facility, its loans to Maiden Lane II and Maiden Lane III, and its preferred interests in AIA Aurora LLC and ALICO Holdings LLC. On the other hand, it is unlikely that Treasury will fully recover the direct costs of its capital investments in AIG. In June 2009, the Congressional Budget Office estimated that Treasury would lose $35 billion of its $70 billion total commitment to AIG, including undrawn funds in the equity facility.[3] And the 2011 Budget reflected an expected loss of $48 billion on that commitment.

Today, on the basis of a range of measures, Treasury believes that losses on its investments in AIG are likely to be lower. If market conditions continue to improve and AIG's businesses perform well, the actual recovery on Treasury's preferred stock could be significantly higher. The Congressional Budget Office recently estimated that losses on all Treasury investments in AIG would be $9 billion.[4]

The President has put forward a concrete plan to recover every penny that Treasury committed to stabilize our financial system, including Treasury investments in AIG. The President's proposed Financial Crisis Responsibility Fee would be imposed on large financial institutions to recoup all losses from TARP investments.

Ending "Too-Big-To-Fail" Through Comprehensive Financial Reform

The Administration designed its proposals for financial reform to address the moral hazard challenges posed by large, interconnected financial institutions that the markets perceive as "too-big-to-fail." Specifically, through regulatory and pecuniary mechanisms, the proposals seek to force such institutions to internalize the risks they impose on our financial system and to remove expectations that such firms would receive government support in a crisis.

First, the proposals give federal regulators the authority and responsibility to oversee every financial firm whose failure could pose a threat to financial stability. In the United States, in the buildup to the recent financial crisis, many major financial firms escaped meaningful oversight of their consolidated operations – firms like AIG, Lehman Brothers, and Bear Stearns. Going forward, major financial firms must not be able to shop for their regulator or manipulate their legal form to exploit gaps in the financial regulatory framework. The government must have the authority to subject all financial firms that present outsized risks to the stability of our financial system – regardless of whether they own an insured depository institution and regardless of whether they focus on commercial banking or investment banking, wholesale activities or retail activities – to a common framework of supervision and regulation.

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[3] Congressional Budget Office, The Troubled Asset Relief Program: Report on Transactions Through June 17, 2009, Jun. 2009, 2, available at http://www.cbo.gov/ftpdocs/100xx/doc10056/06-29-TARP.pdf.

[4] Congressional Budget Office, The Budget and Economic Outlook: Fiscal Years 2010-2020, Jan. 2010, 13, available at http://www.cbo.gov/ftpdocs/108xx/doc10871/01-26-Outlook.pdf.

Second, the proposals require stricter supervision and regulation of our major financial firms. These firms would be subject to more stringent capital requirements, tough new liquidity requirements, and constraints on interconnectedness with other major firms and markets. For example, to limit the risks that the failure of any single company could pose to a major financial firm and to the stability of the U.S. financial system, these firms would be subject to single-counterparty concentration limits. Specifically, the Administration's proposals would prohibit each major financial firm from having credit exposure to any single company that exceeds 25 percent of the firm's regulatory capital.

Third, we have proposed to increase the capital, liquidity, and other buffers throughout the financial markets and the critical nodes of our financial infrastructure to make them more resilient to adverse shocks, including the collapse of a major financial firm. The Administration's proposals would require for all banking firms higher levels and quality of capital, a simple mandatory leverage ratio, mitigation of the pro-cyclical elements of the regulatory capital framework, strengthened liquidity requirements, and forward-looking provisioning. The proposals also would provide for greater transparency and substantial risk retention requirements for participants in the securitization process. Further, the proposals require the central clearing of standardized over-the-counter (OTC) derivatives; trading of standardized derivatives on exchanges or electronic trading platforms; reporting of all OTC derivatives to trade repositories; and tough supervision and regulation of derivatives dealers and major market participants.

Fourth, the Administration's proposals would prevent the emergence of firms whose relative size alone could pose a threat to financial stability. The proposals would supplement the existing cap on the ability of a single banking firm to control more than 10 percent of national deposits, with a broader limit on the ability of a single firm to acquire an excessive share of the total liabilities in our financial system or economy. And the Federal Reserve would be required to review and approve any material acquisition by a major financial firm, considering in part the extent to which the acquisition would increase systemic risk to our financial system or the economy.

Fifth, it is important to ensure that the taxpayer-backed safety net for banking firms is not extended to high-risk activities unrelated to the core business of banking. Accordingly, the Administration recently proposed that banking firms be prohibited from engaging in proprietary trading—trading for the banking firm's own account and not in connection with client business—and from owning or sponsoring hedge funds and private equity funds.

Sixth, the Administration's proposals provide the government with the ability to resolve failing major financial institutions in an orderly manner, with losses absorbed not by taxpayers but by equity holders, creditors and, if necessary, other large financial institutions. Use of the authority would be subject to strict governance and control procedures, and any government losses incurred in using the authority would be recouped ex post through a fee on large financial firms, similar to the proposed Financial Crisis Responsibility Fee.
Had the authorities proposed by the Administration existed in 2008, AIG would have posed a much lower risk to the financial system, and the government would have been able to seize

and wind down the company while minimizing the threat it posed to our economy and taxpayers. Supervisors would have had the authority and responsibility to identify and address the dangerous activities carried out by AIG, and would have required AIG to hold adequate capital against all of its exposures, including its derivative exposures. The company would also have been required to hold additional liquid assets to cover potential short-term funding shortfalls. In addition, the company would have been required to report regularly to regulators on the firm's risk concentrations and the extent to which other major financial firms had exposure to it.

Further, the proposed resolution authority would have allowed the government to place the company into receivership, wipe out common stockholders and other providers of regulatory capital to the firm, and immediately terminate and replace management responsible for AIG's imprudent behavior. Because the company would have been required to prepare and regularly update a "rapid resolution plan," the receiver could also have immediately begun the process of separating AIG's insurance businesses from the dangerous financial activities carried our primarily by the parent company, thereby removing a substantial risk to millions of Americans and preserving the value of the insurance subsidiaries. The government could have temporarily frozen AIG's financial contracts and minimized the liquidity drain that threatened the entire company and, consequently, our economy. Haircuts on creditors and counterparties could have been negotiated over time and in an orderly manner, while value in those contracts could have been protected.

I join the American people and Members of Congress in feeling a deep sense of outrage over this crisis, and over the fact that better tools were not available for the government to prevent it and confront it. For that reason, we should be working as hard as possible to make sure we put in place a set of financial reforms that would create a safer, more stable financial system, where opportunity can rise, risk can be mitigated, and where there are stronger protections for consumers, investors, and taxpayers. I look forward to continuing to work with you and the Members of this Committee to accomplish these goals.

4) **The three big credit rating agencies also played a significant part in AIG's demise. They had every incentive to provide AAA ratings to AIG. Do you agree that these rating agencies and that their conflicts of interest with those they are rating should be subject to transparency and oversight? What should be the responsibilities of a systemic risk regulator in such oversight?**

Yes. There is no question that rating agencies should be subject to greater transparency, accountability, and limits on potential conflicts of interest. We have put forward a comprehensive legislative package to address conflicts of interest, regulatory oversight, competition, and transparency in credit rating agencies. For instance, in the Administration's proposed legislation rating agencies would be banned from providing consulting services to issuers that they rate. In addition, rating agencies would be required to disclose the fees paid by each issuer when it releases a rating; the legislation requires greater accountability and stronger authority for each rating agency's compliance officer; and there is a look-back requirement to address the potential revolving door for rating agency analysts to subsequently work at issuers.

The Administration's proposal does not include a single regulatory body that will act as a "systemic risk regulator." We believe that each regulatory agency will have an important role in monitoring for emerging threats through the Financial Services Oversight Council, and for acting under its own authority to promote the stability and sound functioning of the financial system. Under current authority, the SEC is the primary agency with responsibility for regulating and supervising credit rating agencies. The Administration has proposed significant reforms of this oversight, and the SEC has also been active in issuing new roles under existing authority. The Administration also believes that the SEC continues to be the proper location for accountability for credit rating agency regulation and supervision.

5) **There are numerous examples of existing federal regulators failing to do their jobs. The SEC's enforcement division failed to adequately examine Madoff's ponzi scheme, despite repeated reviews. Employees at the Office of Thrift Supervision allowed backdating of contributions when banks may have failed to meet their capital requirements. How would new federal agencies or offices prevent conflicts of interest between regulators and those they are supposed to be regulating? How would you ensure that regulators remain independent?**

Today's federal agencies are expected to promote independence from the institutions they supervise, and any new agency should be held to similar standards. For example, there are strict rules on financial investments by supervisory staff and violations of these rules are expected to be dealt with swiftly. Each supervisory agency has mandatory rotations to reduce the likelihood that examiners will get too close to institutions they supervise and "cooling-off" periods during which senior officials leaving such an agency cannot work for financial institutions. Each agency also has an Inspector General to review its operations and report on supervisory failures, and each is subject to audits and review by the Government Accountability Office (GAO).

Clearly, the recent crisis illustrates that there remains work to be done to improve the accountability of supervisory agencies. Conflicts of interest are not the only threat to supervisory independence and effectiveness. In the years prior to the current crisis, every federal agency failed in some cases to identify weaknesses at institutions it supervised or failed to respond forcefully when such weaknesses had been identified. In retrospect, it appears that supervisors were hesitant, particularly during a strong economy, to challenge firms whose earnings and capital still appeared healthy. In too many instances, supervisors relied upon the judgment of the firms they supervised and did not give sufficient weight to their own analysis of the risks firms were taking or how firms were managing them.

Addressing these failures will require reforms, along the lines that Treasury has proposed, to address opportunities for regulatory arbitrage, strengthen consolidated supervision of financial holding companies, create a council to address risks to the financial system has a whole, and subject the largest, most interconnected financial firms to tougher regulatory standards and supervisory oversight.

6) **On November 5th I asked why the Special Inspector General for TARP noted that the Treasury only partially implemented the recommendation that "Treasury requires all TARP recipients to report on the actual use of TARP funds." In response you indicated that you intend to issue expanded reports that you believe will adequately address the transparency issues raised by SIGTARP. Secretary Geithner—can you please tell me the position of the SIGTARP with regard to the proposal set forth in your November 24, 2009 letter to me? Madam Chairwoman, I would also like to put both my November 5th and Secretary Geithner's November 24th letters in the record.** ***(Letters attached)***

In response to this recommendation, Treasury collaborated with the Special Inspector General for the Troubled Asset Relief Program (SIGTARP) to create the *Use of Funds Survey*. The Survey will analyze measures that financial institutions took, or were able to avoid, based on investments received under the Capital Purchase Program (CPP). Additionally, SIGTARP confirmed in its December 10, 2009 audit report that Treasury's planned response, when implemented, will constitute an adoption of SIGTARP's recommendation.

The scope of the *Use of Funds Survey* will encompass a broad understanding of how each financial institution has employed the capital infusion of CPP funds from the initial date that funds were received until the end of the third quarter of 2009. The electronic survey will instruct respondents to provide qualitative information on all specific uses of CPP capital, refer to quantitative evidence as necessary and appropriate, and maintain all supporting documentation used to complete the survey.

Treasury will post answers collected from each individual CPP recipient from the *Use of Funds Survey*, and will publish the names of any financial institutions that fail to submit a Survey response to Treasury on the *Financial Stability* web site at *www.FinancialStability.gov*. A summary of quantitative data on the categories provided in the overall Quarterly CPP Report for each individual CPP recipient will also be posted.

SIGTARP stated in its December 10, 2009 audit report, "Additional Insight on Use of Troubled Asset Relief Program Funds that Treasury's plan to publish responses on an institution-by-institution basis will provide meaningful information to the public on how the CPP program has met its goals."

Senate Committee on Agriculture, Nutrition & Forestry
Over-the-Counter Derivatives and Addressing Systemic Risk
Questions for the Record
Ms. Blythe Masters
December 2, 2009

Chairman Blanche L. Lincoln

1) **Would you support setting up a division between the research and trading arms of Swap Dealers and Major Swap Participants?**

   Yes. At JPMorgan, the research function and the trading function already are organizationally separate: all research people report up to a Global Head of Research who reports directly to the Chief Executive Officer of the Investment Bank, and we believe that division is appropriate.

2) **Should we require clearinghouses and counterparties segregate customer funds such as margin and collateral? How important is segregation of initial and variation margin to mitigating counterparty and systemic risk?**

   This question needs to be answered separately with respect to clearinghouses and counterparties as well as initial and variation margin. Clearinghouses by their nature have rules which require segregation of customer margin, and we believe this issue is currently covered adequately by the Core Principles applicable to Derivatives Clearing Organizations in the form recently passed by the House of Representatives, which requires DCOs to "have standards and procedures designed to protect and ensure the safety of member and participant funds" and to "hold member and participant funds and assets in a manner whereby risk of loss or delay in the access to the organization to the assets and funds is minimized".

   With respect to counterparties, we think it is important to distinguish between initial and variation margin. It is appropriate to require segregation of initial margin, because initial margin is held above and beyond economic exposure, so the insolvency of an entity (such as Lehman Brothers) holding initial margin exposes the initial margin provider to risk of loss. In contrast, variation margin is posted to cover only actual economic exposure, so the provider of variation margin is always protected because upon a bankruptcy of the margin holder he can exercise his setoff rights.

Senator Chuck Grassley

1) **You stated in your testimony that entities that are not dealers or major swap participants should be exempt from the clearing mandate, because the vast majority of those entities would be commercial end users. However, you didn't say they would "all" be end users. Can you describe to me who you believe might also fall outside the category of dealers or major swap participants? Do you believe it's a better approach to include anyone who is a dealer or major swap participant OR set specific exemptions for end users?**

   To clarify, JPMorgan believes that entities that are not dealers or major swap participants should be exempt from the clearing mandate because they do not pose systemic risk, not because they are commercial end-users. We believe the vast majority of those entities will in fact be commercial end-users, but it is the nature and size of their derivatives activity, not the nature of their organization, that drives the exemption. Any entity that does not pose systemic risk should fall outside the category of dealer or major swap participant. We believe the definitions of "dealer" and "major swap participant" in the bill recently passed by the House of Representatives focus appropriately on the critical determinants of systemic risk. We believe this approach is to be preferred over specific exemptions for end-users because by their nature, specific exemptions (e.g., on number of transactions, aggregate notional amount or exposure or some other measure) are inflexible and can be gamed. A principles-based approach focusing on systemic risk is more flexible and responsive to market and entity-specific developments.

2) **Your testimony reflects that you don't believe it's possible to define the characteristics of a standardized transaction. Chairman Gensler has stated as recently as two weeks ago in our hearing, that if a transaction can be cleared and accepted by a clearinghouse, it should be considered standardized. Do you believe this definition is problematic? Why or why not?**

   This definition is problematic because it only looks at one aspect of the clearinghouse, its acceptance of a transaction for clearing, without considering all the other elements of the clearinghouse's structure: risk measurement models; operational infrastructure; guarantee fund and overall capital strength. In essence, this definition does not examine whether the particular clearinghouse is in fact a central counterparty with which it is safe to transact. That safety and soundness concern should be paramount. Instead, making a single clearinghouse's ability to clear a trade the sole determinant of the clearing mandate will create a rush to be the first clearinghouse to clear, as that clearinghouse will have a monopoly over the clearing of a transaction that has to be cleared, creating attractive profit opportunities with the possibility of increased systemic risk that market participants can't do anything about (because they have to use that clearinghouse for that product). We believe a better approach to dealing with the fundamental issue of systemic risk is to require that a certain percentage of exposures be cleared, and to leave it to market participants to determine which clearinghouse to use.

Additional Material

We would like to take this opportunity to correct the record on a point raised by Terrence Duffy, Chairman of the CME. In the Q&A portion of the hearing, Mr. Duffy indicated that mandatory exchange trading would not harm liquidity or increase volatility in derivatives markets because trade execution is no longer dominated by specialists but rather by electronic trading platforms that could accommodate orders without these unintended consequences. He is incorrect: the key element of exchange trading, common to both of these execution venues, is a central limit order book (CLOB). Regardless of who accomplishes the execution of the trade, the market structure dictated by a CLOB in the derivatives markets will inevitably impair liquidity and potentially increase volatility. Unlike securities or very actively traded futures, OTC derivatives are not sufficiently standardized and liquid to allow for buyers and sellers to automatically match their orders through a CLOB; rather, this market is characterized by large positions, low volumes and long maturities. As a result of mandatory exchange trading requirement, dealers will have to post bids/offers on an exchange's CLOB that makes these larger transactions known to other market participants who will trade, in anticipation, against these positions. The result is analogous to negotiating with a party whilst at the same time divulging one's key terms to that party. This would render the transaction uneconomic, forcing dealers, who have a fiduciary obligation to shareholders, to forego the activity. Fungibility (extreme standardization) and deep liquidity is what makes a CLOB useful in the equities markets, and the lack of these characteristics is exactly why it will not work in all derivatives markets.

It is useful to consider the effect such a trading requirement would have on market participants. For dealers, it will stifle their ability to hedge risk on their own behalf. For corporate end users, dealers' inability to take on and hedge risk makes them less capable of providing risk management transactions that companies need to hedge risks inherent in their business operations. And in fact, any transactions that dealers provide to corporate end users will be more expensive, though it is difficult to know how much more expensive because there is no exchange trading requirement for any other asset class including equities, corporate bonds and US Treasuries, which is the largest OTC market globally.

Senate Committee on Agriculture, Nutrition & Forestry
Over-the-Counter Derivatives and Addressing Systemic Risk
Questions for the Record
Mr. Jiro Okochi
December 2, 2009

Chairman Blanche L. Lincoln

1) If Congress were to craft an end-user exemption, what additional requirements, if any, should be developed to ensure that we do not simply create another regulatory loophole?

Crafting an end-user exemption would require consideration of the options for narrowing exemptions. These could be to either broaden the definition of Swap Dealer and/or Major Swap Participant (MSP) to capture the class of users that may be of concern or to specifically define a "Swap End-User" who utilizes OTC derivatives strictly for hedging, as outlined in my testimony of December 2nd.

The Peterson/Frank Amendment Appears to Close Exemptions

The current legislative approach limits the number of defined classes of users to two main categories, Swap Dealers and Major Swap Participants, leaving a remaining broad class of "undefined" users of derivatives.

The Peterson/Frank amendment essentially broadens the definition of the Swap Dealer and MSP probably to the point of capturing foreseeable loopholes that could ultimately lead to systemic risk.

The table below summarizes some of the different classes of users of OTC derivatives against some of the definitions. The words in **bold** signify where legislation prevents exemptions:

Type of User	Example	Market Making*	Trading for profit	Risk Management	Net Ctpy Credit Exposure	Hedging Commercial Risk	Balance Sheet Hedging	Qualify for proposed exemptions
Derivative Trading Arm	AIGFP	**Yes**	Yes	Yes	**Yes**	Yes	Yes	**No**
Government Sponsored Entity (GSEs)	Fannie Mae, Freddie Mac	No	Yes	Yes	**Yes**	Yes	Yes	**No**
Commodity Trader	Enron	**Yes** (Some Activity)	Yes	Yes	**Yes**	Yes	Yes	**No**
Large Hedge Fund	LTCM	No	Yes	Yes	**Yes**	No	No	**No**
Target End-User	Boeing	No	No	Yes	No	Yes	Yes	Yes

The Peterson/Frank amendment removes the significant market making activity requirement and requires the CFTC to make *de minimus* determinations regarding any non-financial corporation that engages in making prices for agricultural, energy or other commodities, like an Enron or a Metallgesellschaft AG, thereby eliminating one important loophole. The amendment also clarifies that a MSP could be a non-dealer with outstanding swap positions that could create substantial net counterparty risk and significant credit losses. This definition could essentially capture the very active users (GSEs) or those that take large leveraged bets, like Hedge Funds.

The Case for Defining Swap End-User

Despite the benefits of the expansive definitions resulting from the Peterson/Frank amendments described above, there still may be issues. The interpretation of what *substantial* means when referring to a substantial net position or substantial net counterparty exposure may drag in some companies unintentionally. It may also be beneficial to clearly define who is allowed exemptions, rather than who is not, as the public may not appreciate the subtleties of the amendments and may assume that the exemptions are too broad.

Also, as you can see in the previous table, the targeted end-users do not enter into derivatives for speculative purposes, i.e. trading for profit, whereas some of the other groups do. Although substantial net positions or large net counterparty risk terminology may capture speculators, trading for profit could be a clearer way to define MSPs .

Without a Swap End-User definition, the Commissions may also be saddled with making case-by-case determinations of who should be entitled to the proposed end-user exemptions, which can be challenging and costly. It may be easier to regulate if those who feel they are deserving of the exemptions have to declare that they are a Swap End-User, rather than the Commissions being responsible for ferreting out those who are avoiding being classified as a Swap Dealer or Major Swap Participant (those who are not eligible for the exemptions).

The Administration proposal and the Dodd Bill utilize US GAAP to help define bona-fide commercial hedging activities but have faced criticism by corporations whose hedge programs do not qualify (some hedging strategies can fail the stringent FAS 133 effectiveness testing) and by those who do not bother to comply because the reporting requirements can be too comprehensive to do manually. There has also been concern expressed about potential future changes to FAS 133, which would be outside the control of legislation, although under the purview of the SEC. In my testimony, I suggest using risk management policies as an alternative, where at least public companies have to disclose their risk management approach and disclose whether or not they are using OTC derivatives.

As there are many different approaches to disclose and define how derivatives are being used for hedging purposes, companies could declare that they are Swap End-Users as follows:

A company can declare that it is a Swap End-User by complying with the following:

- It is not a Swap Dealer or Major Swap Participant

AND

- Its hedges are effective under US GAAP

OR

- It states in its annual report and 10Q Quarterly statements that it does not use derivatives for speculative purposes, and each derivative hedge is designated to a specific balance sheet or commercial risk.

- For private companies, a documented and audited risk management policy could also be used stating to the effect that OTC derivatives are not used for speculation and only used to mitigate balance sheet and commercial risk.

Senate Committee on Agriculture, Nutrition & Forestry
Over-the-Counter Derivatives and Addressing Systemic Risk
Questions for the Record
Mr. Johnathan Short
December 2, 2009

Senator Chuck Grassley

1) Your testimony includes support for a trade repository that would assist regulators. Chairman Gensler voiced his support for this same concept in his testimony before this committee two weeks ago. Can you expand on who and how this repository should be administered? How will this be kept independent from market players?

Regulators, both domestic and international, have called for the establishment of a repository to collect data on OTC trades not submitted to a clearinghouse. In addition, nearly every financial reform proposal has called for the establishment of trade repository. The reason for the interest in trade repository is that, if properly done, a trade repository can give regulators visibility into the inherently opaque uncleared OTC markets. This visibility will allow regulators to see the bilateral exposure among firms and take action if a firm takes on risk that could have a systemic effect on the market.

Current proposals would allow for multiple repositories. This solution makes sense as a competitive marketplace would ensure an efficient and effective trade repository. A trade repository should be independent, should have expertise in the asset class that it serves, and should equally accommodate large market participants as well as smaller firms. The IntercontinentalExchange, Inc. (ICE) has developed a solution for the energy and commodities asset classes. Over eight years ago, ICE founded the ICE eConfirm Service ("ICE eConfirm"), an internet-based electronic trade confirmation service that works by matching a participant's trade data to its counterparties' and/or brokers' data to execute legally binding confirmations and identify discrepancies. Prior to eConfirm, participants in the energy and commodities markets relied on a manual process, including the faxing of paper trade records to confirm trades between one another. Trade mismatches or errors could take days – if not weeks – to discover and remedy, resulting in unnecessary and unknown risks. Now, users of the ICE eConfirm electronically confirm their energy and commodities trades online regardless of execution method - whether completed through voice brokers, online platforms, or directly between counterparties.

ICE eConfirm has over 200 participants globally, including most major energy and commodities market participants. The service processes financial and physical transactions in the natural gas, electricity, oil and refined products, natural gas liquids, metals, coal, and agriculture markets. More than 4 million commodity trades having a total notional value of $7 trillion are stored in ICE eConfirm and over 25,000 new trades are added each week. As a result, according to some estimates, ICE eConfirm has 80%

of OTC energy and commodities trades in its system.[1] The ICE eConfirm staff work closely with industry participants on major industry standards and protocols, thus making it seamless for the repository to accept trades in common formats. ICE eConfirm is a flexible and scalable system which allows for the addition of new trade types on an immediate basis.

As reporting to a trade repository would be mandatory under many of the legislative proposals, governance of the trade repository is of utmost importance. ICE eConfirm currently requires a vote of a super majority of its users to change the procedures governing the service. This gives all market participants, large or small, the ability to have a voice regarding the operation of the service. In addition, ICE, eConfirm's corporate parent, is a publicly traded company with an independent board of directors. This gives ICE eConfirm participants the confidence that their data will be kept confidential and not used for competitive purposes.

The trade repository should provide useful data to regulators about the OTC energy and commodities markets. As the operator of three regulated exchanges in the U.S., Canada, and Europe and five derivatives clearinghouses (including the first clearinghouse to clear credit default swaps), ICE has a history of working closely with regulators. ICE eConfirm could provide reports detailing OTC exposure for market participants in a form that is useful for regulators, such as a large trader report. This would allow regulators to respond quickly to any issues in the energy and commodities markets.

Again, thank you for the opportunity to testify at the December 2, 2009 hearing. If you have any additional questions, please contact me at 770.738.2120.

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[1] Letter from the Commodities Major Dealers to Theodore Lubke, Federal Reserve Bank of New York (December 7, 2009) (attached)

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