

HEARING TO REVIEW THE ROLE OF CREDIT DERIVATIVES IN THE U.S. ECONOMY

HEARINGS BEFORE THE COMMITTEE ON AGRICULTURE HOUSE OF REPRESENTATIVES ONE HUNDRED TENTH CONGRESS SECOND SESSION

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HEARING TO REVIEW THE ROLE OF CREDIT DERIVATIVES IN THE U.S. ECONOMY

WEDNESDAY, OCTOBER 15, 2008

HOUSE OF REPRESENTATIVES,
COMMITTEE ON AGRICULTURE,
Washington, D.C.

The Committee met, pursuant to call, at 11:05 a.m., in Room 1300, Longworth House Office Building, Hon. Collin C. Peterson [Chairman of the Committee] presiding.

Members present: Representatives Peterson, Holden, Etheridge, Marshall, Ellsworth, Space, Walz, Pomeroy, and Goodlatte.

Staff present: Adam Durand, John Konya, Scott Kuschmider, Rob Larew, Merrick Munday, Clark Ogilvie, John Riley, Sharon Rusnak, April Slayton, Debbie Smith, Bryan Dierlam, Tamara Hinton, Kevin Kramp, and Bill O'Conner.

OPENING STATEMENT OF HON. COLLIN C. PETERSON, A REPRESENTATIVE IN CONGRESS FROM MINNESOTA

The CHAIRMAN. The Committee will come to order. I want to, first of all, thank all the witnesses that have agreed to be with us today, and also the Members for coming back from their districts to be involved in this. This is an important issue. I am going to just talk briefly about where I am coming from.

What I am interested in is getting a clearing situation set up for these credit default swaps. As I understand it, there are discussions going on between the different parties; the SEC, the CFTC, the Fed, different groups that are working on this. They would come under different regulation. There are different proposals out there. Apparently, the different parties are discussing this. We need to get these things in a position where they are being able to be cleared, and by bringing into it some kind of regulated situation we are going to have some kind of capital requirements, which are very much needed.

I believe that a lot of this financial problem and the reason that people don't trust each other is, to some extent, because of these swaps, because people don't know what is out there. They have been put off by what happened with AIG, Lehman, and Bear Stearns, and so forth. And so I think this is a big part of the problem, and the sooner that we can get these clearing mechanisms set up, the better we are going to be.

We have no idea what the \$60 trillion is. Well, we have some idea, but not much. From what I can tell, if you were able to clear all this stuff out, it probably wouldn't be \$60 trillion. It might be \$15 trillion. But that is the problem. Everybody is afraid to borrow

because there might be something out there that they don't know about, and within 3 days you can see that your money could be gone. We saw it with Farmer Mac. They had investments and all of a sudden they had a capital problem.

So, this is a big part of this financial situation that we are in. What I want to accomplish out of this hearing is to try to figure out, or get some sense of how quick we can get this clearing mechanism established, get some idea of what is going on between the different parties.

We have Mr. Lukken here. We appreciate him being here. The gentleman from the SEC, and people from the industry. So this is a big problem. We have a big responsibility here to try to get this right. I think that this Committee is more of an impartial panel, if you will, because we are not as close to Wall Street and all of these other folks that got us into this mess. We can take a more open-minded view of what the solution is going to be than maybe some other folks around this town.

So I appreciate you all being here. I recognize the Ranking Member, and appreciate him coming back from his district and rearranging his schedule to be with us. We will move on to the panel.

**OPENING STATEMENT OF HON. BOB GOODLATTE, A
REPRESENTATIVE IN CONGRESS FROM VIRGINIA**

Mr. GOODLATTE. Well, thank you, Mr. Chairman. I want to thank you for calling today's hearing on the role of credit derivatives in the U.S. economy. This is a critical time in our nation's history when there is widespread doubt about the stability of our financial system. This doubt is the result of serious market failures where major institutions like Fannie Mae, Freddie Mac, Lehman Brothers, Washington Mutual, and AIG have either defaulted, filed bankruptcy or experienced extreme financial distress.

We should consider today's hearing as one part of an aggressive fact-finding mission to determine the role credit default swaps play in the marketplace and if they contributed to the current economic crisis. The primary question for us today is: Do credit default swaps serve a valid purpose in the marketplace to manage risk and allow economic growth opportunities for business expansion? Or, do credit default swaps put businesses, and therefore, the entire economy in a precarious position because they encourage risky behavior and over-leveraging of assets? Is the current trouble with credit default swaps just a symptom of a slowing economy or did their unregulated existence help create the malaise? Do these instruments require more oversight or is the current regulatory system adequate to monitor these transactions? And if transactions in the credit default swaps require additional regulations, what should those regulations be, what should those regulations require, and who would be responsible for enforcement?

These are but a few questions that should be addressed to ensure the marketplace works.

Today, we will hear testimony from those who recently have been exploring those questions and examining this kind of financial activity. As we move forward, it is important that we protect the sanctity of the marketplace while at the same time protect participants and limit any threat of systemic risk.

I look forward to hearing your comments. Thank you, Mr. Chairman.

[The prepared statement of Mr. Goodlatte follows:]

PREPARED STATEMENT OF HON. BOB GOODLATTE, A REPRESENTATIVE IN CONGRESS
FROM VIRGINIA

I would like to thank Chairman Peterson for calling today's hearing on the role of credit derivatives in the U.S. economy.

This is a critical time in our nation's history when there is widespread doubt about the stability of our financial system. This doubt is the result of serious market failures where major institutions like Fannie Mae, Freddie Mac, Lehman Brothers, Washington Mutual, and AIG have either defaulted, filed bankruptcy, or experienced extreme financial distress.

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The primary question for us today is do credit default swaps serve a valid purpose in the marketplace to manage risk and allow economic growth opportunities for business expansion? Or, do credit default swaps put businesses, and therefore, the entire economy, in a precarious position because they encourage risky behavior and over-leveraging of assets.

Is the current trouble with credit default swaps just a symptom of a slowing economy, or did their unregulated existence help create the malaise? Do these instruments require more oversight, or is the current regulatory system adequate to monitor these transactions?

And, if transactions in the credit default swaps require additional regulations, what should those regulations be? What should those regulations require, and who would be responsible for enforcement? These are but a few questions that should be addressed to ensure the marketplace works.

Today, we will hear testimony from those who, recently, have been exploring those questions and examining this kind of financial activity. As we move forward, it is important that we protect the sanctity of the marketplace, while at the same time, protect participants and limit any threat of systemic risk.

I look forward to hearing your comments.

The CHAIRMAN. I thank the gentleman from Virginia. I now recognize the gentleman from North Carolina, the Chairman of the Subcommittee that deals with this, Mr. Etheridge.

**OPENING STATEMENT OF HON. BOB ETHERIDGE, A
REPRESENTATIVE IN CONGRESS FROM NORTH CAROLINA**

Mr. ETHERIDGE. Mr. Chairman, thank you. Let me thank you for holding this hearing today. It may be one of the more important ones we have held all year, other than the passage of the farm bill.

I, like many of you here today, am here with mixed emotions. I am glad we are holding the hearing, though I wish our country were not experiencing the economic turmoil which makes this hearing necessary.

My constituents have been asking me, "How did we get in this financial mess?" They have heard and read some of my colleagues on the Republican side theorizing that they blame the Democrats. They have read that Democrats, theorizing, are blaming the Republicans. I think the truth is there is a lot of blame to go around, and a lot of people share some responsibility in this mess.

The regulatory regime in operation today through all parts of our financial system is a construct that was developed years ago with bipartisan support, through bipartisan legislation. Today, we are looking specifically at over-the-counter credit derivatives, particularly credit default swaps, which constitute the vast majority of these derivatives. Currently, there is no specific regulation of these

financial instruments, as the Chairman has talked about. That wasn't by accident, as he has also indicated. It was by design.

This Committee has jurisdiction over the Commodity Exchange Act. In 2000, Congress passed legislation, the Commodity Futures Modernization Act, which expressly stated that the CEA would not apply to these derivatives. If the lack of oversight of these derivatives and if the lack of these instruments is the source of our financial difficulty, then both parties have some responsibility.

We were told by the financial community and others that we needed to modernize our regulatory structure to compete with financial institutions in Europe and elsewhere. We were assured that the parties to these financial instruments were responsible and sophisticated enough to engage in these transactions without the need for heavy government regulation and oversight. To some extent, they were right, as they were talking about the major players who did not need the government to protect them from each other in the marketplace as opposed to small retail customers who need greater protection from fraud and manipulation.

Like trusting parents, we let the big boys and girls go out in the financial playground, thinking we didn't have to watch over them to keep them from hurting themselves. Little did we know that they would end up trashing the playground instead. We never guessed that the major players could grow up to be so big, that the collapse of one of them would bring down the financial system. Now we have a mess to clean up. Today's hearing is the beginning of our role in that process.

Mr. Chairman, I applaud you for holding this hearing now as opposed to waiting for the next Congress, because I think this is important enough we have to get moving. Earlier this year, the House passed the Commodity Market Transparency and Accountability Act with wide bipartisan margins. It provided for dramatic changes in the regulation of the physical commodity derivatives. It looks like we must add financial commodities to the reform effort. I look forward to working with you and this full Committee in that effort.

Thank you.

[The prepared statement of Mr. Etheridge follows:]

PREPARED STATEMENT OF HON. BOB ETHERIDGE, A REPRESENTATIVE IN CONGRESS
FROM NORTH CAROLINA

Thank you Mr. Chairman. I am here today with mixed emotions. I am glad we are holding this hearing, though I wish our country was not experiencing the economic turmoil which makes this hearing necessary.

My constituents have been asking me, how did we get into this financial mess? They have heard and read Republican theories that place the blame on Democrats and likewise Democratic theories that blame Republicans.

The truth is that everyone, Republicans and Democrats alike, have a share in the responsibility for this mess.

The regulatory regime in operation today for all parts of our financial system is a construct that was developed years ago with bipartisan support through bipartisan legislation.

Today, we are looking specifically at over-the-counter credit derivatives, particularly credit default swaps, which constitute the vast majority of these derivatives.

Currently, there is no significant regulation of these financial instruments. That wasn't by accident, but by design.

This Committee has jurisdiction over the Commodity Exchange Act (CEA).

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It provided for dramatic changes in the regulation of physical commodity derivatives.

It looks like we must add financial commodities to the reform effort, and I look forward to working with you on that effort.

The CHAIRMAN. I thank the gentleman, and thank him for his leadership on the Subcommittee. All Members' statements will be made a part of the record, without objection.

We would now like to welcome our witnesses. I would like to remind you that your full testimony will be made part of the record. We want to get to questions so we would ask you to try to—we won't hold you exactly to the 5 minutes, but try to summarize your statements.

We very much appreciate you being with us. First, we have Hon. Walter Lukken, the Acting Chairman of the CFTC, and Erik Sirri, the Director of Division of Trading and Markets of the SEC with us. So, gentlemen, welcome.

Mr. Lukken, you are up first. Welcome to the Committee.

STATEMENT OF THE HON. WALTER LUKKEN, ACTING CHAIRMAN, COMMODITY FUTURES TRADING COMMISSION, WASHINGTON, D.C.

Mr. LUKKEN. Thank you, Mr. Chairman. Good morning, Ranking Member Goodlatte and other distinguished Members of the Committee. Thank you for the invitation here today to discuss credit default swaps.

The current financial crisis is requiring policymakers to rethink the existing approach to market regulation and oversight. Many observers have singled out the \$58 trillion credit default swap market as needing greater scrutiny and transparency. These over-the-counter swap transactions are largely unregulated and may have exacerbated the counterparty and systematic risk in the financial system during this crisis.

With respect to the CFTC, the Commodity Exchange Act excludes most over-the-counter financial derivatives, including credit default swaps, from its regulatory and enforcement jurisdiction. But if we are to avoid repeating the mistakes of the past, we must strive to increase the transparency of these transactions and find

ways to mitigate the systemic risk created by firms that offer and hold these off-exchange instruments. While wholesale regulatory reform will require careful consideration, centralized clearing is one immediate and proven response that will help mitigate the current crisis.

Clearinghouses have been functioning for many years as a means for mitigating the risks associated with exchange-traded financial products. Whether securities, options, or futures, centralized clearinghouses ensure that every buyer has a guaranteed seller and every seller has a guaranteed buyer, thus minimizing the risk that one counterparty's default will cause a systemic ripple through the markets. The clearinghouse is able to take on this role because it is backed by the collective funds of its clearing members.

This clearing guarantee goes to the root of the problems we are confronting today, the constriction of credit due to the fear of default. Indeed, for futures contracts, the standardized on-exchange predecessor of OTC derivatives, clearing has worked extraordinarily well in managing credit risk. For regulated futures exchanges, the clearing and settlement mechanism serves to lessen the likelihood that large losses by a trader will cause a contagion event. At least twice-daily, futures clearinghouses collect payments from traders with losing positions and credit traders with profitable positions. This twice-daily mark-to-market prevents the build-up of significant losses and effectively wipes clean the credit risk inherent in the system. Importantly, no U.S. futures clearinghouse has ever defaulted on its guarantee.

Just as significant, the clearing process provides transparency to regulators. When transactions are cleared, government and exchange regulators receive daily trading and pricing information, which helps them police for manipulation and fraud and to uphold the integrity of the market.

Clearing has been proven to work for OTC derivatives. After Enron's demise in 2001, the OTC energy derivatives markets locked up because many energy companies lacked the requisite financial standing to back their off-exchange trades. In response, the New York Mercantile Exchange sought and received approval from the CFTC in 2002 to clear OTC energy products for the first time. Today, a significant number of OTC energy derivatives are cleared through regulated clearinghouses, which has reduced systemic risk and allowed regulators a greater window into this marketplace. Clearing for OTC products now extends beyond energy products to financial products such as forward rate agreements and foreign currency swaps.

Under existing law, any derivatives clearing organization that is registered with the CFTC may clear OTC derivatives without further registration or subjecting itself to any additional regulatory requirements. Pursuant to the CEA, the CFTC regulates DCOs and has the statutory mandate to ensure the financial integrity of transactions subject to the CEA, and to safeguard against systemic risk. The CFTC relies on the 14 core principles for DCOs set forth by Congress in the CEA as a means for evaluating whether DCOs comply with U.S. law.

The CFTC, in conjunction with other financial regulators, will continue to seek ways to provide clearing solutions for OTC deriva-

tives. Last month, in its swap report to Congress, the CFTC recommended the further use of clearing for OTC derivatives. There are several private sector clearing initiatives currently being considered by Federal regulators. It is imperative that regulators work cooperatively and expeditiously to conduct their due diligence and allow appropriate programs to begin operations promptly. The CFTC will continue to closely coordinate with the Federal Reserve and SEC to further this important policy objective.

While the implementation of centralized clearing for OTC products is a near-term solution that does not require legislative changes, broader reform of the OTC derivatives market is also needed and will require decisive Congressional action. As Congress embarks on reform in the coming months, there are several guiding objectives that should be pursued by legislators to improve the oversight and prevent a similar economic disturbance in the future.

First and foremost, regulatory reform should seek to improve the transparency of these OTC markets, particularly when their size reaches a critical mass where they play a public pricing role and their failure might cause a systemic event. Clearly, the CDS market has met this criteria. Enhanced transparency through reporting or other means would enable regulators to properly police these markets for misconduct and the concentration of risk. In pursuing this objective, Congress might look to the model adopted in the farm bill by this Committee for the OTC energy swaps market, which triggers additional oversight and transparency when a product begins to serve a significant price discovery function.

Second, regulatory reform should incentivize and possibly even mandate centralized clearing and settlement for certain OTC derivatives. As mentioned, clearing brings enhanced transparency, standardization, and risk management to these products at a time when it is most needed.

Third, regulatory reform should revisit the amount of risk-based capital held by dealer firms and large participants in these OTC markets to better account for the interdependent counterparty risk that now seems so evident and to prevent these products from being held off balance sheet in unregulated affiliates. As clearing begins for these products and trading data improves, models for assessing risk will also progress, as will the accuracy of the capital charges assigned to these firms.

Fourth, regulatory reform should provide for clear enforcement authority over these products to police against fraud and manipulation. The CFTC is currently excluded by statute from bringing enforcement cases against OTC financial derivatives. Congress should rectify this by providing clear enforcement powers regarding OTC products to the CFTC and other appropriate regulators, such as the SEC.

Last, regulatory reform of OTC products should be globally coordinated and non-exclusionary. As this financial crisis has shown, the world financial system is highly intertwined, leaving no country's banking system unscathed. We have also learned that one country's actions to stem the crisis cannot be effective without close cooperation among all nations. As this crisis begins to wane and we turn to pursue long-term adjustments to the global regulatory structure, world legislators must work in close concert with each

other to ensure that steps taken by one nation to improve oversight are not exploited by others in the global financial community. This also means that domestic regulators should work in tandem and not engage in the unproductive exercise of defending jurisdictional lines at a time when a comprehensive and coordinated response by regulators is most needed. The entire regulatory community must continue to unite in seeking a sensible and comprehensive solution to the global financial crisis, which may require many of us to rethink our regulatory approaches and jurisdictional biases. The CFTC is committed to playing a constructive role in seeking a cooperative regulatory solution that improves the global regulatory structure for financial markets.

Mr. Chairman, I appreciate your leadership on the critical issue we are talking about today, and I look forward to participating fully in the Congressional and regulatory efforts to implement policies and practices that best serve the public interest. I look forward to your questions.

[The prepared statement of Mr. Lukken follows:]

PREPARED STATEMENT OF HON. WALTER LUKKEN, ACTING CHAIRMAN, COMMODITY FUTURES TRADING COMMISSION, WASHINGTON, D.C.

Chairman Peterson, Ranking Member Goodlatte, and other distinguished Members of the Committee, I am pleased to have this opportunity to appear today to discuss risk management for credit default swaps (CDS). The Commodity Futures Trading Commission (CFTC) welcomes the opportunity to discuss over-the-counter (OTC) derivatives and the benefits derived from clearing such products.

OTC Swaps and Regulated Futures Transactions

From the beginning of U.S. futures trading in the mid-1800s until recently, regulated futures exchanges offered the primary means by which commercial entities could manage their physical market price risks. During the 1980s, however, financial institutions began to develop non-exchange-traded derivatives contracts that offered similar risk management benefits. In 1981, the World Bank and IBM entered into what has become known as a currency swap. The swap essentially involved a loan of Swiss francs by IBM to the World Bank and the loan of U.S. dollars by the World Bank to IBM. The motivation for the transaction was the ability of each party to borrow the funds they were loaning more cheaply than the counterparty, thus reducing overall funding costs for both parties. This structure of swapping cash flows ultimately served as the template for swaps on any number of financial assets and commodities.

The development of the OTC swap industry is related to the exchange-traded futures and options industry in that a swap agreement can function as a competitor or complement to futures and option contracts. Market participants often use swap agreements because they offer the ability to customize contracts to match particular hedging or price exposure needs. Conversely, futures markets typically involve standardized contracts that, while often traded in very liquid markets, may not precisely meet the needs of a particular hedger or speculator. The OTC swap market has grown significantly because, for many financial entities, the OTC derivatives products offered by swap dealers have distinct advantages relative to futures contracts.

Yet, these OTC swap transactions are largely unregulated. With respect to the CFTC, the Commodity Exchange Act (CEA) excludes most OTC financial derivatives, including CDS, from its regulatory and enforcement jurisdiction.¹

¹ See, e.g., CEA, 7 U.S.C. §§ 2(d) and 2(g). Section 2(d) excludes from CEA coverage transactions involving an “excluded commodity” (a broad range of interest rate, currency, credit, equity, weather, and other derivatives) that are not executed on a trading facility and are entered into solely by eligible contract participants. Section 2(g) excludes from CFTC regulation transactions involving a commodity other than an agricultural commodity that are not executed on a trading facility if they are entered into solely by eligible contract participants and are subject to individual negotiation.

Section 2(d)(2) also excludes transactions involving an excluded commodity that are executed through an electronic trading facility by eligible contract participants trading on a principal-to-

Credit Default Swaps

The current financial crisis is requiring policymakers to rethink the existing approach to market regulation and oversight. Many observers have singled out OTC credit derivatives, including CDS, as needing greater scrutiny and transparency.

OTC credit derivatives emerged in the mid-1990s as a means for Wall Street financial institutions to buy insurance against defaults on corporate obligations. Specifically, OTC credit derivatives are bilateral off-exchange instruments that allow one party (the protection buyer) to transfer credit-related risks associated with the actual or synthetic ownership of a “reference asset” to another party (the protection seller) for a price.² The reference asset associated with an OTC credit derivative may be a corporate debt obligation (such as a bond or a bank loan), a sovereign debt obligation, an asset-backed security (such as commercial mortgage-backed securities), or any other obligation or debt. Credit derivatives transfer the credit risks attendant to the actual or synthetic ownership of a reference debt obligation.

The most common credit derivative product is the CDS. Under a CDS, the protection seller promises to compensate the protection buyer for the economic loss associated with a material decline in the value of a reference asset that is triggered by the occurrence of a pre-determined “credit event,” such as a filing for bankruptcy or default on a debt payment by the issuer of the reference asset. In some CDS contracts, the protection buyer pays the protection seller a “periodic premium” for the protection.³ If a triggering credit event occurs, then the protection buyer would receive a full lump-sum payment that is some fraction of the par value of the reference asset, to compensate the buyer for the asset’s devaluation. In turn, the protection buyer would deliver the devalued asset to the protection seller.

The estimated notional amount of CDS transactions has nearly doubled every year since 2001 to reach an estimated peak of \$62 trillion in 2007, before receding 12 percent to \$54.6 trillion as of June 30, 2008.⁴ In all likelihood, this number somewhat overstates the actual size of the CDS market because many traders hold off-setting positions that have not been netted against each other. Nevertheless, the size of total CDS positions is substantial.

The Benefits of Clearing of OTC CDS Transactions

Recent events have uncovered the risks that certain CDS transactions pose to the financial system. American International Group, an insurance company, reportedly issued CDS transactions covering more than \$440 billion in bonds, leaving it with obligations that it could not cover in the current market conditions. This CDS exposure factored into the Federal Reserve’s decision to provide an \$85 billion conditioned loan to the ailing company to prevent its failure and a possible contagion event in the broader economy.⁵ Clearly, there are major risks associated with these products that need further review.

The dispersed and non-standardized nature of many OTC instruments makes finding a regulatory solution a challenging task. But policymakers must strive to increase the transparency of these transactions and find ways to mitigate the systemic risk created by firms that offer and hold these off-exchange instruments. While wholesale regulatory reform will require careful consideration, centralized clearing is one immediate and proven solution that could help mitigate the risks associated with these products.

Clearing mitigates counterparty risk by substituting the credit of the clearing-house for the credit of the counterparty. In addition, clearing: (1) addresses the assessment of market risk and price transparency by publishing a settlement price each day for each product; (2) increases liquidity by enabling participants to offset positions against entities other than the original counterparty; and (3) facilitates order processing by establishing standard procedures and deadlines. For these rea-

principal basis, or by certain authorized fiduciaries or investment managers. Finally, under Title IV of the Commodity Futures Modernization Act of 2000 (CFMA), an exclusion from the CEA was created for certain individually-negotiated swap agreements offered by banks to eligible contract participants.

²In the OTC market, the terminology “protection seller” and “protection buyer” is used to refer to the seller and the buyer of a credit derivative.

³CDS pricing is based on (i) the probability that the issuer of the reference asset will experience a credit event, and (ii) the expected recovery rate for the reference asset. Credit events are defined in Article IV of the 2003 International Swaps & Derivatives Association’s (ISDA) *Credit Derivatives Definitions*. These definitions and standards are well established, and they have been adopted for widespread use in the OTC market.

⁴ISDA News Release, Sept. 24, 2008 (available at <http://www.isda.org/press/press092508.html>).

⁵Indeed, it now appears that AIG may be the beneficiary of up to an additional \$37.8 billion in Federal aid.

sons, this solution has been advocated by CDS market participants and the President's Working Group on Financial Markets (PWG). The PWG first recommended providing clearing solutions for OTC derivatives in a 1999 report to Congress.⁶

Clearinghouses have been available for many years as a means for mitigating the risks associated with exchange-traded financial products. Whether securities, options, or futures, centralized clearinghouses ensure that every buyer has a guaranteed seller and every seller has a guaranteed buyer, thus minimizing the risk that one counterparty's default will cause a systemic ripple through the markets. The clearinghouse is able to take on this role because it is backed by the collective funds of its clearing members.

Clearing would enable parties to a CDS transaction to focus solely on obtaining the best price for the transaction, without regard to whether the parties executing opposite them are capable of performing their obligations. Because the clearinghouse would serve as the central counterparty to all transactions, parties could close out their positions without having to seek out the original counterparties to their trades.

Clearing would also strengthen the infrastructure of CDS trading by facilitating more timely and accurate post-trade processing. For many years, post-trade processing of OTC derivatives has been a decentralized, paper-based process. As a result, the enormous growth in trading volume led to massive backlogs in confirming trades. Various initiatives have been undertaken to improve the trade processing of CDS transactions, and progress is being made toward resolving the backlogs; however, much work remains to be done. By contrast, as evidenced by the performance of U.S. futures clearinghouses, efficient and accurate trade processing is a hallmark of clearing. Adopting a clearing regime for CDS would prevent such backlogs from developing in the future.

Centralized clearing addresses the root problems the markets are confronting today—the constriction of credit due to fear of default. Indeed, for futures contracts—the standardized on-exchange cousin of OTC derivatives-clearing has worked extraordinarily well in managing credit risk. The first independent U.S. futures clearinghouse was established in 1925, and this model helped launch others. Today, the world's largest derivatives clearing facility is located in the United States and routinely moves billions of dollars per day in mark-to-market settlements, including a record \$12.7 billion on January 23, 2008, without any disruption. In 2007, that same facility traded a record 2.2 billion derivative contracts valued at more than \$1 quadrillion.

For regulated futures exchanges, the clearing and settlement mechanism serves to lessen the likelihood that large losses by a trader will cause a contagion event. At least twice daily, futures clearinghouses collect payments from traders with losing positions and credit traders with profitable positions. This twice-daily “mark-to-market” prevents the buildup of significant losses. Importantly, no U.S. futures clearinghouse has ever defaulted on its guarantee.

Just as significant, the clearing process provides transparency to regulators. When transactions are cleared, government and exchange regulators receive daily trader and pricing information, which helps them to police for manipulation and fraud and to uphold the integrity of the market.

Current Regulation of OTC Derivatives Clearing

Clearing has been proven to work for OTC derivatives. After Enron's demise in 2001, the OTC energy derivatives markets “locked up” because many energy companies lacked the requisite financial standing to back their off-exchange trades. In response, the New York Mercantile Exchange (NYMEX) sought and received approval from the CFTC in 2002 to clear OTC energy products for the first time. Today, a significant number of OTC energy derivatives are cleared through regulated clearinghouses, which has reduced systemic risk and allowed regulators a greater window into this marketplace. Clearing for OTC products now extends beyond just energy products to financial products such as forward rate agreements and foreign currency swaps.

Under existing law, any derivatives clearing organization (DCO) that is registered with the CFTC may clear all OTC derivatives without further registration or subjecting itself to any additional regulatory requirements.⁷ Pursuant to the CEA, the

⁶Over-the-Counter Derivatives Markets and the Commodity Exchange Act, Report of the President's Working Group on Financial Markets, November 1999.

⁷The CFMA added Section 409 to the Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA), 12 U.S.C. § 4422, which governs the clearing of OTC derivative instruments by multilateral clearing organizations (including DCOs). Section 409 of FDICIA prohibits a person from operating a clearing organization for OTC derivative instruments except if that

CFTC regulates DCOs and has the statutory mandate to ensure the financial integrity of transactions subject to the CEA and to avoid systemic risk. The CFTC relies on the 14 core principles for DCOs set forth by Congress in the CEA, 7 U.S.C. § 7a-1, as a means of evaluating whether DCOs comply with U.S. law.

In analyzing compliance with these principles, the CFTC looks to the controls and tools utilized by a clearinghouse, including: (1) appropriate membership standards and continuing oversight of members; (2) collection of position reports from large traders; (3) daily mark-to-market of all open positions; (4) collection of an appropriate amount of performance bond (sometimes referred to as “margin”), which serves to cover any losses that cannot be met by the market participant; (5) periodic stress-testing of open positions; (6) an ability to liquidate all of a market participant’s open positions quickly; and (7) availability of other financial resources for use by the clearinghouse to cover any member default. Any clearinghouse seeking to clear CDS transactions will need to show in its proposal that it can bring such tools to bear.

While DCOs do not need pre-approval from the CFTC to clear OTC derivatives, any such initiative would be required to comply with the relevant core principles set forth in the CEA, and the CFTC would review it for compliance with those principles. In addition, the CFTC would need to approve in advance any request by a DCO to commingle funds associated with “cleared-only” OTC derivatives with the DCO’s customer segregated funds. The customer funds underlying exchange-traded futures and options are required to be held in a separate account and to be segregated from the funds of the clearing member and of the DCO. The CEA and CFTC regulations prevent any other funds from being held in the segregated account absent permission from the CFTC. This is a critical customer protection feature that is designed to ensure that customer funds for exchange-traded futures and options are protected and available for withdrawal or transfer even if the clearing firm in question experiences severe financial distress or goes into bankruptcy. In appropriate circumstances, the CFTC has permitted DCOs to commingle customer funds associated with “cleared-only” OTC derivatives with customer funds associated with exchange-traded futures and options in the segregated account. The CFTC has permitted such treatment only when it has concluded that the benefits of permitting such commingling outweigh the risks.

Separate from clearing, the creation of a trading platform for CDS products also could be beneficial because it would enhance pricing transparency, liquidity for the product, and order processing. However, the utility of some of these customized off-exchange instruments might be lost if they become sufficiently standardized to be listed on a multilateral exchange trading facility. For example, two major U.S. derivatives exchanges listed credit derivatives products in 2007, but neither product was able to gain a significant market share.

In closing, the CFTC, in conjunction with other financial regulators, will continue to seek ways to provide clearing solutions for OTC derivatives. Last month, in its swaps report to Congress, the CFTC recommended the further use of clearing for OTC derivatives. There are several private sector clearing initiatives currently being considered by Federal regulators, and it is imperative that policymakers work cooperatively and expeditiously to conduct their due diligence and allow appropriate programs to begin operations promptly. While comprehensive financial reform might take time, encouraging centralized clearing is one immediate step that can reduce risk in the markets and benefit the U.S. economy.

Thank you for your leadership on this critical issue. We look forward to participating fully in Congressional and regulatory efforts to address these issues and to implement policies and practices that serve the public interest.

The CHAIRMAN. Thank you, Mr. Lukken.

Welcome, Mr. Sirri. We look forward to your testimony.

STATEMENT OF ERIK R. SIRRI, DIRECTOR, DIVISION OF TRADING AND MARKETS, U.S. SECURITIES AND EXCHANGE COMMISSION, WASHINGTON, D.C.

Mr. SIRRI. Thank you, Chairman Peterson, Ranking Member Goodlatte, and Members of the House Committee on Agriculture. I am pleased to have the opportunity today to testify regarding the credit default swap market. As is widely noted, the CDS market

person is registered with the CFTC or the SEC, or is supervised by certain approved foreign financial regulators, or unless that person is a type of banking organization.

has experienced explosive growth in recent years. At the end of the first half of 2008, the total notional value of CDS is expected to be approximately \$55 trillion, doubling its size in only 2 years.

The SEC has a great interest in credit default swaps, in part because of their impact on the market for debt net equity securities and the Commission's responsibility to maintain fair, orderly, and efficient markets. These markets are directly affected by CDS because the credit protection is written on the financial claims of the issuers that we regulate. In addition, we have seen CDS spreads move in tandem with falling stock prices, a correlation that suggests that activities in the CDS market may be spilling over into the cash securities markets.

The Commission's current authority with respect to OTC CDSs, which are generally securities-based swap agreements under the CFMA, is limited to enforcing the anti-fraud prohibitions under the Federal securities laws, including prohibitions against insider trading. I note, however, that if CDS were standardized as a result of centralized clearing or exchange trading, or other changes in the market, and no longer individually negotiated, the swap exclusion from the securities laws under the CFMA would be unavailable.

Under current law, however, the SEC is statutorily prohibited from promulgating any rules regarding CDS trading in the over-the-counter market. Thus, the tools necessary to oversee the OTC CDS market effectively and efficiently do not exist.

The SEC staff are actively participating with other financial supervisors and industry members in efforts to establish one or more central counterparties, or CCPs, for credit default swaps. The SEC has regulated the clearance and settlement of securities, including derivatives on securities, since the Securities Acts Amendments of 1975. A CCP for credit default swaps would be an important first step in reducing systemic and operational risks in the CDS market, and Commission staff fully support these efforts.

In addition to reducing counterparty and operational risks inherent in the CDS market, and thereby helping to mitigate the potential systemic impacts, a central counterparty may help to reduce the negative effects of misinformation and rumors that can occur during high volume periods. A CCP could be a source of records regarding CDS transactions. Of course, to the extent that participation in a CCP is voluntary, its value as a device to protect manipulation and other fraud and abuse in the CDS market may be greatly limited.

There is no guarantee, however, that efforts to establish a central counterparty or other mechanisms would be successful or that the OTC CDS market participants would avail themselves of these services. Accordingly, one should not view a central counterparty as a panacea for concerns about the management of exposures related to credit derivatives. Even with a CCP, dealers and other market participants must manage their remaining bilateral exposures effectively under ongoing regulatory oversight. Nonetheless, a central counterparty would be an important step in addressing regulatory concerns.

Exchange trading of CDS would add efficiency to the market for these instruments. It is not uncommon for derivative contracts that are initially developed in the OTC market to become exchange-

traded as the product markets mature. While the contracts traded in the OTC market are subject to individual bilateral negotiation, an exchange is effectively a market for a standardized form of a contract. These standardized exchange contracts typically coexist with more varied and negotiated OTC contracts.

Exchange trading of credit derivatives would enhance both the pre- and post-trade transparency of the market, and that would enhance efficient pricing of credit derivatives. Exchange trading could also reduce liquidity risk by providing a centralized market that allows participants to effectively initiate and close out positions at the best available prices.

Credit default swaps serve important purposes as tools that can be employed to closely calibrate risk exposure to a credit or a sector. Yet, CDSs raise a number of regulatory concerns, including the risks they pose, systemically, to financial stability and the risk of manipulation.

With regard to financial stability, the default of one major player affects not only the financial health of that participant but also the market and operational risks borne by parties distant to those transactions. In addition, there is a risk of manipulation and fraud in the CDS market, in part because trade reporting and disclosure are limited. One way to guard against misinformation and fraud is to create a mandatory system of record-keeping and the reporting of all CDS trades to the SEC. Ready information on trades and positions of dealers would also aid the SEC in its enforcement of its existing anti-fraud and anti-manipulation rules.

Notwithstanding the lack of statutory authority to require the reporting or record-keeping in the CDS market, the SEC is doing what it can under existing statutory authority. Most recently, the Commission announced a sweeping expansion of its ongoing investigation into possible market manipulation involving financial institutions. The expanded investigation will require hedge fund managers and other persons with positions in CDS to disclose those positions to the Commission and to provide certain other information under oath.

Investigations of over-the-counter CDS transactions have been far more difficult and time-consuming than those involved in other markets because the information on CDS transactions gathered from market participants has been incomplete and inconsistent.

In crafting any regulatory solution, it is important to keep in mind the significant role that CDS trading plays in today's financial markets, as well as the truly global nature of the CDS market. Further, the varied nature of the market participants in credit default swaps and the breadth of this market underscore the importance of cooperation amongst financial supervisors at the Federal and state levels, as well as supervisors internationally.

Thank you for the opportunity to discuss these important questions, and I am happy to take your questions.

[The prepared statement of Mr. Sirri follows:]

PREPARED STATEMENT OF ERIK R. SIRRI, DIRECTOR, DIVISION OF TRADING AND MARKETS, U.S. SECURITIES AND EXCHANGE COMMISSION, WASHINGTON, D.C.

Chairman Peterson, Ranking Member Goodlatte, and Members of the House Committee on Agriculture:

I am pleased to have the opportunity today to testify regarding the credit default swap (CDS) market. The over-the-counter (OTC) market for CDSs has drawn together some of the world's important financial institutions into a complex web. These institutions have diverse roles in the market for CDSs, including as market makers, hedgers, and speculators who take proprietary positions in the credit risk of the underlying entity. The CDS market has experienced explosive growth in recent years. As of the end of the first half of 2008, the total notional value of CDSs is estimated to be approximately \$55 trillion, according to the International Swaps and Derivatives Association (ISDA), doubling its size in only 2 years. AIG alone is reported to have sold over \$440 billion of CDS protection on a notional basis. It is important, however, to keep in mind that notional value is not a precise measure of the total risk exposure.

The SEC has a great interest in the CDS market because of its impact on the debt and cash equity securities markets and the Commission's responsibility to maintain fair, orderly, and efficient securities markets. These markets are directly affected by CDSs due to the interrelationship between the CDS market and the claims that compose the capital structure of the underlying issuers on which the protection is written. In addition, we have seen CDS spreads move in tandem with falling stock prices, a correlation that suggests that activities in the OTC CDS market may in fact be spilling over into the cash securities markets.

The Commission's current authority with respect to OTC CDSs, which are generally "security-based swap agreements" under the CFMA, is limited to enforcing anti-fraud prohibitions under the Federal securities laws, including prohibitions against insider trading. The SEC, however, is statutorily prohibited under current law from promulgating any rules regarding CDS trading in the over-the-counter market. Thus, the tools necessary to oversee this market effectively and efficiently do not exist.

SEC staff are actively participating with other financial supervisors and industry members in efforts to establish one or more central counterparties, or CCPs, for credit default swaps. Improving market infrastructure and the ability to monitor the CDS market, for example by establishing a CCP, would be an important first step in reducing systemic and operational risks in the market. The Commission staff fully supports these efforts.

In addition, when Chairman Cox spoke before the Senate Committee on Banking, Housing, and Urban Affairs 3 weeks ago, he called the lack of regulation of the CDS market a "cause for great concern." The CDS market's considerable size and importance to the financial system, particularly during periods of significant market turbulence, compel greater oversight. Recent credit market events, notably the default by Lehman Brothers and the intervention by the Treasury with respect to Fannie Mae and Freddie Mac, have required an *ad hoc* response by market participants, generally under the auspices of industry groups such as ISDA. In all three cases, the industry had to orchestrate an auction to permit cash settlement of CDSs intended to be settled through physical delivery of bonds as a means to reduce operational frictions. In fact, the industry had to meet under the auspices of ISDA to even determine with certainty that the Treasury actions with respect to Fannie Mae and Freddie Mac were an event of default for purposes of credit default swaps written on the debt securities of those two reference entities. While *ad hoc* approaches have worked remarkably well to date, Chairman Cox and others have questioned whether the size and importance of the market make more oversight, including a more developed infrastructure, prudent.

Background

As you know, CDSs, like other credit derivatives, are a type of financial contract whose value is based on underlying debt obligations. By their very nature, CDSs transfer risk rather than directly raise capital in the way a bond or stock does. However, the transference of risk can indirectly aid in raising capital. A CDS can be tied to the performance of the debt obligations of a single entity or security, or—with more complex CDSs—an index of several such entities or securities. In a CDS, as in an insurance contract, the CDS "buyer" is buying protection and the CDS "seller" is selling protection against a default or other credit event with respect to the underlying debt obligations. The buyer pays the seller a premium for this protection, and the seller only pays the buyer if there is a default or other credit event that triggers the CDS contract. The premium—cost of protection for the buyer—increases as the risk associated with the underlying obligation increases. In other words, as the creditworthiness of the underlying entity goes down, the cost of protection goes up.

CDSs are executed bilaterally with derivatives dealers in the OTC market, which means that they are privately negotiated between two sophisticated, institutional

parties. They are not traded on an exchange and there is no required record-keeping of who traded, how much and when. The dealers include more than a dozen large, globally active banks. London and New York are the centers of CDS trading. In addition to the dealers, active participants in the CDS market include hedge funds and registered investment companies, as well as insurance companies, among others.

Although CDSs are frequently described as insurance (buying protection against the risk of default), they, in fact, also are used by investors for purposes other than hedging. Institutions can and do buy and sell CDS protection without any ownership in the entity or obligations underlying the CDS. In this way, CDSs can be used to create synthetic long (or short) positions in the referenced entity. Because a CDS transfers the risk of default on debt obligations from the buyer to the seller, a CDS buyer is analogous to being “short” the bond underlying the CDS. Whereas a person who owns a bond profits when its issuer is in a position to repay the bond, a CDS buyer profits when, among other things, the bond goes into default. Conversely, a CDS seller can be said to be taking a “long position” on the underlying credit. In other words CDSs may be used to replace cash bonds in establishing trading positions in a credit.

Indeed, for a typical corporate debt issuer, the notional amount of activity in OTC derivatives tied to its debt or credit can be substantially larger than the outstanding balance (principal amount) or trading in the issuer’s actual debt securities. CDSs, therefore, can be used to manage the risk of a portfolio of assets or to mitigate a firm’s exposure to an entire financial institution. Writers of CDSs can develop concentrated exposures to particular credits, which if large enough, could raise serious systemic issues for the global financial system.

Establishing a Central Counterparty for the CDS Market

Although the clearance and settlement of CDSs are not currently regulated, the SEC has regulated the clearance and settlement of securities, including derivatives on securities, since the Securities Acts Amendments of 1975. The SEC has registered approximately 20 clearing agencies under the Exchange Act, and SEC staff have performed many compliance inspections and program reviews. During the more than 30 years the SEC has regulated clearing agencies, the SEC has continued to develop expertise in this area, and no registered clearing agency under the securities laws has failed to perform its obligations or contributed to the failure of another institution through poor performance.

As noted above, there are important relationships between the securities markets and the market for CDSs. Accordingly, the SEC is participating in discussions with the Federal Reserve Board (Fed), the Federal Reserve Bank of New York, the Commodity Futures Trading Commission (CFTC), and industry participants to create a central counterparty (CCP) for credit default swaps. Last week, senior SEC staff attended meetings with other regulators, hosted by the Federal Reserve Bank of New York, at which industry members discussed their proposed CCPs. There are currently four potential CDS central counterparties: Eurex, NYSE Euronext, CME Group/Citadel, and IntercontinentalExchange/The Clearing Corporation. The SEC staff will continue to work in close cooperation with the Fed, the Federal Reserve Bank of New York, and the CFTC to facilitate the creation of at least one CCP.

As addressed in the testimony of my colleague, Dr. James Overdahl, before the Senate Subcommittee on Securities, Insurance, and Investment on July 9 of this year, a CCP could be an important step in reducing the counterparty risks inherent in the CDS market, and thereby help to mitigate the potential systemic impacts. As I noted earlier, CDS are bilateral contracts between market participants. As is the case with all contracts, each party to the transaction needs to be concerned about the willingness and capacity of the party on the other side to perform its obligations.

To illustrate how CDSs work, suppose that Dealer X sells protection on ABC to Dealer Y. Dealer Y needs to be concerned about Dealer X’s ability and willingness to perform in the event of a default or other credit event by ABC. While the risk being transferred from Dealer Y to Dealer X relates to the credit quality of ABC, Dealer Y, while shedding risk related to ABC, is taking on counterparty risk to Dealer X. Market participants manage this counterparty risk using a variety of tools, including marking positions to market and posting collateral, as well as documentation that provides for other mitigants.

A central counterparty could further reduce systemic risk by novating trades to the CCP, meaning that Dealers X and Y no longer are exposed to each others’ credit risk. In addition, the CCP could reduce the risk of collateral flows by netting positions in similar instruments, and by netting all gains and losses across different instruments. So, instead of Dealer Y having a large volume of trades, some offsetting, with many counterparties, Dealer Y could have a single net position in ABC with

the CCP. Likewise, Dealer X could have a single net position in each underlying credit, perhaps related to a large volume of individual trades, with the CCP. By replacing the current “web” of CDS exposures with a “hub and spokes” architecture, a CCP could vastly simplify containing the failure of a major market participant.

Moreover, a CCP could further reduce risk through uniform margining and other robust risk controls over its exposures to its participants, including specific controls on market-wide concentrations that cannot be implemented effectively when counterparty risk management is decentralized. A CCP also could aid in preventing the failure of a single market participant from destabilizing other market participants and, ultimately, the broader financial system.

A CCP also could help ensure that eligible trades are cleared and settled in a timely manner, thereby reducing the operational risks associated with significant volumes of unconfirmed and failed trades. It may also help to reduce the negative effects of misinformation and rumors that can occur during high volume periods, for example when one market participant is rumored to “not be taking the name” or not trading with another market participant because of concerns about its financial condition and taking on incremental credit risk exposure to the counterparty. Finally, a CCP could be a source of records regarding CDS transactions, including, for each day, by underlying reference entity, the identity of each party that engaged in one or more CDS transactions. Of course, to the extent that participation in a CCP is voluntary, its value as a device to prevent and detect manipulation and other fraud and abuse in the CDS market may be greatly limited.

There is no guarantee, however, that efforts to establish CCPs or other mechanisms would achieve success, or that OTC CDS market participants would avail themselves of these services. Even if a dealer does participate in the CCP, trades the dealer elects to do away from the CCP would escape its risk management oversight. Accordingly, one should not view a CCP as a panacea for concerns about the management of exposures related to credit derivatives. Even with a CCP, preventing a systemic risk buildup would require dealers and other market participants to manage their remaining bilateral exposures effectively, and the dealers’ management of their bilateral exposures would require ongoing supervisory oversight. Nonetheless, developing a CCP for clearing CDSs would be an important step in accomplishing this goal.

Exchange Trading of CDSs

It is not uncommon for derivative contracts that are initially developed in the OTC market to become exchange-traded as the market for the product matures. While the contracts traded in the OTC market are subject to individual bilateral negotiation, an exchange efficiently creates a market for a standardized form of the contract that is not subject to individual negotiation (other than price and quantity). These standardized exchange-traded contracts typically coexist with the more varied and negotiated OTC contracts. In this regard, we note that last year the Commission approved a proposal by the Chicago Board Options Exchange to list and trade Credit Default Options (“CDOs”) and Credit Default Basket Options. The CDOs are modeled after CDSs and structured as binary call options that settle in cash based on confirmation of one or more specified adverse credit developments (such as payment default) involving obligation(s) referenced in the CDO, such as a debt security.

Some of the prospective central counterparties for CDSs also propose offering some type of trading facility. Exchange trading of credit derivatives could add both pre- and post-trade transparency to the market that would enhance efficient pricing of credit derivatives. Exchange trading also could reduce liquidity risk by providing a centralized market that allows participants to efficiently initiate and close out positions at the best available prices.

Primary Regulatory Concerns

CDSs serve important purposes as a tool that can be employed to closely calibrate risk exposure to a credit or a sector. CDSs can be especially useful for the business model of some financial institutions that results in the institution making heavily directional bets, and others—such as dealer banks—that take both long and short positions through their market-making and proprietary trading activities. Through CDSs, market participants can shift credit risk from one party to another, and thus the CDS market may be an important element to a particular firm’s willingness to participate in an issuer’s securities offering.

CDSs also raise a number of regulatory concerns, including the risks they pose systemically to financial stability and the risk of manipulation.

With regard to financial stability, the OTC CDS market, together with other derivative products, has drawn together the world’s major financial institutions and others into a deeply interconnected network. Their activities in the CDS market

generate significant market, credit, and operational risk that extend beyond the willing counterparties to the CDS transaction. As I described earlier, the buying and selling of default protection through CDSs creates short and long exposures—market risk—to the index, debt security, or other obligations referenced in the CDS contract. At the same time, the buying and selling of default protection creates credit risk exposure to counterparties. The default of one major player therefore impacts not only the financial health but also the market and operational risks experienced by financial market participants distant to these transactions.

In addition, like all financial instruments, there is the risk that CDSs are used for manipulative purposes, and there is a risk of fraud in the CDS market, in part because trade reporting and disclosure to the SEC are limited. Further, very small trades in a relatively thin market can be used to “paint the tape” and suggest that a credit is viewed by the market as weak. The focus by current data providers in CDS is on the spreads at which trades are concluded, rather than the volume transacted at that price.

One way to guard against misinformation and fraud is to create a mandatory system of record-keeping and reporting of all CDS trades to the SEC. The information that would result from such a system would not only reduce the potential for abuse of the market, but would aid the SEC in detection of fraud in the market as quickly and efficiently as possible. Given the interdependency of financial institutions and financial products, it is crucial that we have a mechanism for promptly obtaining CDS trading information—who traded, how much and when—that is complete and accurate.

OTC market participants generally structure their activities in CDSs to comply with the CFMA’s “swap exclusion” from the Securities Act and the Exchange Act. These CDSs are “security-based swap agreements” under the CFMA, which means that the SEC currently has authority to enforce anti-fraud prohibitions under the Federal securities laws, including prohibitions against insider trading. If CDSs were standardized as a result of centralized clearing or exchange trading or other changes in the market, and no longer individually negotiated, the “swap exclusion” from the securities laws under the CFMA would be unavailable.

Notwithstanding the lack of statutory authority, the SEC is doing what it can under its existing statutory authority to address concerns regarding this market. Most recently, the Commission announced a sweeping expansion of its ongoing investigation into possible market manipulation involving certain financial institutions. The expanded investigation will require hedge fund managers and other persons with positions in CDSs to disclose those positions to the Commission and provide certain other information under oath. This expanded investigation should help to reveal the extent to which the risks I have identified played a role in recent events. Depending on its results, this investigation may lead to more specific policy recommendations.

However, investigations of over-the-counter CDS transactions have been far more difficult and time-consuming than those involving cash equities and options. Although the SEC clearly has anti-fraud jurisdiction over the CDS market, the SEC faces a much more difficult task in investigating and taking effective action against fraud and manipulation in the CDS market as compared to other markets. Because of the lack of uniform record-keeping and reporting to the SEC, the information on CDS transactions gathered from market participants has been incomplete and inconsistent.

Recent private sector efforts may help to alleviate some of these concerns. For example, Deriv/SERV, an unregulated subsidiary of DTCC, provides automated matching and confirmation services for over-the-counter derivatives trades, including CDSs. Deriv/SERV’s customers include dealers and buy-side firms from more than 30 countries. According to Deriv/SERV, more than 80% of credit derivatives traded globally are now confirmed through Deriv/SERV, up from 15% in 2004. Its customer base includes 25 global dealers and more than 1,100 buy-side firms in 31 countries. While programs like Deriv/SERV may aid the Commission’s efforts, from an enforcement perspective, such voluntary programs would not be expected to take the place of mandatory record-keeping and reporting requirements to the SEC.

In the future, Deriv/SERV and similar services may be a source of reliable information about most CDS transactions. However, participation in Deriv/SERV is elective at present, and the platform does not support some of the most complex credit derivatives products. Consequently, not all persons that engage in CDS transactions are members of Deriv/SERV or similar platforms. Greater information on CDS trades, maintained in consistent form, would be useful to financial supervisors. In addition to better record-keeping by market participants, ready information on trades and positions of dealers also would aid the SEC in its enforcement of anti-fraud and anti-manipulation rules. Finally, because Deriv/SERV is unregulated, the

SEC has no authority to view the information stored in this facility for supervision of risk associated with the OTC CDS market.

In crafting any regulatory solution, it is important to keep in mind the significant role CDS trading plays in today's financial markets, as well as the truly global nature of the CDS market. Further, the varied nature of market participants in CDSs and the breadth of this market underscore the importance of cooperation among U.S. financial supervisors at the Federal and state level, as well as supervisors internationally.

Thank you for this opportunity to discuss these important issues. I am happy to take your questions.

The CHAIRMAN. Thank you very much. I would like to note for the record that the Federal Reserve was also invited, but they claim to be too busy. I guess they are a little busy.

As I understand it, there are discussions going on, almost daily, regarding these clearinghouses, and I guess now there are different proposals out there involving CFTC, SEC, the Fed, and the New York Fed or something. Would you give us a brief description, each of you, of what your take on where that is at and how soon we are going to see some action there?

Mr. LUKKEN. The law as, changed in 2000, allows over-the-counter derivatives to be cleared through a variety of different entities, including a CFTC-regulated clearinghouse, but also an SEC-regulated clearinghouse and a bank-regulated clearinghouse. And so the regulators have been cooperatively meeting over the past several weeks to discuss private sector solutions that may be developed to get a lot of the existing over-the-counter credit default swap business on to a regulated clearinghouse. As both our testimonies laid out, this manages counterparty party risk, as well as providing transparency to regulators and the people running the clearinghouse to see who the participants are and what exposures they may have in the system. Those are all beneficial public policy goals.

We have been meeting regularly to ensure that people are moving forward with these proposals, to coordinate our responses, and to ensure that all regulators involved in the process have the information they need to carry out their statutory mission of overseeing these clearinghouses we are trying to ensure that this will happen according to, and that it will help with the market situation that we are currently facing.

We have been meeting, as you said, almost daily by phone call, trying to talk with the private sector groups who are involved in the clearing proposals and ensuring that they are doing their due diligence to move forward as quickly as possible.

Mr. SIRRI. I agree with everything that Commissioner Lukken said. The only thing I would add and emphasize is that this is truly a cooperative effort between the various regulators that are involved. For something like this to succeed, a central counterparty, it has got to be that it is appropriately designed and brings the private sector to that counterparty. It may be that Congress chooses to act and makes working with such a counterparty mandatory, but the work is proceeding as if it is voluntary; that is, the counterparty will have to attract market participants.

In that way, it has got to be appropriately designed to reduce systemic risk and provide information and transparency to regulators. Systemic risk issues are the ones that we both talked about.

Chairman Peterson, you mentioned trust in your opening statement. You pointed out that in times of stress, people don't have trust in their counterparties, they don't have trust in the system. The point of a central counterparty is to create exactly that trust, where you don't have to worry who you have traded with. A credible central entity has taken the place of that counterparty you don't know.

So getting us all to work together to create that structure that provides trust is exactly what we are all about as a group.

The CHAIRMAN. I appreciate that. I appreciate the fact that you regulators are working together. It seems to me like the industry is into a deal to try to figure out who can get control of this, and some people are trying to figure out how to keep the current system going without being regulated. I don't know—those folks that are trying to do that, I don't know what planet they are living on.

Anyway, one of the questions is: Can we have more than one clearing entity? The CME has got a proposal, ICE has a proposal, somebody else has a proposal. Can we have two or three of these, and will that work? As I understand it, I guess the one that ICE is working on, they have tried to corral up the broker dealers to get whatever control, or whatever they are up to. They want to be regulated by the Fed. As I understand it, the Fed has never done this. So what sense does that make?

You guys are clearing it at the SEC. I guess you are doing that. The CFTC clearly does that. I don't know what this is all about. If they want to get away from this Committee where they can get to a committee that has more friendly people on it, or what they are up to. They are going to have a hell of a fight with us if that is what they are up to.

Can more than one of these things exist, and what do you think about the Fed getting, with all their other problems, getting into something they have never done before?

Mr. LUKKEN. I will start. Yes, more than one of these entities can exist. I think there are obviously efficiencies having one central counterparty, but the law allows multiple central counterparties to compete for this business. And the market should allow these different entities to come to exist based on who has the best model and risk management approach.

But when you have more than one potential central counterparty, what is key for regulators is close information sharing and cooperation, because I think all of us, if this is outside of our jurisdiction, still have an interest in what is going on, who the participants might be, because as we have learned with this crisis, everything is interdependent and intertwined.

Whatever happens in the coming weeks as these proposals move forward, regulators have to closely cooperate with each other and share information about what they are seeing on their central counterparties so that all of us have the proper oversight tools regarding these markets.

Mr. SIRRI. The statutory framework for clearing for securities provides explicitly that we encourage competition, and in this setting I think we believe that competition will be helpful. As Commissioner Lukken said, one might think if it were all in one place, that would be optimal, but we found in general that competition

provides better services, better pricing, and we think with appropriate supervision, can provide good risk management.

I would point out also we have been addressing the question of what exists in the United States; that is, is there one or more than one central counterparty? But other parts of the world, especially Europe, are extremely active in the over-the-counter space. My expectation is they too will have a central counterparty. So a truly global solution to this problem would involve coordination and interoperability between central counterparties located in the United States and central counterparties located elsewhere in the world. That kind of interoperability would be important to have a truly efficient global setting for reduced risk management.

The firms that we are talking about are globally incorporated firms. Subsidiaries of those firms operate in the United States, London, and elsewhere in the world. If we don't have such a framework, a firm such as that could easily move business from one jurisdiction to the other to suit their purposes.

It is incumbent on us regulators, both domestically and internationally, to work together to eliminate that incentive.

The CHAIRMAN. Thank you for your answers. The gentleman from Virginia, Mr. Goodlatte.

Mr. GOODLATTE. Thank you, Mr. Chairman. Gentlemen, I appreciate very much your testimony. You may recall that this Committee spent a good deal of effort this year after the completion of the farm bill on the issue of the oversight authority of the Commodity Futures Trading Commission. The Committee produced bipartisan legislation which ultimately passed the House of Representatives just last month that increased the oversight authority of the CFTC with regard to over-the-counter trades of various kinds.

We were cautioned during hearings that were held during that period, and in a letter that we received from the leading financial officers of the Administration, including the Treasury Secretary, the Chairman of the Federal Reserve Board, the Chairman of the SEC, and CFTC—you, Mr. Lukken—cautioning us that we not over-regulate the futures industry or that business would be conducted overseas beyond the reach of our regulators. Certainly, this is a legitimate concern. In fact, in the other areas of our financial sector that are experiencing great difficulties right now, I would say a major part of that problem has been what I would call mis-regulation. Some was over-regulation, some under-regulation, resulting in the problems that we have.

Does your testimony today constitute a recognition that there can be international cooperation here so that we don't face that kind of concern about some other market somewhere else attempting to draw away business from our U.S. markets if we do what you have recommended here today.

I note the fourth recommendation that you have, Chairman Lukken, is that regulatory reform should provide for clear enforcement authority over these products to police against fraud and manipulation. The CFTC is currently excluded by statute from bringing enforcement cases against OTC financial derivatives. Congress should rectify this by providing clear enforcement powers regarding

OTC products to the CFTC and other appropriate regulators, including the SEC.

How would you characterize the current situation we are in *vis-à-vis* where we were when we were working on that legislation?

I will start with you, Mr. Lukken.

Mr. LUKKEN. I think you raise a very good point on the international coordination issue. As I had mentioned, my fifth point of my testimony, this has to be tightly coordinated among global regulators for this to work. I think we all have to come at this with a similar approach. You don't want to sort of squeeze the balloon and have this go elsewhere around the world. And so everybody is, I think, finding the same problems in all jurisdictions around the world. Chairman Cox, as Chairman of the Technical Committee of the International Organization of Security Commissions, and the CFTC which is a member, will work to address, internationally, how our regulatory approaches should change to address a lot of the issues that we have been seeing of late.

I would say on the enforcement side, and this is enforcement, after-the-fact enforcement powers *versus* regulation, we have that authority in regards to energy and agricultural products. I don't see a large harm in extending that to financial swaps. That if these financial swaps are affecting our markets in some ways, our central financial futures markets, that we should have the ability to take enforcement action for manipulation or fraud against those participants in those markets as well.

Mr. GOODLATTE. I take it if more of these were required to be cleared, that given what is going on in the financial turmoil the world is facing right now, that many engaged in these trades would find greater assurance in U.S. markets that they could do so, and trade with greater safety, if that were the case.

Let me in that regard ask you if credit default swaps were required to be cleared a year ago, what activity would either of your Commissions have taken?

Mr. LUKKEN. Well, if they were required to come on to a U.S.-registered clearinghouse, we would have to ensure that they continue to meet the core principles, the 14 core principles that are stated in our Act for financial integrity, that they are managing risk, all the things that we require of clearinghouses, that these instruments were not in any way jeopardizing the status of a clearinghouse and putting it at greater risk.

And so we, under law, have to ensure that clearinghouses meet those standards, and continue to meet those standards. So we would run them through that stress testing and all the things we do for clearinghouses to ensure that they were meeting those standards.

Mr. GOODLATTE. Mr. Sirri.

Mr. SIRRI. Over-the-counter credit default swaps are securities-based swaps. Because of that, the SEC currently has anti-fraud authority over those swaps. So, for example, in instances of market manipulation or insider trading, we have the authority—we have enforcement authority in that space.

Now we cannot rule right in the area of over-the-counter derivatives to regulate them. For example, one of the things we have learned with respect to our ongoing enforcement investigations is

because we haven't been able to place requirements on standardized record-keeping within these firms, it becomes extremely difficult for our enforcement folks to go into these firms and get the kind of information they need to efficiently oversee this market.

If these contracts were to come on-exchange or to be centrally cleared, they would become standardized, and they would be securities. Once these instruments are securities, the Commission has the power to require registration of the clearinghouse, require registration of the exchange. They may or may not choose to do that, but as a staff we would recommend that they too, as Chairman Lukken said, enforce the core provisions of the securities laws that pertain to securities in these settings.

So, for example, when it comes to clearing, we believe it is very important that clearinghouses have strong risk management programs; they have to have strong internal controls in business continuity procedures; they have to keep records and provide those records to the Commission staff when they ask for them. They have to be regularly inspected by regulators.

Mr. GOODLATTE. Let me ask you a question about your observation that these credit default swaps will need to become more standardized if they are going to be cleared through clearinghouses. What will that do in terms of their usefulness to manage risk? I understood these swaps to be highly negotiated instruments that are very specific to the negotiating parties. Will that specificity make it difficult to clear the instrument, and if they do become standardized, will that reduce their purpose in terms of allowing the people who trade in them to manage risk?

Mr. SIRRI. It is a very perceptive question. I think it will have a subtle effect. The over-the-counter markets will continue to be the place and the source of innovation. There will continue to be individually negotiated transactions there. But, as on the futures markets, risk will be shifted into these markets where there is standardization. That risk will move efficiently and will in fact foster growth in the over-the-counter markets. The best example I can think of is in the interest rates swap markets. They are fairly standardized, but can be somewhat individually negotiated in the over-the-counter markets. But the Euro dollar futures markets, those markets effectively shed and manage risk in a standardized way; the point being that standardized markets and customized markets can coexist, and they are in fact complementary.

The existence of a strongly regulated and standardized market allows efficient risk sharing and the shedding of risk that allows for strong growth in the customized market.

Mr. GOODLATTE. Thank you, Mr. Chairman.

The CHAIRMAN. I thank the gentleman. The gentleman from Pennsylvania, Mr. Holden.

Mr. HOLDEN. Thank you, Mr. Chairman.

Chairman Lukken, according to Mr. Pickel's testimony, AIG's defaults in the CDS market were actually its failure to post additional collateral. Its CDS counterparties were entitled to additional collateral because rating agencies suddenly and drastically downgraded AIG's credit rating.

If AIG had been a participant in the CDS clearinghouse on September 16 when this downgrade occurred, what action would have

been taken? Is it likely the clearinghouse would have required that AIG post additional capital? If so, it clearly would have been unable to comply; and what would have happened then?

Mr. LUKKEN. The benefits of clearinghouses allow, as events become more probable, for more margin to be held by those participating firms. Again, as I mentioned, twice daily we mark-to-market. As those probabilities change, as an entity becomes closer to default, the amount of money changing hands would increase. And so instead of a large systemic event that we saw with the potential of AIG going into default, we would have seen a more gradual changing of default standards and margin to allow people, the winners to be paid by the losers over a period of time. It becomes a more orderly way of shifting the risk. Beyond that, we also have lots of guarantees involved at the clearinghouse level, and segregation of funds. We have lots of built-in safeguards at the clearinghouse to prevent us having to go in and potentially bail out a large participant because the clearing system, in essence, is backing the guarantee behind the default.

Mr. HOLDEN. Maybe you better elaborate a little bit. How would you have gradual notice when the rating system happens suddenly and dramatically, with AIG specifically?

Mr. LUKKEN. Well, just like credit default spreads change on a daily basis based on market information, I think we would have seen in the futures markets and the clearing markets margin change as a result as well, as people start to get closer to a rate change or not. Those rate changes are based on events and underlying information about the firm's ability to pay. And so that occurs over a period of time.

You are correct, the change by a rating firm of the firm's rating occurs at a moment's notice, but the information leading up to that change is gradual.

Mr. HOLDEN. Thank you.

Mr. Sirri, last week, Lynn Turner, former SEC Chief Accountant, testified before the Oversight and Government Reform Committee that the SEC's Office of Risk Management has been reduced to a single staffer this February. Can you tell us what the responsibility of this office is and what role, if any, it has in reviewing risk associated with the credit default swaps, and is the statement about the staffing level accurate?

Mr. SIRRI. The Office of Risk Assessment is headed by Jonathan Sokobin. At the moment, I don't know the exact staffing. I believe it is on the order of six or seven at the moment, on its way to nine, which is full staffing. So it is staffed substantially above that level.

That office is used throughout the Commission by its staff to aid in basic risk questions. So, for example, my division works closely with the Office of Risk Assessment. When we have questions that inherently involve risk in some way that we can't handle we would engage them to do analytical work, depending on what we want, to help us assess a particular risk problem.

So it is fully staffed at the moment, as I understand it. It may be shy one or two, but I think those offers have already been made, and I think it performs a useful and practical function within the Commission.

Mr. HOLDEN. Thank you, Mr. Chairman.

The CHAIRMAN. I thank the gentleman. The gentleman from North Carolina, Mr. Etheridge.

Mr. ETHERIDGE. Thank you, Mr. Chairman.

Mr. Sirri, the SEC's Inspector General report, which I have a copy of here, and I think others have had an opportunity to have, *Report on the Oversight of Bear Stearns and the Consolidated Supervised Entity*, or CSE program, which came out last month states, "Thus, it is indisputable that the CSE program failed to carry out its mission in the oversight of Bear Stearns because under the Commission and the CSE program's watch Bear Stearns suffered significant financial weakness."

In the unedited version posted by Senator Grassley on the Senate Finance Committee's website, it says your division failed to follow up on red flags raised by Bear Stearns' increasingly constant trading in market risk for mortgage securities.

It is my understanding that Bear Stearns was also heavily involved in credit default swaps, our topic today. I want to give you an opportunity to respond to this IG's report and answer two questions: What happened with SEC's oversight of Bear Stearns that led to its collapse? Second, given your inside view, can you answer a question that will come up likely in the next panel, can the collapse of Bear Stearns be traced back to credit default swaps or to the underlying obligations like subprime mortgage securities to which they are linked?

Mr. SIRRI. Thank you. There is a formal response from the staff in that report, and it pretty much lays out our position on these things. But I will address your question.

I think to get at the issue you raise, it is important to understand the context of the program, the consolidated supervised entity program. Firms like Bear Stearns, Goldman Sachs, Morgan Stanley, the large security firms were, if you will, a regulatory hole that was not covered under Gramm-Leach-Bliley. These are institutions, large securities institutions that do not have the traditional depository, so they are not bank holding companies. There is no program for the supervision of them as a holding company. It was a gap.

In 2004, the European Union had a financial conglomerates directive. Because of that, these firms needed a single consolidated supervisor. The SEC stepped into that gap and provided such a program by rule. There was no statutory program there. And so these firms opted into a rule-based program to supervise these programs at the holding company level. The supervision provided for oversight at the financial and operational risk controls of those holding companies, as well as reporting schemes for their capital and the requirement that these firms keep a pool of liquidity at the holding company.

Now, absent us stepping into that, there would have been no supervision of those holding companies at all. For us, the core question is: Had we not stepped in, what would Bear Stearns, Goldman Sachs, Morgan Stanley have looked like, because there would have been no holding company supervision at all. I can't answer that question for you today, but it is a point to which our Chairman has spoken—

Mr. ETHERIDGE. Let me interrupt. If you can't answer today, can you get back to us in writing, because I think that is a central point of what we are trying to get to?

Mr. SIRRI. I would be happy to.

Mr. ETHERIDGE. Just to talk and not give an answer is not very helpful.

Mr. SIRRI. Well, let me say that with respect to—you did ask a very precise question about Bear Stearns, which is to what extent were credit swaps responsible for the demise of Bear Stearns. I don't think that credit default swaps were causal in that sense. That firm was involved in a number of activities. In particular, they had concentrated exposures to the mortgage markets. These were one of the causes of that.

The real cause toward the end of that time, however, had to deal with the behavior of counterparties and short-term funders as liquidity ran out of that firm in the week of March 10th.

Mr. ETHERIDGE. So you will get a written statement back.

Mr. SIRRI. I will. Absolutely.

Mr. ETHERIDGE. Thank you.

Thank you, Mr. Chairman.

The CHAIRMAN. I thank the gentleman. The gentleman from Georgia, Mr. Marshall.

Mr. MARSHALL. Mr. Sirri, just following up on Mr. Etheridge's question concerning oversight of the big banks; well, institutions; a couple of banks. Wouldn't you say that had SEC appropriately measured the risk, it would have required that greater reserves be held or that more liquidity be present. In many instances, the CDSs that were being held as insurance against underlying defaults on the underlying assets, principal assets being CDOs, that those CDSs were lip gloss, at best. Many came from Canada. They had triple A ratings from the Canadian rating agency, but in fact there wasn't anything substantial underlying it. And so really greater reserves should have been held in these different banks against those obligations. Wouldn't you say that the SEC should have required that? I don't want to get into too much of a back-and-forth here, but to suggest that the SEC is innocent in all this is a bit of a stretch.

Mr. SIRRI. It is a fair point. I wouldn't mean to suggest that we were innocent, but I think I was just addressing whether credit default swaps were the root cause of what was at issue.

Mr. MARSHALL. It is argued that had those credit—as this unfolded, in order to entice investment money in order to be willing to take the risk, an awful lot of entities sought these credit default swaps, many, I suppose, anticipating that they were more than mere lip gloss, designed to fool people. And to the extent that they were real, and provided real insurance, we wouldn't be where we are at the moment, correct?

Mr. SIRRI. Well, the important thing to realize with credit default swaps is they are marked-to-market. So, in that context, even over-the-counter collateral and funds move on a daily basis. They shift in value. So, again, I think they are an important risk-shifting market, but I don't think within this context they were the essential element of what caused problems here.

You are correct that there were problems with counterparties who wrote those instruments. These are some of the things that would be addressed by a central counterparty, in the way that Chairman Lukken said.

Mr. MARSHALL. The concern that I think many of us probably have is we are looking for more than just lip gloss. And if you had multiple clearinghouses all competing with one another for business worldwide, how is it that this clearinghouse process would be any safer than the process the market devised and relied upon, which is credit default swaps themselves? It would potentially be another layer of lip gloss, and if we ran into the systemic problem that we ran into this time around, the same thing would occur.

Mr. SIRRI. I understand your question better now, so let me try and answer that.

Mr. MARSHALL. I started with an observation. The question is multiple DCOs competing with one another.

Mr. SIRRI. So one fair concern that one would have is if these central counterparties do compete, one might have a fear that you would have some type of a race to the bottom. I think there are two things that mitigate against that. One is that the customers of these folks are some of the people who are most concerned about credit risk. So I don't mean the banks themselves, I mean the customers of the banks. They may be hedge funds, they may be investment companies. They are concerned with the credit risk of their counterparties, the banks.

Mr. MARSHALL. If I can interrupt, that is the same thing that prompted the credit default system.

Mr. SIRRI. But they would have an interest in not taking on the credit risk of their counterparty.

Mr. MARSHALL. That is why credit default swaps were created to begin with.

Mr. SIRRI. They were created to adjust the credit risk of the IBMs, of industrial corporations. Here I am talking about the banks that write those swaps.

The second thing that would be important here is you would have in some of these proposals an exchange. An exchange would establish an arm's-length price. As that price was transparent and moved, the market would see that a credit was deteriorating. As you saw that credit deteriorate, you produce public information. That could affect margin, that could collect collateral flows, and reduce the systemic risk.

Mr. MARSHALL. There are two different things that we don't want to conflate; one is the price discovery function that is served by an exchange in exchange-traded standard contracts. And the second problem that we are trying to address today is with these OTC unique products, to what extent would multiple DCOs clearing these products enhance world security from another financial collapse. That is the real issue we are dealing with today, not the price discovery issue.

Mr. SIRRI. From my view, they are linking in the following sense. The price discovery that comes out helps those clearing organizations move the kind of collateral they need to move to mark these things to market. So the price discovery says, well, that swap was a 200 basis point swap. Now credit has gotten worse, it has gone

to a 300 point basis swap. That would happen. An example was——

Mr. MARSHALL. You would pick whatever product was closest on the exchange and use that to determine how to mark-to-market the comparable OTC derivative that is just being cleared, not on-exchange.

Mr. SIRRI. It would be an important input. It is an input that is absent today.

Mr. MARSHALL. Thank you, Mr. Chairman.

The CHAIRMAN. Thank you.

The gentleman from Indiana, Mr. Ellsworth.

Mr. ELLSWORTH. Thank you, Mr. Chairman.

Mr. Lukken, I think Mr. Sirri touched on this earlier, but would you take a stab for me at what form you think the clearinghouses should take or at least some components that you think would make this successful, that we can understand, and will stop this from occurring again.

Mr. LUKKEN. The Commodity Exchange Act requires that to be a designated derivatives clearing organization, that you have to meet 14 core principles. I encourage Members of this Committee to look through them because they are very readable in layman's terms. But they require the keeping of financial safeguards; that there is proper membership, proper ownership of the derivatives clearing organization; and they walk through all the things that we as a regulator look to that entity to have in place, all the controls in place to ensure that the credit in the central counterparty is working.

Basically, how central counterparties work is people come to these markets and they agree to—even though they have potentially entered into a transaction with a third party, they agree to allow the central counterparty to be the opposite party of that transaction. And that central counterparty is a guaranteed party. They always pay.

And so instead of me having to rely on, for example, Erik and me entering into a transaction, I understand I will enter in with a central counterparty, and that is guaranteed to pay that transaction. It allows for money to flow without the concern that somebody might default on that payment.

It works very well, and has worked since 1925. In the futures industry we have never had a default on a guarantee by a clearinghouse. It is a proven system. We do have over-the-counter derivatives currently clearing in our clearinghouses energy and other types of financial assets. So we think it is a proven solution. It is not always guaranteed. It provides safeguards, but there is always concern that somebody may—the clearinghouse may default, and that is why we walk them through these processes to ensure they are backing these transactions.

Mr. ELLSWORTH. Are there other things that we can do to discourage the excessive speculation? I guess eliminating naked swaps would be one way. Are there other ways that you can think of that we would discourage that?

Mr. LUKKEN. As I mentioned in my testimony, and as touched on by Erik, I think finding the appropriate capital charges for these transactions, as they are being held by institutions, is something

we will have to revisit. I am not sure that we were holding enough back in collateral for the risks that we are now seeing in the system. I am not an expert in that area, but it just seems to me that that is another area besides encouraging central trading—or central clearing. Another area that we might have to revisit is capital charges.

Mr. ELLSWORTH. Mr. Sirri, any response on that?

Mr. SIRRI. I would agree with what Chairman Lukken said. You may have personally sold stock on something like the New York Stock Exchange or on NASDAQ, and you never worried about whether you got paid nor did you worry about who bought the stock that you sold. The reason is that there is a central counterparty in there that a day after you trade locks that trade in and stands between you and the person who bought that stock from you.

The same thing is what happens here. By putting a central counterparty in that central default space, you are no longer subject to the kind of rumors, or to the kind of concerns, or to the kind of manipulations that would be possible if you had a pool of bilateral contracts. That counterparty's financial fortunes may falter later on, but because the central counterparty is in place instead of that original counterparty, you are insulated from that risk.

Mr. ELLSWORTH. Thank you very much.

Mr. Chairman, I would yield back.

The CHAIRMAN. If I could take the rest of your time, would the Members be all right with that?

One of the things that I have raised: If we go onto these clearing exchanges, it is going to cost money, and it is going to require capital requirements and margins, whatever, which we do not have now, really, in the over-the-counter market.

So one of the things that concerns me is, what is going to happen here? Are we going to have people just shift over to the over-the-counter market so they do not have to pay that and so that they do not have to be subject to that regulation and so forth?

I guess it is kind of the same argument we had. Well, if you regulate these guys, they are going to go overseas, and we are not going to be able to do anything with them. Well, we saw where that whole argument got us, along with the argument that these guys are too big to regulate and so forth.

So is there some way that we could have an incentive to move onto the regulated market; in other words, where it would cost you more to be in the over-the-counter market than it would cost you to go onto the regulated market in terms of what the actual price is to go onto that regulated market? Is there some way that we could put some kind of—I don't know—penalty or tax or whatever on these people who are in the over-the-counter market to try to encourage people to go into a clearing situation so we can know what they are up to?

Mr. LUKKEN. I will take a stab at it.

Yes, I think that is what we should be doing, because there is a public good in getting into a registered clearing organization. We do not want to have reverse incentives where we drive people out of that type of environment.

I think we are going to have a natural migration to a central counterparty, though. We saw that with Enron. We saw the energy markets looking for this solution. They wanted to come to a guaranteed counterparty-type environment. So I think, naturally, we are going to see migration there.

But, as policymakers think about this in the coming months, they should think about what are the costs of each of these things and whether they are being held by a firm in an individual, negotiated-type fashion or cleared. The incentives should be towards clearing and trading these on-exchange, so that you may want to look, as we mentioned, at the capital requirements of people holding these on their books *versus* those who choose to come to a central clearinghouse.

The CHAIRMAN. Thank you.

The gentleman from Ohio, Mr. Space.

Mr. SPACE. Thank you, Mr. Chairman.

Mr. Lukken, you mentioned a few moments ago in response to Mr. Ellsworth's questioning that no clearinghouse has ever defaulted in these other fields. I understand the benefits of clearinghouses in terms of risk management and internal controls and regulations; but these CDSs and other exotic mechanisms clearly caused the need to rescue AIG.

Is it conceivable that a U.S. futures clearinghouse would ever default? If so, would not the effect of such default be systemically catastrophic beyond anything we have seen thus far?

Mr. Lukken. I think you are exactly right. I mean, that is one concern, that it is a highly regulated entity and that there is a significant concentration of risk in one entity. So, when we walk through the regulations with these organizations, we make sure that they have proper controls in place, that they stress-test this environment, that there is a guaranty fund involved in this, that the funds are segregated, that they are mark-to-market daily—twice-daily in most instances.

So you are exactly right in that there is a concentration of risk here, but I think the benefits outweigh the risks of going to this type of a model.

I mean, what we have seen by going to clearing is that regulators would see a greater window into these transactions. We would be able to manage the credit and counterparty risk by having some transparency in this area *versus* what we are seeing today, which is, we do not know what is out there, and this is unraveling on its own. Whereas, if we saw this in one location, I think it would be a much better way to manage the risk of the system.

Mr. SPACE. As I understand it, one of the differences between you and Mr. Sirri's concerns is whether this should be in one location *versus* in multiple central counterparties.

Is that a correct assessment?

Mr. LUKKEN. No. I think we have both said that there should be and that there can be multiple clearinghouses of these types of products, and that is what the law allows.

Mr. SPACE. Okay. I have another question.

Professor Hu will be testifying in the next panel. He references some of the concerns and problems of the system. In one of them he identifies, of the CDS process, how credit default swaps can

sometimes undermine the soundness of corporations referenced in the swaps. Specifically, he talks about decoupling the ownership of debt with economic exposure to the risks associated with default—in other words, creditors having no incentive to work with troubled debtors.

How does the presence of a large clearinghouse affect that problem associated with the CDSs?

Mr. SIRRI. I think those are really two different issues. The purpose of a central clearinghouse is to be sure that promised payments are made. When you and I enter into a contract, you and I make the kind of payments that are stipulated by that contract.

I have not read Professor Hu's testimony.

As I understand what he is saying, you have a situation where someone who has exposure to an underlying credit through a credit default swap has a different set of incentives than someone who actually owns the bond. That might be true, but I want to point out that that is true with any number of other kinds of derivatives.

For instance, in the futures markets, I could own 500 individual stocks or I could buy an S&P 500 future in the options market. I could buy a call on General Motors and have an exposure that way, or I could own a share of General Motors stock. Each of them creates similar economic exposures.

So that attribute of credit default swaps is similar to the attribute of futures, and it is similar to the attribute of options, contracts we have become comfortable with over the years and whose issues, I think, we have learned how to manage.

Mr. SPACE. Mr. Lukken.

Mr. LUKKEN. I agree. I think his testimony is getting to the fact that there is more incentive when you have skin in the game to manage the risks associated with owning an underlying asset.

As Erik said, in the regulated space, there are a lot of people who are able to buy futures contracts in a variety of different commodities, whether it is corn or wheat or financial futures, without owning the underlying asset. So it is a problem. But I think it is a separate issue than the clearing issue, which is ensuring guaranteed payments on the credit risk side.

Mr. SPACE. Okay. Thank you. I yield back.

Mr. HOLDEN [presiding.] The gentleman from Minnesota, Mr. Walz.

Mr. WALZ. Well, thank you. Thank you to the Chairman and to the Ranking Member for holding this hearing, and thank you to our two witnesses. This has been very informative.

I would like to go back to, I think, put this into perspective. Picture today that America is listening to this.

I just came from the plains of southern Minnesota. What are they hearing? I heard this term "trust" being used. This is fundamental, this crisis of confidence that is out there; and if you cannot hear the rage, open the window. It is there, and people are wondering what is going on and what is happening.

Now, I heard talk that there was going to be voluntary cooperation. Well, please excuse the healthy skepticism from my constituents when they are not buying that right now, so there are a couple of things I want to ask.

First, Mr. Sirri, in listening to your testimony and in listening to where we are, it seems like the consensus is large that we may have a different opinion in the next panel in moving toward the clearing of these.

A few weeks ago, Chairman Cox was very clear on the CDSs; he said they should be regulated. Is that the Administration's position?

Mr. SIRRI. I believe Chairman Cox is clear in his view there. As I understand it, his view is that there is a regulatory hole in that these instruments are not appropriately regulated and that there is sufficient importance that it would be helpful if Congress were to act and would provide regulatory authority.

Mr. WALZ. So that is Chairman Cox's position. Is it the Administration's position?

Mr. SIRRI. I cannot speak for the Administration.

Mr. WALZ. America would like to know, because what is happening right now is that we are hearing conflicting issues across the spectrum, and it changes day to day.

If we are talking about trust and a crisis of confidence, that is what we need to get to, and that is why I am very appreciative of our holding this hearing. But we have not heard that yet. What we are hearing now are reasons and excuses, and every one of us who is out there hearing this, if you happen to be on the other side of the political spectrum, we hear Fannie Mae and Freddie Mac and nothing else. I do not think anybody in this room believes that is totally the issue or totally not the issue.

So I think it is a concern in that we are hearing conflicting messages from the key players in this, and that is very frustrating for the public.

I would ask again the impact that it is making on that, and the idea that they simply do not understand all of what is happening here. This is too sophisticated for the people who are out there working jobs that pay them \$40,000 a year, who are trying to save for retirement, who are trying to figure out how to get their kids to college. It matters to them; it matters to them what is happening here. So I think we are getting at this, and I am glad that we are moving in the right direction.

My question to both of you is this, and I think it gets at the heart of this: Assuming that clearing is the way we go and assuming we work out all of the details that happen there, aren't we fighting the last war? What are we going to do in the future to make sure this does not happen again?

I know, Mr. Lukken, you spoke of this, and I thought you were passionate about it in your testimony, but you did not flesh it out, really. What is going to be the next shadowy world that emerges? Isn't it incumbent upon us to anticipate what it is and to make sure that this does not happen again?

I would be glad to listen.

Mr. LUKKEN. I think in the modern regulatory financial system information is key. We have to, as regulatory authorities, make sure that we are getting the proper information to make informed decisions. So that, I think, is the path we have to pursue no matter what instruments are being traded; and it has to be consistent and fair across all products.

What we have tried to lay out, or what I have tried to lay out, is that at times there is an event that should trigger our getting additional information and regulatory oversight.

This Committee did an admirable job of looking at the energy swaps market and in determining that at a certain point in time there is a public interest that arises in wanting to regulate these instruments. I think now we are looking at financial derivatives in the same context and that at some point there is a public interest, that a significant price discovery function begins to happen. When people start quoting these in policy papers and on CNBC and elsewhere that there is a need for us to get in there and to get more information, and to regulate these products.

So that is what we are going through today. As a legislator, it takes time, but we are hopeful to do this as quickly as possible.

Mr. SIRRI. You made a very good point, and I think we are always aware that we are solving yesterday's problem and that we are playing catch-up. As a regulator and especially as a financial regulator, I think that is something we are sensitive to. It is a criticism that we hear.

I think the issue today is with credit default swaps, although not yesterday's problem for two reasons: One, it is a large, important and growing segment of the risk management community. It is also a particular instance of securities-based swaps, and I expect more novation to occur there. The second and perhaps more important reason is that we are creating a template, a template that allows for the contracts to exist, but that provides for risk management and systemic risk control over a portion of that market, the standardized portion. I don't know if it can be replicated across other contracts, but I am hopeful that this kind of process is a process that can be replicated and that might be useful in other settings.

Mr. WALZ. Well, I am very appreciative of both of you coming here and taking the time to explain this.

I think the Chairman stepped out, but I do think it is important to note that this issue, when it was in the oil futures, as well as this, this is something that the Chairman and that the other Members of this Committee have been talking about and have been providing the foresight. I just hope we have that ability to get that out there ahead of time, but I appreciate both of you.

I yield back.

Mr. HOLDEN. The gentleman from North Dakota, Mr. Pomeroy.

Mr. POMEROY. I thank the Chairman.

I am interested in where we go from here, but I am also, as part of that effort, interested in understanding precisely where we are and how we got here relative to CDS exposure throughout our economy at this hour. It just seems so paradoxical to me.

As I have sat on this Committee over the years, I have learned about these over-the-counter, unregulated activities and about these wonderful financial innovations that were going to alleviate risk. As an old insurance commissioner, I like ways that you can shed risk, and I understand how that is going to have a positive impact on growth.

In this utterly unregulated context where we were told, essentially sophisticated players would be able to manage this because obviously they would only want to shed risk to creditworthy enter-

prises, we are seeing that no one really knows. A lot of the CDS commitment out there is highly questionable in terms of whether or not the risk-assuming party can actually pay on the triggering event. So instead of alleviating risk, we have compounded risk with false security on the way up and aggravated uncertainty on the way down.

We have to get our hands around how in the world this happened.

Now, the CFTC had no regulatory authority, and its interest in what was occurring in the deregulated area went away at the end of the last decade. Is that a fair statement, Mr. Lukken?

Mr. LUKKEN. As the over-the-counter market developed, the CFTC really never had jurisdiction over it. It was exempted in 1994 by the CFTC. Then, in 2000, it was codified to exclude us from regulating in this area.

Mr. POMEROY. Okay. I am not going to argue; if that is fact, that is fact. The SEC had no regulatory authority. This Office of Risk Management, are they supposed to just look at the regulated activity or are they supposed to look at broader economic activity occurring that is going to impact regulated activity?

Mr. SIRRI. Their charge is actually not at all related to this.

Mr. POMEROY. What I am curious about is that the balance sheets of lots of regulated enterprises have basically been positively affected because they have shed risk on these CDSs; is that correct?

Mr. SIRRI. The credit default swaps are risk management tools and do let you shed or take on risk.

Mr. POMEROY. So we let them, in an unregulated sense, shed risk to parties who may or may not be creditworthy; but the regulator looks at a balance sheet that has been improved by the shedding of risk. Is that correct?

Mr. SIRRI. That could happen.

Mr. POMEROY. Now, under that circumstance, is there no one in the SEC looking at what is occurring in this unregulated avenue as it may impact the regulated avenue?

You said that the credit default swaps have doubled in the last 2 years. Now are you telling me nowhere in the SEC is anyone evaluating, at least as kind of a—isn't there some corner of the place where we have someone thinking, how is all of this going to work in the end?

Mr. SIRRI. Well, it is important to know what our authority is. Our authority is only over fraud, so if there is fraud in this market, we can step into it.

Mr. POMEROY. You are absolutely limited from even exploring the accumulation of systemic risk in an unregulated, questionable context that might impact those regulated enterprises, but the public interest of those enterprises is under your jurisdiction?

Mr. SIRRI. For example, these instruments that you are talking about, credit default swaps, we regulate broker-dealers, and we have strong authority over broker-dealers, but large financial firms tend to hold these credit default swaps outside of broker-dealers in unregulated affiliates over which we have no authority.

Mr. POMEROY. So, basically you have statutory blinders? Nowhere in the SEC can you look at what is occurring in this unregulated area as it may impact the regulated area; is that correct?

Mr. SIRRI. When the Chairman talked the other day about the regulatory hole for these large securities firms, he in part was referring to these kinds of situations where we do not have the ability to oversee these affiliates.

Mr. POMEROY. Have you been statutorily limited from evaluating? I mean, it would seem to me, if I were at the SEC, I would say, "What is occurring here? We have had a doubling in the last 2 years. What are we doing about it?"

Now, wouldn't that Office of Risk Management have an ability to take a look at that?

Mr. SIRRI. There is some amount of information that they may be able to collect, but we do not even have the authority to compel production of information to us outside of an informant process.

Mr. POMEROY. Correct. But is there an analytical capability within the SEC to at least hypothesize about the danger to regulated activity from this unregulated activity?

Mr. SIRRI. We may be able to hypothesize, but we like to work with data.

Mr. POMEROY. Well, I would be happy with anything.

So, has anyone hypothesized?

Mr. SIRRI. I cannot answer that question. I think what we do understand is that these are important tools, that these are large markets and that they are worthy of our attention. So things like exchange trading—

Mr. POMEROY. Okay. They are worthy of your attention. Is anyone paying attention?

Mr. SIRRI. I think we are. The way we are doing it, as a group of regulators, is by the core efforts with the central counterparty and exchange trading. They are the most efficient.

Mr. POMEROY. Are you talking about the retroactive application of that?

Mr. SIRRI. Well, if these things were to be centrally cleared and prices produced, those prices would be useful for contracts.

Mr. POMEROY. A prospective or retrospective?

Mr. SIRRI. A contract that trades today would help inform prices of contracts that already exist, so it would have a retrospective component.

Mr. POMEROY. I am out of time.

I am not quite sure I follow that. If we created a clearinghouse and moved futures activity through it, would we in the next few months be able to get a more clear sense of basically how much risk has been shed that is unlikely to be recovered?

Mr. SIRRI. I understand what you are saying. I think in many ways the answer to that is "yes." There are processes in place for the compression of these trades that would let counterparties look and say, "All right. I may have a whole bundle of credit default swaps. Through an efficient process of compressing them down, we can understand what those exposures are, and we can compress and net them down to a much smaller exposure."

That is the kind of thing that can be facilitated by the information produced by a central counterparty. So, yes, it will have an effect on that issue.

Mr. LUKKEN. Congressman, one of the objectives of the regulators—the SEC, the Federal Reserve and the CFTC—in this process is to make sure that it is not just a central counterparty for future business, but that it is getting at the current holdings of credit default swaps that are on the books today. We want to be able to get a lot of that potentially risky business onto a clearinghouse and into view of regulators and through a central counterparty.

Mr. POMEROY. I am deeply alarmed that we have had this doubling of the last 2 years, which has been a rough period of time. So we are not on the way up anymore during the last 2 years; and you have CDSs doubling, and we do not have a refined regulatory proposal in this area. I surely look forward to working to develop one.

Thank you. I yield back.

The CHAIRMAN [presiding.] I thank the gentleman, and I thank the panel for their being with us and for their answers. And I thank the Members for their good questions. We will dismiss this panel.

We would now like to invite our second and final panel to the table: Mr. Robert Pickel, the Chief Executive Officer of the International Swaps and Derivatives Association of Washington, D.C.; Professor Henry Hu, the Allan Shivers Chair in the Law of Banking and Finance of the University of Texas School of Law at Austin; Mr. Johnathan Short, Vice President and General Counsel of IntercontinentalExchange of Atlanta, Georgia; and Ms. Kim Taylor, Managing Director and President of the Clearing House of the Chicago Mercantile Exchange, Inc., Chicago, Illinois.

I welcome the members to the panel. We appreciate your being with us.

Mr. Pickel, as soon as everyone gets organized here and gets settled in, we would welcome your testimony.

All of the witnesses, your full statements will be made part of the record. We will ask you to try to, potentially, summarize your statements, and try to stay within the 5 minute rule that we have for this Committee.

So, Mr. Pickel, if you are ready, we appreciate your being with us. We look forward to your testimony.

**STATEMENT OF ROBERT G. PICKEL, EXECUTIVE DIRECTOR
AND CEO, INTERNATIONAL SWAPS AND DERIVATIVES
ASSOCIATION, WASHINGTON, D.C.**

Mr. PICKEL. Thank you, Mr. Chairman.

Chairman Peterson, Ranking Member Goodlatte and Members of the House Agriculture Committee, thank you for inviting ISDA to testify on the role of credit derivatives in the U.S. economy.

ISDA represents participants in the privately negotiated derivatives business, and we have 830 member institutions from 56 countries around the world. These members include most of the major institutions who deal in privately negotiated derivatives. Among

other types of documentation that we publish for this market, ISDA produces definitions related to credit default swaps.

Credit derivatives serve multiple uses. A CDS can be used by the owner of a bond or loan to protect itself against the risks that a borrower will not make good on its promises. A CDS can also be used to hedge against other risks related to the potential default of a borrower. Or, a CDS can be used to express a view about the health of a particular company or of the market as a whole.

An investment fund might believe that there will be a large number of corporate bankruptcies in the future. In order to meet its fiduciary duty to invest its clients' money prudently, the fund might seek to generate returns during those bankruptcies by purchasing credit protection on one or more companies the fund believes are most likely to default. The use of credit derivatives in this manner is similar to someone who sells wheat futures or who buys put options on a security when they do not own the underlying wheat or shares.

The last several weeks have seen major credit events in the credit default swap market. Fannie Mae and Freddie Mac, two of the world's largest issuers of debt, were taken into government conservatorship. Shortly thereafter, Lehman Brothers, one of the largest OTC derivatives dealers, filed for bankruptcy. Then Washington Mutual, likewise, filed for bankruptcy protection.

All of the above companies were referenced under a large number of credit default swaps. They also tended to be counterparties to a large number of other types of derivative trades. Despite defaults by these firms, the derivatives market and, in particular, the credit default swap market have continued to function and to remain liquid. This is true even while other parts of the credit markets have seized up and while the equity markets have declined. Credit derivatives remain one of the few ways parties can continue to manage risk and to express a view on market trends.

Under U.S. law, the counterparties to a failed firm like Lehman Brothers are able to net out payments owing to and from the bankrupt counterparty without having to wait for a bankruptcy judge to resolve claims. The failure of this large Wall Street firm has not caused the failure of its derivatives counterparties. That risk was contained because of the prudent structure of insolvency law in the United States and in the apparently sensible collateral requirements of Lehman's counterparties.

As has occurred in previous credit events, ISDA held an auction to determine the cash price of the outstanding debt of Fannie, Freddie and Lehman, and it will do so for Washington Mutual as well. These auctions were done according to well-established procedures, and they resulted in the successful settlements of the outstanding CDS trades on those companies. Participants in the CDS business have seen their trades settled in an orderly fashion and according to swap participants' expectations.

Regarding AIG, our observation is that AIG's situation was a result of its overexposure to mortgage finance, primarily by taking exposure to various tranches of CDOs, collateralized debt obligations. Also, we believe that the collateral practices of AIG, where they agreed to post collateral only upon a downgrade, exacerbated their problems. If they had used collateral extensively from the

start of their trading relationships, we believe that the situation would have been far less, very similar to this mark-to-market situation that exists generally in the derivatives business, as well as through the clearinghouse functions. The regular use of collateral provides credit protection and it also provides trading discipline.

Before closing, I would like to address an issue that has come up recently regarding credit default swaps. With respect to exchange trading, by definition, OTC contracts—over-the-counter, privately negotiated contracts—cannot be traded on an exchange. They exist because there was and there will always be a need for individualized, custom-tailored, private risk management contracts. Anything that eliminates that risk management option will not eliminate the need for these contracts. They will simply be done elsewhere.

In conclusion, there is little dispute that ill-advised mortgage lending, coupled with improperly understood securities backed by those loans are the root cause of the present financial problems.

We heard from Mr. Sirri earlier. And in Mr. Parkinson's testimony, they both made clear that CDS did not cause the faults of individual companies or the general economic crisis that we are experiencing. It is also true, however, that recent market events clearly demonstrate that the regulatory structure for financial services has failed. Laws and regulations written in the 20th century need to be changed to account for 21st century markets and products. An in-depth examination of the U.S. regulatory structure is self-evidently warranted.

In this examination, it is ISDA's hope that the facts surrounding OTC derivatives and the role they continue to play in helping to allocate risk and to express a view on market activity will highlight the benefit of derivatives, of industry responsibility, and of widely applied good practices. We at ISDA look forward to working with this Committee and with other Committees of Congress to address that overall regulatory structure.

Thank you, Mr. Chairman. I look forward to your questions.

[The prepared statement of Mr. Pickel follows:]

PREPARED STATEMENT OF ROBERT G. PICKEL, EXECUTIVE DIRECTOR AND CEO,
INTERNATIONAL SWAPS AND DERIVATIVES ASSOCIATION, WASHINGTON, D.C.

About ISDA

ISDA, which represents participants in the privately negotiated derivatives industry, is the largest global financial trade association, by number of member firms. ISDA was chartered in 1985, and today has over 850 member institutions from 56 countries on six continents. These members include most of the world's major institutions that deal in privately negotiated derivatives, as well as many of the businesses, governmental entities and other end-users that rely on over-the-counter derivatives to manage efficiently the financial market risks inherent in their core economic activities.

Since its inception, ISDA has pioneered efforts to identify and reduce the sources of risk in the derivatives and risk management business. Among its most notable accomplishments are: developing the ISDA Master Agreement; publishing a wide range of related documentation materials and instruments covering a variety of transaction types; producing legal opinions on the enforceability of netting and collateral arrangements; securing recognition of the risk-reducing effects of netting in determining capital requirements; promoting sound risk management practices; and advancing the understanding and treatment of derivatives and risk management from public policy and regulatory capital perspectives. Among other types of documentation ISDA produces definitions related to credit default swaps.

About Credit Default Swaps

Credit default swaps (CDS) are privately negotiated contracts which require one party to pay another in the event a third party cannot pay its obligations. To use an example, an investment fund that owns a large number of bonds issued by a corporation may want to protect its investors against the possibility that the corporation goes bankrupt. The investment fund would then seek a counterparty, usually a commercial bank, an investment bank or other financial institution, that is willing to enter into a CDS contract. Under the terms of this contract the investment fund agrees to periodically make payments to the counterparty, usually every 6 months for a specified time period such as 5 years. The counterparty (*e.g.*, the bank, investment bank or financial institution) agrees to pay the full amount on bonds or loans issued by the corporation if there is a “credit event”. Parties to a CDS contract are free to choose what constitutes a “credit event”; under standard ISDA documentation credit events include an issuer’s bankruptcy, the acceleration of payments on its obligations, default on its obligations, the failure to pay its obligations, the restructuring of the issuer’s debt or a repudiation or moratorium on payment on its obligations.

Credit derivatives like CDS serve multiple uses. As in the example above a CDS can be used by the owner of a bond or loan to protect itself against the risk that the borrower won’t make good on its promises. A CDS can also be used to hedge against other risks related to the potential default of a borrower. For instance, an auto parts company that is heavily reliant on one auto manufacturer as its primary customer might seek to protect itself against the risk that manufacturer will go out of business. One way to do so would be to purchase credit protection (through a CDS) on that company. Though not a perfect hedge, such protection could at least help limit the fallout from that customer’s bankruptcy.

CDS can also be used to express a view about the health of a particular company or the market as a whole. An investment fund might believe that there will be a large number of corporate bankruptcies in the future. In order to meet its fiduciary duty to invest its clients’ money prudently the fund might seek to generate returns during those bankruptcies by purchasing credit protection on one or more companies the fund believes are most likely to default. Use of credit derivatives in this manner is similar to someone who sells wheat futures or buys put options on a security when they don’t own the underlying wheat or shares. In each case the idea is to maximize profits from a decline in prices.

Recent Market Turmoil

Beginning in the summer of 2007 investors became aware of growing problems in certain securities backed by residential mortgages. In particular, it appeared that home loans made to borrowers with lower credit scores were experiencing higher-than-expected rates of default. This occurred simultaneously with an increasingly steep drop in the value of homes in the U.S. Thus mortgage loans were defaulting and the value of the homes that secured the loans were falling below the value of the loan itself.

Some of these mortgage loans had been sold by lending banks and repackaged as securities called “collateralized debt obligations,” or “CDOs”. Although CDO and CDS are similar abbreviations, they are very different products. As described above a CDS is a privately negotiated contract between two parties. A CDO, on the other hand, is an investment security that can be bought and sold freely on the market. Like other securities in the U.S., CDOs are subject to the disclosure and other requirements of the securities laws; nevertheless it appears that these CDOs, widely sold to investors throughout the U.S. and the world, were fundamentally mis-priced. Worse, in some cases the structures of the CDOs themselves were extremely complicated and apparently not well understood.

As mortgage defaults increased and housing prices fell, the value of these CDOs became increasingly unclear. The secondary market for CDOs disappeared as buyers were unwilling to purchase securities backed by assets which were declining in value. When markets lack buyers it becomes difficult to determine the fair value of an asset; banks, investment firms, institutional investors and others were required to mark down the value of their portfolios. On paper these institutions themselves appeared to be rapidly losing value.

The Role of CDS in the Market Turmoil

From ISDA’s conversations with regulators and market participants it appears that the role of CDS in the recent market turmoil can be described as follows:

First, CDS make the pricing and extension of credit more efficient. If a lender can be sure it will be repaid regardless of whether a borrower defaults, it is more likely to lend. There are many reasons that the last 10 years have seen a world flooded

with cash: loose monetary policy on the part of central banks; oil countries seeking to invest wealth generated by high energy prices; tremendous economic growth in emerging markets like India, China and Brazil. Experience demonstrates that, in retrospect, many loans were made that never should have been made.

Second, many credit derivatives require counterparties to post collateral in order to guarantee payment. Under any derivative contract both parties guarantee they will make payments to each other based on the value of some other asset or index thus both parties face risk both in terms of the price of that asset as well as the risk that their counterparty will be able to make its required payment. It is because of this last type of risk, called "counterparty credit risk," that a derivative contract counterparty may be required to increase the amount of collateral it gives to the other party to the contract if the first party experiences a change in its financial condition. For instance, a triple A rated company will generally be required to post less collateral than a single A rated company. But if that triple A rated company faces a ratings downgrade, it may be required to post more collateral.

In a typical situation a party that sells protection under a CDS contract is guaranteeing that it will pay the value of bonds issued by a third party. If that third party's financial condition worsens the counterparty that bought protection will require that the protection seller post more collateral. If this happens at the same time the protection seller has also suffered a deterioration in financial condition, it will be required to post still more collateral. Improperly managed, a derivatives counterparty could face a situation akin to a run-on-the-bank, where as its financial condition worsens it becomes subject to more and more collateral calls until it can no longer meet its obligations under its derivatives contracts. This risk is not new or confined to derivatives markets; many financial contracts have a "material adverse change in condition", or MAC, clause that functions similarly. Swap participants have long been aware of this risk; the need for careful management was highlighted 15 years ago in a document outlining good risk management practices for the Group of Thirty, the widely cited "Derivatives: Practices and Principles." Nevertheless for counterparties that fail to follow good practices the consequences can be significant.

This appears to be what happened in the case of AIG. AIG was one of America's largest corporations, an insurance company regulated under the laws of the State of New York as well as a thrift holding company supervised by the Office of Thrift Supervision. AIG was highly rated by SEC licensed rating agencies, who considered it well capitalized. Many of AIG's derivatives counterparties apparently did not require it to post collateral; in particular AIG Financial Products, a wholly owned subsidiary of AIG active in the derivatives business, did not routinely post collateral. When on September 16, 2008, AIG's credit rating was downgraded, its creditors, including counterparties to derivatives contracts, demanded the company post more collateral than it had available. AIG was unable to meet its contractual obligations and sought assistance from the U.S. Government.

While the market value of AIG's contracts has declined, and its collateral requirements have increased, we are not aware that they have been called upon to make payments following defaults on significant numbers of obligations. An increase in the market value of mortgage backed securities, or merely the performance of the mortgages underlying the mortgage backed securities it has guaranteed, would reduce AIG's difficulties substantially. To our knowledge AIG has performed on all of its obligations.

The Performance of Credit Derivatives in the Current Market

The last several weeks have seen five major credit events. On September 15 Tembec Inc., a Canadian forest products company, filed for bankruptcy in the U.S. This filing was largely lost in the cavalcade of bankruptcies and credit events that followed: Fannie Mae and Freddie Mac, two of the world's largest issuers of debt, were taken into government conservatorship. Shortly thereafter Lehman Bros., one of the largest OTC derivatives dealers, filed for bankruptcy. Then Washington Mutual likewise filed for bankruptcy protection.

All of the above companies were referenced under a large number of CDS; with the exception of Tembec they also tended to be counterparties to a large number of other types of derivatives trades. Despite defaults by these firms, the derivatives markets, and in particular the CDS market, has continued to function and remain liquid. This is true even while the other parts of the credit markets have seized-up and the equities markets continue to decline precipitously. Credit derivatives remain one of the few ways parties can continue to manage risk and express a view on market trends.

The failure of Lehman Bros. provided a test case for managing the default of a major derivatives dealer. Despite dire predictions and erroneous press reports, OTC

derivatives transactions are designed to deal with the failure of any market participant, even a major dealer. Starting in the late 1980s, Congress acted to amend the bankruptcy and banking insolvency statutes to ensure that the failure of a major counterparty to a qualified financial contract, such as a swap agreement, would not spread systemically and threaten other market participants. Thus, under U.S. law the counterparties to a failed firm like Lehman Bros. are able to net-out payments owing to and from the bankrupt counterparty without having to wait for a bankruptcy judge to resolve all claims. Additionally, counterparties are allowed to foreclose on collateral the failed party posted. In this way a derivatives counterparty is protected against suffering large losses because the other party to the contract can't meet its obligations.

The bankruptcy of Lehman Bros. shows the strength and resiliency of this system. The failure of this large Wall Street firm has not caused the failure of its derivatives counterparties; that risk was contained because of the prudent structure of insolvency law in the U.S. and the apparently sensible collateral requirements of Lehman's counterparties.

In addition to the resiliency of the derivatives markets in the face of the failure of a major counterparty, the credit events involving Fannie and Freddie likewise demonstrate the strength of the business. As noted above Fannie and Freddie were two of the world's largest issuers of debt and likewise two of the largest objects of CDS protection. When the U.S. Government decided to place these GSEs in conservatorship, the credit event provisions of the standard ISDA documents were triggered. That meant that thousands of CDS trades on Fannie and Freddie needed to be settled. Likewise, Lehman was also the object of thousands of CDS trades which needed to be settled in light of that company's bankruptcy.

As has occurred in previous credit events ISDA held an auction to determine the cash price of the outstanding debt of Fannie, Freddie and Lehman. These auctions, occurring on October 8 (in the case of the GSEs) and October 10 (in the case of Lehman) were done according to well established procedures and resulted in the successful settlement of the outstanding CDS trades on the three companies. As has occurred in the case of previous credit events, participants in the CDS business have seen their trades settled in an orderly fashion and according to swap participants' expectations.

Conclusion

As this testimony makes clear, both the role and effects of CDS in the current market turmoil have been greatly exaggerated. There is no question that CDS facilitate lending and corporate finance and, as such, have impacted and been impacted by recent events. However to say that CDS were the cause, or even a large contributor, to that turmoil is inaccurate and reflects an understandable confusion of the various financial products that have been developed in recent years. There is little dispute that ill advised mortgage lending, coupled with improperly understood securities backed by those loans, are the root cause of the present financial problems. It is also true, however, that recent market events clearly demonstrate that the regulatory structure for financial services has failed. Laws and regulations written in the 20th century, in many cases designed to address markets which existed in the 18th century, need to be changed to account for 21st century markets and products. An in-depth examination of U.S. regulatory structure is self-evidently warranted.

In this examination it is ISDA's hope that the facts surrounding OTC derivatives, and the role they continue to play in helping allocate risk and express a view on market activity, will highlight the benefit of derivatives and of industry responsibility and widely applied good practices. Derivatives have continued to perform well during a greater period of stress than the world financial system has witnessed in decades. In the wake of failures of major market participants, both counterparties and issuers of debt, CDS participants have settled trades in an orderly way precisely according to the rules and procedures established by Congress and market participants. In this respect CDS activity has been a tremendous success. We are confident that policymakers and market participants alike will find their prudent efforts in helping build the infrastructure for derivatives over the last 25 years have been rewarded.

The CHAIRMAN. Thank you, Mr. Pickel.
Professor Hu.

**STATEMENT OF HENRY T.C. HU, J.D., ALLAN SHIVERS CHAIR
IN THE LAW OF BANKING AND FINANCE, UNIVERSITY OF
TEXAS SCHOOL OF LAW, AUSTIN, TX**

Mr. HU. Mr. Chairman and distinguished Members of the Committee, thank you for this opportunity.

My name is Henry Hu. I teach at the University of Texas Law School, and my testimony today reflects only preliminary personal views. I ask that the written testimony I have submitted also be included in the record.

The public and private efforts to improve the operational infrastructure for credit default swaps of the sort just discussed by Chairman Lukken and Director Sirri are extremely valuable. Credit default swaps create a web of dependencies among widely disparate, often very important participants in the world capital markets. Possible clearinghouse arrangements and ISDA's netting and other efforts can, indeed, help reduce the systemic risks being created by such swaps.

However, I would like to briefly look beyond these operational infrastructure matters. I will focus on three other matters that I think are also important to consider: the possible creation of a data clearinghouse, errors in financial institution decision-making, and debt decoupling.

First is the matter of data. Each OTC derivatives contract is individually negotiated and is not required to be disclosed to any regulator. No one regulator knows on any sort of real-time basis entity-specific exposures, the ultimate resting places of the credit market and of other risks associated with OTC derivatives, or some of the other facets of the web of dependencies created by OTC derivatives.

The disclosure situation as to credit default swaps may be particularly deficient. For instance, the best source of statistical information as to OTC derivatives overall is the BIS Triennial Survey issued by the Bank for International Settlements. These periodic surveys are based on polls of derivatives dealers that are conducted by 54 central banks and monetary authorities. Yet those surveys do not even cover turnover in credit derivatives.

There is likely a need for a data clearinghouse for credit and for other OTC derivatives activities worldwide, as I have argued for, for some time. That is the centralized, comprehensive, near real-time disclosure of such transactions in some standardized and retrievable computerized form. Such a data clearinghouse may well help to provide advance notice to regulators of possible problems. Should possible problems arise, this data clearinghouse can contribute to the informational predicate for proper regulatory responses.

Second is the matter of financial institution decision-making. In a 1993 article, I suggested that there were a variety of structural factors, perhaps, causing even sophisticated financial institutions to make mistakes as to complex financial products. For example, I refer to certain psychological biases and to certain compensation incentive structure problems.

One cognitive bias is the human tendency to ignore low-probability, catastrophic events. One incentive structure problem relates to the temptations posed by the highly asymmetric nature of

the payoffs often found in the derivatives industry—huge wealth if the rocket scientist is perceived by his superiors as doing well and typically, at most, simply losing your job if you are not.

There is not enough public information as to whether these structural factors undermined American International Group's decision-making with respect to credit default swaps, but it may be a matter worth looking into. For instance, I do point out the psychological tendency to ignore low-probability, catastrophic events. In August 2007, the head of the AIG unit responsible for credit default swaps stated that it is hard for us, without being flippant, to even see a scenario within any kind of realm of reason that would see our losing \$1 in any of these transactions.

I do point out as to the asymmetric payoff issue in derivatives that the head of that AIG unit apparently made \$280 million over the last 8 "good years" and that, when he left in February of this year, he was given, among other things, a contract to consult for AIG at \$1 million a month.

Third is the matter of how credit default swaps are sometimes used by hedge funds or by others to engage in—thank you, Congressman Space for referring to this issue—what can be termed "debt decoupling." That is that a creditor of a company could enjoy the control rights given to him in the loan agreement while simultaneously, through holding enough credit default swaps, actually having a negative economic exposure to the company. Such a creditor might well want its power to go into bankruptcy and have incentives to use its control rights to help grease the skids. This is quite different from simply holding a contract on corn. You control the weather, in effect, in terms of this situation; that is, having the control rights on the loan agreement side and yet having, perhaps, incentives to see the company not do well and certainly succeeding in undermining the bankruptcy proceedings as well.

In conclusion, times are too interesting. It is difficult to make public policy much less public policy that may be foundational for the next several generations. As for credit derivatives, I have touched briefly on three of the areas that I think need more attention. Important strides can be made, especially if coordinated worldwide, to avoid regulatory arbitrage and if the steps can be taken with full respect for the private and social value that both over-the-counter and exchange-traded credit derivatives can offer.

Thank you very much.

[The prepared statement of Mr. Hu follows:]

PREPARED STATEMENT OF HENRY T.C. HU, J.D., ALLAN SHIVERS CHAIR IN THE LAW OF BANKING AND FINANCE, UNIVERSITY OF TEXAS SCHOOL OF LAW, AUSTIN, TX

CREDIT DEFAULT SWAPS AND THE FINANCIAL CRISIS: "INTERCONNECTEDNESS" AND BEYOND *

I. Introduction

Mr. Chairman and Members of the Committee, thank you for the invitation of October 9 to testify before the Committee. My name is Henry Hu and I hold the Allan Shivers Chair in the Law of Banking and Finance at the University of Texas Law School. My testimony reflects preliminary personal views and does not represent the views of my employer or any other entity. I ask that my written testimony also be included in the record.

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At its economic core, the typical “cash-settled” credit default swap involves a bet between two parties on the fortunes of some referent third party. The “protection buyer” on the swap may be concerned (*e.g.*, if the buyer had lent money to the third party) or simply skeptical (*e.g.*, if the buyer wished to speculate) as to the plight of the third party. For a fee (or stream of fees), the “protection seller” of the swap will pay the buyer cash upon a specified disaster befalling the third party, the amount based on the severity of the disaster and the size of the bet (*i.e.*, the size being measured by the “notional amount”). A derivatives dealer (typically a major financial institution) stands ready to enter into either side of such bets—such privately negotiated two-party contracts—with its customers. The customers are hedge funds, banks, insurance companies, and others in the wholesale capital markets. Dealers may also enter into such swaps with other dealers.

The market for these privately-negotiated contracts, for this segment of the “OTC derivatives” market, has grown rapidly, at least until recently. At mid-year 2008, the notional amount of credit default swaps outstanding was \$54.6 trillion.¹ As with other OTC derivatives, these contracts helped customers address their risk management and other objectives in ways custom-tailored to each customer’s specific needs.

The role of credit default swaps in the current financial crisis has become a matter of public debate. The immediate responses have largely focused on the substantive aspects of “interconnectedness” problems, through mechanisms such as clearinghouse arrangements to limit credit exposures among the web of participants in this market.²

I would like to discuss three themes, albeit very briefly because of time constraints and because the below-footnoted sources offer closer analysis:

(1) While the substantive reduction of credit exposures is worthwhile, there must also be independent measures to significantly enhance disclosures as to the web of relationships in credit default swap and other OTC derivatives markets.³ A near-real-time “data clearinghouse” for OTC derivatives activities may be needed. (*Part II*)

(2) There are structural reasons why “sophisticated” financial institutions may misunderstand—or may act as if they misunderstand—the risks of the derivatives they offer.⁴ If such decision-making errors threaten the survival of the dealer itself, a request for governmental intervention will not be far behind. (*Part III*)

(3) How credit default swaps are sometimes used can undermine the soundness of the corporations referenced in the swaps and, if bankruptcy occurs, proper reorganization.⁵ (This is even after leaving aside entirely the fraud and manipulation issues being investigated by the SEC.) What can be termed “debt decoupling,” through such swaps and through securitization, may not only undermine the health of individual corporations, but affect the soundness of the financial system as a whole. (*Part IV*)

II. Interconnectedness: The Likely Need for a “Data Clearinghouse”

“Interconnectedness” issues related to credit default swaps deserve the attention they are getting. A decline in a major derivatives dealer’s creditworthiness may undermine the financial soundness of the counterparties relying on that dealer’s

¹See, *e.g.*, Darrell Duffie & Henry T.C. Hu, *Competing for a Share of Global Derivatives Markets: Trends and Policy Choices for the United States*, draft available at <http://ssrn.com/abstract=1140869>; ISDA Mid-Year 2008 Market Survey Shows Credit Derivatives at \$54.6 Trillion, ISDA News Release, Sept. 24, 2008.

²I leave aside the Securities and Exchange Commission, with its focus on fraud and manipulation, and New York State, with its focus on the need to protect insurance policyholders. See Jesse Westbrook & David Scheer, *SEC chief demands credit swap regulation*, GLOBE & MAIL (Canada), Sept. 24, 2008, at B14; Raymond J. Lehmann, *New York Moves to Define Some Swaps as Insurance*, BESTWIRE, Sept. 23, 2008.

³See, *e.g.*, Henry T.C. Hu, *Misunderstood Derivatives: The Causes of Informational Failure and the Promise of Regulatory Incrementalism*, 102 YALE LAW JOURNAL 1457, 1503–1509 (April 1993) [hereinafter Hu, *Misunderstood Derivatives*]; Henry T.C. Hu & Bernard Black, *Debt, Equity and Hybrid Decoupling: Governance and Systemic Risk Implications*, 14 EUROPEAN FINANCIAL MANAGEMENT 663, 693 (September 2008), draft available at <http://ssrn.com/abstract=1084075> [hereinafter Hu & Black, *EFM—Decoupling*].

⁴See, *e.g.*, Hu, *Misunderstood Derivatives*, *supra* note 3 at 1476–95; *Hedge Fund Operations, Hearing Before the Committee on Banking and Financial Services*, U.S. House of Representatives, Oct. 1, 1998 (testimony of Henry T.C. Hu) (relating collapse of hedge fund Long Term Capital Management to thesis of *Misunderstood Derivatives*).

⁵See, *e.g.*, Henry T.C. Hu & Bernard Black, *Equity and Debt Decoupling and Empty Voting II: Importance and Extensions*, 156 UNIVERSITY OF PENNSYLVANIA LAW REVIEW 625 (January 2008), available at <http://ssrn.com/abstract=1030721>; Hu & Black, *EFM—Decoupling*, *supra* note 3.

swaps. The deterioration in the creditworthiness of such “first generation” counterparties would affect their ability to meet their obligations on the “second generation” credit default swaps *they* may have separately entered into. And so on. Linkages among widely disparate participants in the worldwide wholesale capital markets are created.

Regulatory and private responses have largely focused on the substantive matter of reducing the exposures associated with this web of transactions. The federal government did intervene as to Bear Stearns Companies, Inc. (“Bear Stearns”) and American International Group, Inc. (“AIG”) in large part because of the especially important roles they had as dealers in credit default swap derivatives.⁶ With the strong encouragement of the Federal Reserve Bank of New York, various private efforts are on-going to try to centralize clearing and reduce the web of dependencies among credit default swap participants.⁷ The International Swaps and Derivatives Association, the main industry trade association, has played an active risk-reducing role as well, particularly with respect to the mechanics of settling credit default swap payouts, including those associated with the Fannie Mae and Lehman “credit events.”

Independent, comprehensive measures to enhance disclosures as to credit default swaps and other OTC derivatives, would be helpful. Each OTC derivatives contract is individually negotiated and not required to be disclosed to any regulator, much less to the public generally. No one regulator knows, on a real-time basis or not, entity-specific exposures, the ultimate resting places of the credit, market, and other risks associated with OTC derivatives, or some of the other important facets of the “web of dependencies” created by OTC derivatives.

The disclosure situation as to credit default swaps may be particularly deficient. The best source of statistical information as to OTC derivatives generally is the “BIS Triennial Survey” issued by the Bank for International Settlements (BIS), based on polls of derivatives dealers that are conducted by 54 central banks and monetary authorities. These periodic surveys are available from 1998 to 2007. However, the BIS Triennial Surveys do not even cover turnover in credit derivatives, much less the far more detailed, real-time information needed to properly assess the web of dependencies.

Other sources provide information at a granularity similar to the BIS surveys. The best official U.S. statistics on credit derivatives are probably those that come from the Office of the Comptroller of the Currency. Those statistics focus on the activities of U.S. commercial banks—a category that, for instance, excludes the activities of the AIG. ISDA’s market surveys of credit default swaps (and interest rate derivatives and OTC equity derivatives) are conducted twice a year and rely on voluntary participation—although, as to the June 30, 2008 survey, ISDA notes that “all major derivatives houses provided responses.”

Clearinghouse and/or any associated exchange trading of credit derivatives will no doubt improve transparency as to transactions that are comprehended by the applicable systems. I have not had the opportunity to look at the limited public information as to these on-going matters. However, there will still presumably remain an OTC credit derivatives market and many transactions that are not funneled into the systems. Moreover, I am not currently aware of other types of OTC derivatives being subject to such proposed arrangements.

There is likely a need is for a “data clearinghouse” for OTC derivatives: centralized, comprehensive, near-real-time disclosure of OTC derivative transactions, in some standardized and retrievable computerized form. Perhaps BIS would be an appropriate entity to serve as such a data clearinghouse. But determining what details to precisely require of OTC derivatives market participants as to the transactions they enter into, how close to “real-time” such disclosures should be made, what regulatory access and non-regulatory access there should be to such disclosures, and what processing of the information submitted to the data clearinghouse should be undertaken are some of the issues that need to be subject to careful benefit/cost analysis. Such a data clearinghouse may help provide advance notice to regulators of possible entity-specific or system-wide problems and early remediation. Should

⁶ See, e.g., Nelson D. Schwartz, & Julie Creswell, *What Created This Monster?*, N.Y. TIMES, Mar. 23, 2008, Bus. Sec., at 1 (quoting a prominent securities analyst as saying that the Bear Stearns rescue “was 100 percent related to credit default swaps”); Justin Fox, *Why the Government Wouldn’t Let AIG Fail*, at <http://www.time.com/time/printout/0,8816,1841699,00.html> (Sept. 25, 2008) (noting government’s “biggest fears” as to the consequences of AIG’s failure had to do with credit default swaps).

⁷ See, e.g., Serena Ng & Gregory Zuckerman, *Electronic Exchange For CDSs Is Proposed*, WALL ST. J., Oct. 7, 2008, at C2; Jeremy Grant Anuj Gangahar, *New attempt to set up swaps initiative*, FIN. TIMES, Oct. 10, 2008, at 23.

problems actually arise, this data clearinghouse can contribute materially to the informational predicate for proper regulatory responses to such problems.

III. Financial Institution Decisionmaking Errors

In my 1993 YALE LAW JOURNAL article “Misunderstood Derivatives,” I suggested that there were a variety of structural reasons to believe that even sophisticated financial institutions will make mistakes with respect to derivatives and other complex financial products. For example, certain “cognitive biases” can undermine the models developed by rocket scientists. Additionally, the compensation structure in derivatives units, and the complexity of some products may overwhelm normal “internal” and “external” corporate governance mechanisms for deterring inappropriate behavior.

There is insufficient public information at the moment to determine whether some of these structural reasons undermined AIG’s decisionmaking with respect to credit derivative swaps. But some of the evidence available thus far suggests that these are matters worth pursuing.

For instance, one of the cognitive biases undermining derivatives models is the tendency to ignore low probability catastrophic events. Psychologists theorize that individuals do not worry about an event unless the probability of the event is perceived to be above some critical threshold. The effect may be caused by individuals’ inability to comprehend and evaluate extreme probabilities, or by a lack of any direct experience. This effect manifests itself in attitudes towards tornados, safety belts, and earthquake insurance. My 1993 article indicated that in the derivatives context, financial rocket scientists are sometimes affirmatively encouraged, as a matter of model design, to ignore low probability states of the world.

Certain public AIG statements are arguably consistent with the operation of this cognitive bias, though they do not necessarily prove the existence of the bias. For example, in August 2007, the head of the AIG unit responsible for credit default swaps stated:

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 one dollar in any of those [credit default swap] transactions.⁸

Similarly, AIG’s Form 10-K for 2006 stated:

The threshold amount of credit losses that must be realized before AIGFP has any payment obligation is negotiated by AIGFP for each transaction to provide that the likelihood of any payment obligation by AIGFP under each transaction is remote, even in severe recessionary market scenarios.

In the derivatives industry, the incentive structure can be highly asymmetric. True success—or the perception by superiors of success—can lead to enormous wealth. Failure or perceived failure may normally result, at most, in job and reputational losses. Thus, there may be serious temptations for the rocket scientist to emphasize the rewards and downplay the risks of particular derivatives activities to superiors, especially as the superiors may sometimes not be as financially sophisticated (and loathe to admit it). Moreover, the material risk exposures on certain derivatives can sometimes occur years after entering into the transaction—given the turnover in the derivatives industry, the “negatives” may arise long after the rocket scientist is gone. The rocket scientist may have an especially short-term view of the risks and returns of his activities. Undesirable behavior can be tempered by disclosure requirements; however but, among other things, SEC and accounting disclosure requirements have not fully kept up with the derivatives revolution.

I do not know if any of AIG’s current or past employees succumbed to any such behavior, by reason of the incentive structure or otherwise. That said, it is a matter that would be worth looking into. According to the testimony of Martin Sullivan, the former CEO of AIG, until 2007, many employees at AIG Financial Products (AIGFP) (the subsidiary generating the losses leading to the AIG bailout) were being paid higher bonuses than he was. The head of AIGFP, Joseph Cassano, apparently made \$280 million over the last eight years. And when Mr. Cassano left AIG in February 2008, he was given, among other things, a contract to consult for AIG at \$1 million a month.

⁸ Gretchen Morgenson, *Behind Insurer’s Crisis, Blind Eye to a Web of Risks*, N.Y. TIMES, Sept. 28, 2008, at A1.

IV. Uses of Credit Default Swaps Undermining the Health and Reorganization of Corporations

There may be aggressive—but legal—uses of credit default swaps by hedge funds and others that can undermine the soundness of the referent third parties and, if bankruptcy occurs, the reorganization of such parties. In August 2007, I began suggesting that the separation of control rights and economic interest with respect to corporate debt through swaps can cause such problems. This “debt decoupling” analysis has been further developed and I rely on this analysis to illustrate these issues.⁹

Ownership of debt usually conveys a package of economic rights (to receive payment or principal and interest), contractual control rights (to enforce, waive, or modify the terms of the debt contract), other legal rights (including the rights to participate in bankruptcy proceedings), and sometimes disclosure obligations. Traditionally, law and real world practice assume that the elements of this package are generally bundled together. One key assumption is that creditors generally want to keep a solvent firm out of bankruptcy and (apart from intercreditor matters) want to maximize the value of an insolvent firm.

These assumptions can no longer be relied on. Credit default swaps and other credit derivatives now permit formal ownership of debt claims to be “decoupled” from economic exposure to the risk of default or credit deterioration. But formal ownership normally still conveys control rights under the debt agreement and legal rights under bankruptcy and other laws.

There could, for instance, be a situation involving an “empty creditor”: a creditor may have the control rights flowing from the debt contract but, by simultaneously holding credit default swaps, have little or no economic exposure to the debtor. The creditor would have little incentive to work with a troubled corporation for it to avoid bankruptcy. Indeed, if it holds enough credit default swaps, it may simultaneously have control rights and a *negative* economic exposure. In such a situation, the creditor would have incentives to cause the firm’s value to fall. Such “debt decoupling” could also cause problems within bankruptcy proceedings, such as those relating to the allocation of voting power among creditors, without consideration of their true economic exposures.

Because many of the substantive and disclosure matters relating to debt decoupling are beyond the scope of this Committee hearing, I have been especially brief in discussing this aspect of credit defaults swaps.

V. Conclusion

Times are too interesting. In such times, it is difficult to calmly and rationally make public policy, much less public policy that may be foundational for the next several generations.

As for credit derivatives, the issues are complex. They are products that are valuable to corporations, investors, and financial institutions worldwide. OTC credit derivatives, like other OTC derivatives, allow for contracts customized to the individual customer preferences. All derivatives are important to our financial services sector, the third largest sector of the U.S. economy.

On the other hand, there are pressing needs for reform. I have touched on three of the areas which I believe have not received enough attention. Reform efforts in the U.S. generally need to be well-coordinated with efforts in other countries, because of the nature of the financial products and market participants and because of the prospect of unwelcome regulatory arbitrage.

While we are in the early stages of sorting out the financial crisis, including the role of credit default swaps, I think important strides can be made.

Thank you.

The CHAIRMAN. Thank you, Professor. We appreciate your being with us.

Mr. Short.

⁹For stories on the “debt decoupling” research referenced in footnote 5, see, e.g., *Bankruptcies in America—Waiting for Armageddon*, THE ECONOMIST, March 27, 2008, at 81–82; Francesco Guerrera, Ben White, & Aline van Duyn, *Derivatives boom raises risk of bankruptcy*, FIN. TIMES, Jan. 28, 2008, at 13.

**STATEMENT OF JOHNATHAN H. SHORT, SENIOR VICE
PRESIDENT AND GENERAL COUNSEL,
INTERCONTINENTAL EXCHANGE, INC., ATLANTA, GA**

Mr. SHORT. Thank you.

Chairman Peterson, Ranking Member Goodlatte, I am Johnathan Short, Senior Vice President and General Counsel of Intercontinental Exchange, or ICE. We very much appreciate the opportunity to appear before you today to discuss the role of credit derivatives in the financial markets and to discuss ICE's efforts, along with those of other market participants, to introduce transparency and risk intermediation into these OTC credit derivative markets.

ICE is proud to be working with the Federal Reserve Bank, with the Commodity Futures Trading Commission and with the Securities and Exchange Commission on these efforts that are vital to the health of our financial markets. We believe that we have important domain expertise and knowledge to bring to bear to that effort.

As background, ICE operates three regulated futures exchanges—ICE Futures U.S., ICE Futures Europe and ICE Futures Canada—together with three regulated clearinghouses—ICE Clear U.S., ICE Clear Europe and ICE Clear Canada.

ICE recently acquired Creditex Group in August of 2008. Founded in 1999, Creditex is a global market leader in the execution and in the processing of credit derivatives. In the last few years, Creditex has worked collaboratively with market participants on a number of important initiatives which directly address calls by regulators, most notably the Federal Reserve Bank of New York, for improving operational efficiency and for providing heightened transparency regarding risk exposures in the credit derivatives market.

In 2005, Creditex helped to develop the ISDA cash settlement auctions, which are the market standard for credit derivative settlement. They have been used in recent weeks to allow the orderly settlement of CDS contracts referencing, among others, Fannie Mae, Freddie Mac and Lehman Brothers. Creditex has also worked collaboratively with industry participants to launch a platform to allow the efficient compression of offsetting CDS portfolios of major dealers in order to net down exposures, and to determine the real CDS exposures of various market participants.

To be clear, however, more must be done. While credit derivatives serve an important role in the broader financial markets, improving the market structure pursuant to which credit derivatives are traded and cleared is essential. Candidly, this was an opportunity that I saw when we chose to acquire Creditex.

Presently, the credit markets operate very similar to the way that energy markets worked earlier this decade. Most transactions are bilaterally executed between brokerage firms. This is not a transparent or an efficient way for a market to operate. Critically, the bilateral nature of the market leaves participants exposed to counterparty risk. In times of great financial distress, like the present, this risk can have systemic implications. When financial counterparties do not trust each other, they then stop lending to each other, and the credit markets freeze. In addition, the failure of a large counterparty can spread risk throughout markets, espe-

cially where the market is opaque and where the true extent of risk is not known.

The question before us today is how to bring appropriate transparency to the CDS markets as well as how to appropriately mitigate counterparty credit risk.

ICE believes that these mutual goals of transparency and the mitigation of counterparty credit risk and systemic risk can be achieved through the introduction of regulated clearing and appropriate reporting obligations to regulators. This was the solution that was referenced by Chairman Lukken in his prior comments.

ICE's proposed solution: ICE has announced an agreement in principle with The Clearing Corporation, leading credit market participants, Markit, and Risk Metrics to introduce a clearing solution to address the problem that is presently existing in this market. To clear credit default swaps, ICE will form a limited purpose bank, ICE U.S. Trust, for the sole purpose of clearing credit default swaps.

ICE U.S. Trust will be a New York trust company that will be a member of the Federal Reserve System. In other words, it will be regulated both at the state and Federal levels; it will be a bank clearinghouse, and it will be subject to the direct regulatory and supervisory requirements of the Federal Reserve System. ICE U.S. Trust will offer its clearing services to its membership, and its membership will be open to market participants meeting appropriate financial criteria, with third parties unable to meet these criteria being able to trade through the existing membership.

ICE U.S. Trust will review each member's financial standing, operational capabilities, systems, and controls, and the size and nature and the sophistication of its business in order to meet comprehensive risk management standards with respect to the operation of the clearinghouse. In addition, ICE will make available its industry-leading T-Zero trade processing platform as part of this effort.

Finally, and perhaps most importantly, a word about regulation: The appropriate regulation of credit derivatives is of the utmost importance to the financial system. Presently, the credit derivatives market is largely exempt from regulation from the Commodity Futures Trading Commission, or the Securities and Exchange Commission. Also, as recent events demonstrate, the credit markets are intricately tied to the banking system with many credit derivative market participants being banks that are subject to regulation by the Federal Reserve.

As Chairman Peterson asked one of the earlier panelists, is there an incentive to trade cleared products, I think the fact that many of the largest market participants in this area are being regulated directly by the Fed provides that incentive through the Fed's ability to raise capital requirements.

Given the central role the Federal Reserve has played in addressing both the current credit crisis and issues related to credit derivatives within the broader market, ICE proactively sought to ensure that its clearing model would be subject to direct regulation by the Federal Reserve System. ICE shares its model in order to ensure that its credit derivative markets will be transparent and fully regulated from the inception of its business by whomever we

view as the regulator with the most appropriate jurisdiction in the area. But to be clear, this effort was not undertaken to avoid jurisdiction of the CFTC, of the SEC or of any other relevant regulator; and ICE stands ready to work with all regulators in this important industry effort.

ICE understands that Congress may choose to enact additional financial market reforms in the coming Congress, including taking steps to broadly reform the financial regulatory system as a whole. We would stand ready to work within that framework as Congress evolves it.

Finally, ICE will be introducing a similar clearing model in Europe through its ICE Clear Europe clearinghouse to address European CDS, and would make information sharing and regulatory dialogue a cornerstone of our clearing solution.

Mr. Chairman, thank you for this opportunity to share our views with you, and I will be happy to answer any questions.

[The prepared statement of Mr. Short follows:]

PREPARED STATEMENT OF JOHNATHAN H. SHORT, SENIOR VICE PRESIDENT AND
GENERAL COUNSEL, INTERCONTINENTALEXCHANGE, INC., ATLANTA, GA

Introduction

Chairman Peterson, Ranking Member Goodlatte, 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 role of credit derivatives in the financial markets and discuss ICE's efforts, along with other market participants, to introduce transparency and risk intermediation into the OTC credit markets. ICE is proud to be working with the Federal Reserve Bank, the Commodity Futures Trading Commission ("CFTC"), and the Securities Exchange Commission on these efforts that are vital to the health of our financial markets. Importantly, ICE has a history of working with OTC market participants to introduce transparency and risk intermediation into markets, having been a pioneer in the introduction of transparent electronic trading into the energy markets and having introduced cleared OTC energy swap contracts into its markets in 2002 in response to a market crisis in the energy markets—a freezing of credit and transactions—much like the crisis faced today in the broader financial markets.

Background

ICE was established in 2000 as an electronic over-the-counter (OTC) market. Since that time, ICE has grown significantly, both through its own market growth fostered by ICE's product, technology and trading innovations, as well as by acquisition of other markets to broaden its 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 a separate 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 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 three clearinghouses: ICE Clear U.S., a Derivatives Clearing Organization under the Commodity Exchange Act, located in New York and serving the markets of ICE Clear U.S.; ICE Clear Europe, a Recognised Clearing House located in London that will serve ICE Futures Europe and ICE's OTC energy markets; and ICE Clear Canada, a recognized clearing house located in Winnipeg, Manitoba that serves the markets of ICE Futures Canada.

Finally, and of importance to this discussion, ICE recently acquired Creditex Group. Founded in 1999, Creditex is a global market leader and innovator in the execution and processing of credit derivatives. Creditex operates a hybrid model of voice and electronic execution, and was the first to successfully launch electronic trading for credit default swaps in 2004. In the last few years, Creditex has worked collaboratively with market participants on three important initiatives which directly address calls by regulators, most notably the Federal Reserve Bank of New York, for improved operational efficiency and scalability in the credit derivatives market.

In 2005, Creditex helped to develop the ISDA Cash Settlement Auctions which are the market standard for credit derivative settlement and have been used in recent weeks to allow orderly settlement of CDS contracts referencing Fannie Mae, Freddie Mac and Lehman Brothers. Also in 2005, Creditex launched its subsidiary, T-Zero, which is now the industry standard for trade transmission and same-day trade matching. The platform addresses recommendations by the President's Working Group earlier this year for flexible and open architecture, ambitious standards for accuracy and timeliness of trade matching errors and operationally reliable and scalable infrastructure. In recent months, Creditex has also worked collaboratively with industry participants to launch a platform to allow efficient compression of off-setting CDS portfolios of major dealers. The platform reduces operational risk and provides capital efficiency.

Credit Derivatives and the Importance of Credit Derivatives Clearing

ICE has earned a reputation as an innovator in introducing clearing and transparency to the energy derivatives markets. ICE was the first to introduce clearing to the power markets, which were the domain of voice brokered, bilateral transactions. Voice brokered transactions offer limited transparency and cater to the largest customers. Now, the energy markets are predominately cleared with the attendant benefits of mitigation counterparty credit risk and related systemic risk that can flow from the failure of a large trading counterparty that has bilateral agreements with a large number of market counterparties. Of equal importance, regulators such as the CFTC and the Federal Energy Regulatory Commission ("FERC") were provided with important market and individual trading information that has allowed each agency to better understand, monitor, and discharge their respective regulatory obligations with respect to these vital markets. In its last *State of the Markets Report*, FERC remarked ICE "provides the clearest view we have into bilateral spot markets."¹

Like energy derivatives, credit derivatives serve an important role in the broader financial markets, allowing parties to shift credit risk, such as the downgrade in a company's debt, or insure against a default in connection with a credit instrument. A common type of credit derivative is the credit default swap, in which the buyer agrees to make a payment or series of payments to the seller. In return, the seller agrees to pay the buyer should a specified credit event occur. Presently, the credit market is very similar to the way energy markets worked earlier this decade; most transactions are bilaterally executed through brokerage firms. This is not a transparent or efficient way for a market to operate. Critically, the bilateral nature of the market leaves participants exposed to counterparty risk. In times of great financial distress, like the present, this risk can have systemic implications. When financial counterparties do not trust each other, and are unable to hedge their credit risk, they then stop lending to each other and the credit markets freeze.

The question before us today is how to bring appropriate transparency to the credit derivatives markets, as well as how to appropriately mitigate counterparty credit risk and resulting counterparty default risk that can have implications in the broader financial markets when a large market counterparty defaults on its obligations. ICE believes that the mutual goals of transparency and mitigation of counterparty credit risk and systemic risk can be achieved through the introduction of clearing and appropriate reporting obligations to regulators.

ICE's Proposed Solution

ICE has announced an agreement in principle with leading credit market participants, Markit, Risk Metrics and The Clearing Corporation to introduce a clearing solution to address this problem. Founded in 1925, The Clearing Corporation is an independent clearinghouse, owned by some of the largest derivatives dealers, including many of the largest credit derivatives brokers. The Clearing Corporation has been a leader in devising a credit derivatives clearing solution. With its Creditex

¹Federal Energy Regulatory Commission, 2007 *State of the Markets Report*, pg. 9 (Issued, March 20, 2008).

subsidiary and its partnership with The Clearing Corporation, ICE believes it can offer a clearing solution uniquely tailored to the credit derivatives market.

To clear credit default swaps, ICE will form a limited purpose bank, ICE U.S. Trust. ICE U.S. Trust will be a New York trust company that will be a member of the Federal Reserve System, and therefore will be subject to regulatory and supervisory requirements of the Federal Reserve System and the New York Banking Department. ICE U.S. Trust will meet the statutory requirements for a multilateral clearing organization, or MCO, as a state member bank. As an MCO, ICE Trust, pursuant to section 409 of the FDIC Improvement Act, will be allowed to be a clearinghouse for OTC derivatives.

ICE U.S. Trust will offer its clearing services to its membership. Membership will be open to market participants that meet the clearinghouse's financial criteria, and third parties unable to meet membership criteria will be able to clear through members of the clearinghouse. ICE U.S. Trust will review each member's financial standing, operational capabilities (including technical competence), systems and controls, and the size, nature and sophistication of its business in order to meet comprehensive risk management standards with respect to the operation of the clearinghouse. In order to supplement ICE U.S. Trust's own monitoring processes, members will have a general obligation to immediately notify ICE U.S. Trust of any infringement of its rules or applicable laws or of any financial or commercial difficulty on the part of themselves or any member and, as soon as practicable thereafter, give the ICE U.S. Trust full particulars of the infringement or difficulty.

Members of ICE U.S. Trust will be required to report various specific other matters to the clearinghouse including: where the member ceases to hold sufficient capital or breaches any applicable position limit; if the capital of such member reduces by more than 10% from that shown on the latest financial statement filed by it with the clearinghouse for any reason; the failure to meet any obligation to deposit or pay any Margin when and as required by any clearinghouse of which it is a member; failure to be in compliance with any applicable financial requirements of any regulatory authority, exchange, clearing organization or delivery facility; the insolvency of the member or any controller or affiliate of that member; any default affecting it; any breach by it of the Rules; any breach by it of any applicable law; or any action taken against it (including a fine, censure, warning, default proceeding, disciplinary proceeding, investigation, suspension or expulsion).

ICE U.S. Trust will adhere to the "Recommendations for Central Counterparties" ("RCC") developed jointly by the Committee on Payment and Settlement Systems (CPSS) and the Technical Committee of the International Organization of Securities Commissions (IOSCO) which set out standards for Risk Management of a central counterparty (CCP). These recommendations are broadly recognized and have been used by national regulators and other firms for self assessment.

Following these guidelines, ICE U.S. Trust will establish a Guaranty Fund sufficient to meet costs associated with the cost of closing out an insolvent member's liabilities that exceed the financial resources (cash and collateral) held in the account of the insolvent member. Each member will be required to contribute to the Guaranty Fund in an amount which is adjusted to reflect the volume of activity and risk they hold within the clearinghouse. The value of the Guaranty Fund will be sufficient in aggregate to meet the largest single modeled stress-test loss of a member in excess of the margin requirement of that member. Portfolio stress-testing will use scenarios to cover market risks exceeding a confidence level of 99.9%.

In addition, ICE will make available its T-Zero service to facilitate same-day trade matching. T-Zero is a credit default swap trade processing service launched by Creditex in 2005. T-Zero is the market standard for CDS affirmation, novation consent, routing and straight through processing. T-Zero's ability to deliver timely and accurate trade information across the marketplace and to multiple users will be leveraged to effectively support ICE U.S. Trust T-Zero currently supports every major CDS trading house at some level as well as three interdealer brokers.

Regulation of Credit Derivative Clearing

Appropriate regulation of credit derivatives is of utmost importance to the financial system. Presently, credit default swaps are largely exempt from regulation by the Commodity Futures Trading Commission and the Securities Exchange Commission. Also, as recent events demonstrate, the credit markets are intricately tied to the banking system, with many credit derivative market participants being banks that are subject to regulation by the Federal Reserve.

Given the central role that the Federal Reserve has played in addressing both the current credit crisis and issues related to credit derivatives within the broader market, ICE proactively sought to ensure that its clearing model would be subject to direct regulation by the Federal Reserve. ICE chose its model in order to ensure

that its credit derivatives markets will be transparent and fully regulated from the inception of its business. Regulatory requirements will include minimum capital requirements, membership requirements, margin requirements, a satisfactory guaranty fund, and operational safeguards, all with a view to satisfying the internationally recognized clearing standards. As a limited purpose bank, ICE U.S. Trust will be subject to examination by the Federal Reserve and New York Banking Department in the normal course of operations.

Finally, ICE understands that Congress may choose to enact additional financial market reforms in the coming Congress to broaden the purview of regulation of credit derivatives. In the event of such reform, and any decision to vest jurisdiction of credit derivatives with any particular regulator, ICE U.S. Trust will stand ready to work with all appropriate regulators to ensure that its clearing operations are robust, that the trading of credit derivatives through its clearing house is transparent, and that each relevant regulator has all information that it needs to carry out its mission. ICE is willing to work towards any oversight solution that insures that these markets are properly regulated.

Conclusion

ICE has always been and continues to be a strong proponent of open and competitive markets in the derivatives 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 its markets. To that end, we have continuously worked with regulatory bodies in the U.S. and abroad in order to ensure that they have access to all relevant information available to ICE regarding trading activity on our markets. We have also worked closely with Congress to address the regulatory challenges presented by derivatives markets and will continue to work cooperatively for solutions that promote the best marketplace possible.

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

The CHAIRMAN. Thank you, Mr. Short, for your testimony.

Now we will hear from Ms. Taylor. Welcome to the Committee.

STATEMENT OF KIMBERLY TAYLOR, MANAGING DIRECTOR AND PRESIDENT, CLEARING HOUSE, CHICAGO MERCANTILE EXCHANGE INC., AND CME GROUP, INC., CHICAGO, IL

Ms. TAYLOR. I am Kim Taylor, Managing Director and President of the Clearing House of CME Group, Inc. Thank you, Chairman Peterson and Ranking Member Goodlatte, for inviting us to testify today.

The credit default swap market has grown because credit derivatives permit the dispersion and realignment of credit risks. These instruments are tremendously valuable financial tools in the right hands and if used properly. However, the individual and systemic risks created by the exponential growth of such contracts has not been properly managed. In some cases, it appears not to have been understood by the managers, who are highly compensated for promoting these instruments.

The lack of transparent pricing, of standardized contract terms, of multilateral netting, and of all of the other advantages that flow from an integrated trading and central counterparty clearing system have compounded risk and uncertainty in this market. We need to restore confidence in this market.

There is a solution. The transparent price discovery and multilateral trading and clearing mechanisms that have been proposed by CME and by Citadel Investment Group offer a systematic method to monitor and collateralize risk on a current basis, reducing systemic risk and enhancing certainty and fairness for all participants.

Our solution offers regulators the information and transparency they need to assess risks and to prevent market abuse. Our systematic, multilateral netting and well-conceived collateralization standards will eliminate the risk of a systemic impact when a jump to default of a major reference entity might otherwise create a cascade of failure and defaults. Let me provide a few examples of the problems and of the solutions that our proposal offers.

First, credit default swap markets are opaque. Best-price information is not readily available, as it is on an electronic trading facility. Efficient and accurate mark-to-market prices are hindered by this lack of transparency. Disagreements on pricing are common, leading to subjective and inconsistent marks-to-market and to potentially incomplete disclosure to investors of the unrealized losses on open positions.

Currently, CME publishes official, independent prices for over 800,000 instruments each day. The financial market trusts those prices because they are independently and neutrally determined. Over \$45 trillion in direct market exposure is marked to our prices on a daily basis with an untold amount of related over-the-counter exposure also being marked based on those prices.

Second, risk assessment information is inadequate, and risk management procedures are inconsistent across the market. Precise information on gross and net exposures is not available. The true consequences of a default by one or more participants cannot be measured, exactly the sort of systemic risk brought to light by the Bear Stearns and AIG crises, which caused major disruptions in the market. As Bear Stearns and AIG faltered, credit spreads for most dealers widened, volatility increased and liquidity declined. Intervention became necessary.

Transparent market information, combined with risk management protocols enforced by a neutral third-party clearinghouse could have mitigated this outcome. The clearinghouse and regulators would have seen and would have been able to manage concentration risks within a particular portfolio and would have been able to stress-test the consequences of a major default.

Third, the gross exposures for bilateral CDS transactions magnify systemic risk because a failure in the payment chain can spiral out of control.

Our proposal goes beyond the plans of dealer-owned clearing systems which only address the needs of the interdealer market. As we understand it, nondealers, who may account for nearly half of current trading volumes, would not benefit directly from trade novation under the dealer-owned model. Excluded market participants would also reap little benefit from the clearinghouse's guarantee of performance. Settlement risk would be mutualized for some, but not for all trades.

Our proposal, which is open to both dealers and to their customers from day one, offers scalable, efficient trading and clearing mechanisms to market participants, and it brings price transparency to the entire market. Our systems include nearly instantaneous trade confirmation, and they also take advantage of multilateral netting to compress the portfolios that are open at this time. We are in the process of running portfolio compression exercises

with market participants now so they can gauge the effect, the benefit they will gain, from this multilateral netting.

Our long experience is a tremendous asset in the fight against systemic risk in the CDS market. The CME clearinghouse currently holds more than \$100 billion of collateral on deposit and routinely moves mark-to-market payments exceeding \$5 billion a day between market participants. We conduct the real-time monitoring of market positions and of aggregate risk exposures, twice-daily financial settlement cycles and advanced portfolio-based risk calculations. We monitor large account positions and perform daily stress testing. Our clearinghouse has a proven ability to scale operations to meet the demands of new markets and of unexpected volatility.

We have the scope and scale to protect against the risks of the CDS market with our industry-leading financial safeguards package of over \$7 billion and in our long track record of effectively managing high-risk scenarios such as the recent failure of Lehman Brothers. Additionally, clearing credit default swap products under the existing structures that we use for our primary futures markets will protect customer funds in segregated accounts that are afforded special protection under the Bankruptcy Code.

The CDS market requires product structures, rules and regulatory oversight that are suited to the needs of all market participants. That may not occur if centrally traded and cleared credit products must be fitted within regulatory frameworks that were developed for different markets or to meet different policy goals.

We are currently working with the New York Federal Reserve, with the Commodity Futures Trading Commission and with the SEC to find a way to quickly bring our solution to market. We are encouraged that the regulators are highly motivated to contain the problem without delay and that cooperation among them will eliminate the jurisdictional and regulatory uncertainties that might otherwise delay a solution.

I thank the Committee for the opportunity to share CME Group's views, and I look forward to your questions.

Thank you.

[The prepared statement of Ms. Taylor follows:]

PREPARED STATEMENT OF KIMBERLY TAYLOR, MANAGING DIRECTOR AND PRESIDENT, CLEARING HOUSE, CHICAGO MERCANTILE EXCHANGE, INC., AND CME GROUP, INC., CHICAGO, IL

I am Kimberly Taylor, Managing Director and President of the Clearing House of CME Group Inc. Thank you Chairman Peterson and Ranking Member Goodlatte for inviting us to testify today.

CME Group was formed by the 2007 merger of Chicago Mercantile Exchange Holdings Inc. and CBOT Holdings Inc. CME Group is now the parent of CME Inc., The Board of Trade of the City of Chicago Inc., NYMEX and COMEX (the "CME Group Exchanges"). The CME Group Exchanges are neutral market places. They serve the global risk management needs of our customers and producers and processors who rely on price discovery provided by our competitive markets to make important economic decisions. We do not profit from higher food or energy prices. Our Congressionally mandated role is to operate fair markets that foster price discovery and the hedging of economic risks in a transparent, efficient, self-regulated environment, overseen by the CFTC.

The CME Group Exchanges offer a comprehensive selection of benchmark products in all major asset classes, including futures and options based on interest rates, equity indexes, foreign exchange, agricultural commodities, energy, and alternative investment products such as weather and real estate. We also offer order routing, execution and clearing services to other exchanges as well as clearing services for

certain contracts traded off-exchange. CME Group is traded on NASDAQ under the symbol “CME.”

The Credit Default Swap market has grown because credit derivatives permit dispersion and realignment of credit risks. These instruments are a tremendously valuable financial tool in the right hands and used properly. However, the individual and systemic risks created by the exponential growth of such contracts has not been properly managed—in some cases it appears not to have been understood by the managers who were highly compensated for promoting these instruments. The lack of transparent pricing, standardized contract terms, multilateral netting and all of the other advantages that flow from an integrated trading and central counterparty clearing system have compounded risk and uncertainty in this market.

There is a solution. The transparent price discovery and multilateral trading and clearing mechanisms that has been proposed by CME and Citadel Investment Group offers a systematic method to monitor and collateralize risk on a current basis—reducing systemic risk and enhancing certainty and fairness for all participants. Our solution offers regulators the information and transparency they need to assess risks and prevent market abuse. Our systematic multilateral netting and well conceived collateralization standards will eliminate the risk of a death spiral when a jump to default of a major reference entity might otherwise create a cascade of failures and defaults.

Let me provide a few examples of the problems, and the solutions that our proposal offers:

- First, CDS markets are opaque: best price information is not readily available, as it is on electronic trading facility. Efficient and accurate mark-to-market practices are hindered by the lack of transparency. Disagreements are common, leading to subjective and inconsistent marks and potentially incomplete disclosure to investors of unrealized losses on open positions. For example, earlier this year, Toronto Dominion Bank announced a \$94 million loss related to credit derivatives that had been incorrectly priced by a senior trader. In an exchange model, with transparent pricing and broad market data distribution, such errors are much less likely to occur.
- Second, risk assessment information is inadequate, and risk management procedures are inconsistent across the market. Precise information on gross and net exposures is not available. The true consequences of a default by one or more participants cannot be measured—exactly the sort of systemic risk brought to light by the Bear Stearns and AIG crises, which caused major disruptions in the market. As Bear Stearns and AIG faltered, credit spreads for most dealers widened, volatility increased and liquidity declined. Intervention became necessary.

Transparent market information combined with risk management protocols enforced by a neutral clearinghouse could have mitigated this outcome. Risk managers would have had accurate and timely information on their firms’ positions, exposures and collateral requirements. Collateral to cover future risks would have been in place or positions would have been reduced. The clearinghouse and regulators would have seen and been able to manage concentration risks within a particular portfolio, and stress-test the consequences of a major default.

- Third, gross exposures for bilateral CDS transactions magnify systemic risk because a failure in the payment chain can spiral out of control.

Our proposal goes beyond the plans of dealer owned clearing systems, which only address the needs of the inter-dealer market. As we understand it, non-dealers, who may account for nearly half of current trading volumes, would not directly benefit from trade novation under the dealer-owned model. Excluded participants also would reap little benefit from the clearinghouse’s guarantee of performance. Settlement risk would be mutualized for some, but not all, trades.

Our proposal, which is open to both dealers and their customers, offers scalable, efficient trading and clearing mechanisms to market participants and brings price transparency to the entire market. Our systems include nearly instantaneous trade confirmation.

Our long experience is a tremendous asset in the fight against systemic risk in the CDS market. The CME Clearinghouse currently holds more than \$100 billion of collateral on deposit and routinely moves more than \$5 billion per day among market participants. We conduct real-time monitoring of market positions and aggregate risk exposures, twice-daily financial settlement cycles, advanced portfolio-based risk calculations, monitor large account positions and perform daily stress testing. Our clearinghouse has a proven ability to scale operations to meet the demands of new markets and unexpected volatility. We have the scope and scale to

protect against the risks of the CDS market, with our industry-leading financial safeguards package of over \$7 billion and our long track record of effectively managing high-risk scenarios, such as the recent failure of Lehman Brothers. Additionally, clearing CDS products under the existing structures that we use for our primary futures markets will protect customer funds in segregated accounts that are afforded special protection under the Bankruptcy Code.

The CDS market requires product structures, rules and regulatory oversight that are suited to the needs of all participants. That may not occur if centrally traded and cleared credit products must be fitted within regulatory frameworks that were developed for different markets or to meet different policy goals. We are working with the New York Federal Reserve, the CFTC and the SEC to find a way quickly to bring our solution to market. We are encouraged that the regulators are highly motivated to contain the problem without delay and that cooperation among them will eliminate the jurisdictional and regulatory uncertainties that might otherwise delay a solution.

I thank the Committee for the opportunity to share CME Group's views, and I look forward to your questions.

The CHAIRMAN. Thank you, Ms. Taylor.

Thank you, all members of the panel, for your testimony.

Ms. Taylor, the CFTC testified earlier that apparently a designated clearing organization could start clearing credit default swaps without prior approval from the CFTC.

Do you need any approval from the SEC or from the Federal Reserve to begin to operate a clearinghouse for these instruments?

Ms. TAYLOR. We are working with the SEC toward an exemption from certain provisions of the Securities Acts that govern securities, because the SEC is likely to view these as options on securities; but they are working very effectively with us, and I believe all other solutions that are trying to come to market have the same issue with the SEC in needing an exemption.

The CHAIRMAN. So that is going to happen shortly? I keep hearing that something is going to happen by the end of the month and that, if that happens, you can get started shortly after that; is that all accurate?

Ms. TAYLOR. Yes. Subject to the appropriate regulatory exemptions and from an operational point-of-view, we would be ready to start by early November. It is unlikely that a critical mass of market participants would be ready to start in that time frame, and so we figure it would be more like January before the facility would be fully up and running.

The CHAIRMAN. Now, you are talking about doing this under the CFTC, and this competing deal is going to be under the Federal Reserve. Do you think the regulation under the Fed will be stricter or looser, or do you know? To your knowledge, has the Fed ever exercised regulatory jurisdiction over a bank that provides this type of clearing service?

Ms. TAYLOR. I do not believe that the Federal Reserve currently is the official supervisor of any central counterparty clearing entity. I would suggest that the regulatory oversight that would be placed on a clearinghouse for credit default swaps would probably be able to be effective under different regulatory regimes.

The CHAIRMAN. So do you think it would be the same?

Ms. TAYLOR. I don't know that it would be the same, but I think it would be able to be comparably effective.

The CHAIRMAN. Mr. Short, your company has three clearinghouses that are currently under CFTC regulation. Yet, apparently you are now proposing to set up this new deal under the Federal

Reserve. I guess you are going to become a bank or a bank holding company or something?

Mr. SHORT. Correct, a limited purpose trust.

The CHAIRMAN. Is this because of their deep pockets, so if you screw this up, they are going to bail you out like everybody else?

Mr. SHORT. No, absolutely not.

To be clear, we chose to establish ICE U.S. Trust as a limited purpose trust company and as a member of the Federal Reserve because we viewed the Fed as one of the thought leaders in this area. I can assure you it will be a fully regulated solution. It will have all of the appropriate risk management controls.

The CHAIRMAN. Well, with all due respect, these risk management controls have not done a very good job in our current situation. You know, I am one of those who does not have a lot of confidence in what is going on; and I had more confidence in the CFTC because I maybe understand it better and so forth. But it just mystifies me why you would shift off in this other direction. My skeptical nature leads me to believe that something is going on here that is not apparent, so I just do not have a lot of confidence in the fact that they have these regulations and so forth.

Mr. SHORT. We would love to give you that confidence. As I said, the reason we chose the Fed was in part because of the jurisdictional hook that they have directly into the banks.

One of the prior panelists mentioned that one of the ways you can incent somebody to clear through a clearinghouse would be to make capital requirements more difficult for banks if they were trading off-exchange. I think the Fed would likely have that direct regulatory hook into many of the largest market participants.

The CHAIRMAN. Well, they have never done this. Why would we get them involved in something that they do not know anything about? We have enough problems here without trying to teach somebody something they do not know or do not have any experience with.

Mr. SHORT. I think, unfortunately, we are in a situation where the Fed is doing a lot of things that it has never done before.

The CHAIRMAN. I understand that.

Mr. SHORT. Certainly not to dismiss the question, I think the issue that ICE tried to address was bringing a clearing and transparency solution to the market as it exists today to mitigate the risk. In other words, to put out the fire with a view that the new Congress will probably undertake systematic financial market regulatory reform. As to whichever regulatory bucket we end up in, we are more than happy to comply with what Congress wishes in that regard. We just need to get a solution to market quickly.

The CHAIRMAN. Well, if the Committee will indulge me for a minute here, as I understand it, the CDSs that are held by the banks are something like \$16 trillion out of the \$55 trillion, \$58 trillion, whatever it is. So are you saying that what you are going to be doing is clearing these CDSs that are in the banks, or is that what this is intended to do?

Mr. SHORT. It would be a solution for all market participants, for all CDSs, not just for banks.

The CHAIRMAN. But they would have to be broker-dealers, right?

Mr. SHORT. No.

The CHAIRMAN. I thought they had to be part of whatever your group is.

Mr. SHORT. You would have members of the clearinghouse much like there are members of the CME clearinghouse. To the extent that a party was not a member of that clearinghouse, they could trade through a member of the clearinghouse, so it would address all market participants, and that is one of the cornerstones of the Fed's regulatory requirements, that it not just be a solution that is directed towards banks.

The CHAIRMAN. All right. Well, I have more questions.

The gentleman from Virginia, Mr. Goodlatte.

Mr. GOODLATTE. Thank you, Mr. Chairman.

Mr. Pickel, what are your views on the clearing of credit default swaps? Two models have been presented here today—one using a derivative clearing organization under CFTC jurisdiction, the other a clearing mechanism under the jurisdiction of the Federal Reserve.

What are the pros and cons of each?

Mr. PICKEL. Thank you for that question.

As far as ISDA, we have not specifically engaged in the development of these clearing initiatives. We certainly are well aware of them. They are being led by our members, including ICE and CME, who are members of our organization.

What we have focused on is the need to continue to develop the standardized documentation that supports the trading that will be the basis for the trades that go into these clearinghouses. In fact, the clearinghouses, I think, are looking to rely upon our standardized documents, which are definitions that we have published, as well as most likely the settlement mechanism that we have developed and worked with within Creditex and Markit, another company in the CDS base.

So we are following these developments closely. We want to be supportive. I think the suggestion earlier on the first panel is that several different approaches might be the right way. That certainly makes sense to us, and it is also important for us to make sure that the OTC product is robust.

Mr. GOODLATTE. Well, let me ask you about that.

If you don't want to pick a winner here, would two regulators for the same instrument solve the problem we have been tasked with solving? Or does it create a fight for all of the ICE supporters in Congress who line up to support Federal Reserve regulation, and for all of the CME supporters who line up to support the CFTC regulation, and where we end up with gridlock while the market sorts it out?

What should we do? Should we pick one or should we let them compete under two different regulatory schemes?

Mr. PICKEL. I think the best approach is the focus on the fundamental principles for any clearing mechanism, and Acting Chairman Lukken referred to the 14 principles that they put in place for DCOs following the CFMA.

I know that the Federal Reserve Bank of New York has also been very clear that principles that have been developed at the international level for clearing organizations should be followed very

closely. I think those international principles are very consistent with the principles that apply for CFTC DCOs.

So I think that it is important to focus on those principles and make sure that whichever solution is developed is consistent with those principles, like the guaranty funds and the adequate collateral and those types of principles.

Mr. GOODLATTE. Well, I hear you, but I am concerned that we may set up a situation that opens up the process to regulatory and political arbitrage. One that creates and propagates uncertainty instead of ameliorating it if we do not come up with one standard and one regulatory entity to oversee the clearing of credit default swaps.

Mr. PICKEL. It certainly cannot be ruled out. I think you are making a very accurate observation.

I guess my reaction would be that we have an opportunity to see how these two systems work. Keep in mind that there are also two other organizations that are meeting with the New York Fed to discuss clearing arrangements, so there are other alternatives out there that are being discussed.

Mr. GOODLATTE. All right. Well, let me ask Mr. Short.

You have elected to create an entity under the Federal Reserve jurisdiction and to clear credit default swaps. Can you give me the pros and cons of Federal Reserve jurisdiction and why you elected not to follow the Chicago Mercantile Exchange model where they elected to clear them under the CFTC jurisdiction?

Mr. SHORT. Sure. Let me just take a step back and reemphasize that what we are doing is establishing a special purpose clearinghouse solely dedicated to clearing credit default risk.

I think one of the broader questions that the Committee might be interested in is whether these risks should be intermingled with the risks of other futures customers in another clearinghouse. I think Ms. Taylor will obviously have views on that; but we thought, given the highly controversial nature of these instruments, that it might not be the best idea to have other risks combined with those risks.

The Federal Reserve Bank of New York, in our experience, has been a thought leader in this area, and the law did provide for establishing a clearing organization subject to its jurisdiction. That was the sole reason we chose it, because we thought it would be the most relevant regulator and, I guess, also for the reason that it has a direct regulatory touch into not all of it, but into a significant number of market participants, which I think from a transparency perspective is optimal.

Mr. GOODLATTE. Well, thank you.

Let me ask Ms. Taylor if she can give me the pros and cons of CFTC jurisdiction and why CME elected not to follow the ICE model.

I would like you to respond to this question about its being obvious that competitive forces are working to accomplish what many have suggested for the credit derivatives market—central clearing that creates transparency, that provides protection against counterparty default and that minimizes systemic risk.

In your opinion, why does CFTC accomplish those goals better?

Ms. TAYLOR. Thank you. Some of the reasons that we chose the CFTC regulatory regime included the fact that the regulatory regime for derivatives clearing organizations is already well developed and already has proven effective over a range of circumstances over a long period of time. So, another regulator could establish a comparable regime, but it is not established yet. So we wanted to take advantage of the groundwork that had already been laid with the effective CFTC mechanism. We already are working with the CFTC to obtain authority to allow the credit default swap funds and positions to gain the protection of customer segregation of funds. That is very important to users to the centrally cleared futures markets.

In the Lehman example, most recently, I think that we have found that futures customers were able to maintain their access to the market, maintain their hedge or their market exposure, and be able to transfer their positions and their funds, supporting those positions fairly promptly to another clearing member and not be at risk of loss of funds or access to the market. That has not been the case with customers who faced the nonregulated parts of Lehman.

So the futures regime's customer protection mechanism is also very important. One of the other aspects that we have found important—and we did look at the pros and cons of this ourselves—is whether it was appropriate to include the credit default swap products within the existing financial safeguards package that protects all of the products that we clear.

And what we decided was that every time we have added more product to that base, every time we have diversified the products that we clear, we have been able to do so with potentially some increase to the financial safeguards package, but with an overall capital efficiency to the marketplace compared to what the capital would be required if the two pools of business were completely separate. And in these capital-constrained times, we thought it would be very effective for the dealers who are already large contributors to the financial safeguards package to not have to duplicate the contribution in order to be able to participate in the benefits of central clearing of the credit default swaps.

The other side of that argument is, are we exposing the other products within the financial safeguards package to some newer undue risk by including the credit default swap products in the same package? And our goal in making the decision to add the credit default swap products to the existing financial safeguards pool was to be able to equalize the risk profile via other means. And the primary means that we are using to equalize or make comparable—it won't be exactly equal but it will be comparable, the risk profile that is posed to the guaranty fund by the credit default swap products. We have a very different way of calculating the risk associated with the open position. So a very different margining regime that margins these products to a higher standard and with a broader kind of coverage period than the way we margin the futures products, also subjects the products to very different stress-testing related to the market conditions and the distinct risk characteristics of the products. So by having increased margining, that is a very large protection and it improves our ability to make the risk comparable.

Mr. GOODLATTE. Thank you. Thank you, Mr. Chairman.

The CHAIRMAN. I thank the gentleman. The gentleman from North Carolina, Mr. Etheridge.

Mr. ETHERIDGE. Thank you, Mr. Chairman. Mr. Pickel, Chairman Cox has called—the SEC has called for greater regulation of the credit default swaps. And from your testimony, it appears that ISDA doesn't really see a lot of great need for greater regulatory oversight of these or other financial derivatives. I would be interested in your comment on his statement. And what do you think about greater regulation of these instruments other than just transparency? Because in your *60 Minutes* interview, you stated that we need to design a structure in the future that works more effectively. What kind of structure were you talking about?

Mr. PICKEL. Well, for instance, the legislation that was passed for the rescue bill a couple of weeks ago called on the Secretary of the Treasury to develop a report on a redesign of the regulatory structure, including specifically focusing on clearing and settlement of OTC derivatives. It is in that context that we need to look at that and whether that is based on the proposals earlier this year from Secretary Paulson or perhaps something completely different. We are looking to be engaged in that debate and we understand that in that discussion there will clearly be a focus on derivatives. I believe that the decisions that this Congress made or the Congress in 2000 made given the existing regulatory landscape of the securities world and the futures world remains the correct decision.

Mr. ETHERIDGE. You mean, the one where we don't do any regulation?

Mr. PICKEL. Under the existing structure of a securities and futures world, yes, I believe—

Mr. ETHERIDGE. So you would leave it up to the industry to make the decision?

Mr. PICKEL. Well, I think you have to also—

Mr. ETHERIDGE. Look where it has gotten us.

Mr. PICKEL. You have institutional regulation where banks and, previously the SEC with their regulated entities, have oversight and are able to understand the positions that their firms—that their regulated entities are taking on. And that supervisory role is very important for parties—for the regulators to engage in. I think, as I say, if we are looking at a new structure, a new regulatory structure, then we need to look at a more comprehensive one.

Mr. ETHERIDGE. Let me make sure I understand you. What we are saying is, we should not be doing any regulatory scheme, that the \$700 billion we just pumped in, if it isn't enough, we should put some more in with no regulatory schemes? Is that what you are saying?

Mr. PICKEL. No. On the contrary, I am saying that the decision in—that is reflected in the bill to direct the Secretary to report to Congress for a new regulatory regime is a very important step forward and the Congress should be—

Mr. ETHERIDGE. You are saying Congress is out to just sit around, wait around until the Secretary comes back and tells us what we ought to do?

Mr. PICKEL. Well, I think that that is what the legislation from Congress instructed the Secretary to do. So I think that that is the—

Mr. ETHERIDGE. With all due respect, sir, I happen to disagree. Last time I checked, I put my name on the ballot, the Secretary is appointed. Thank you.

Professor Hu, let me ask you a question. You mentioned in your testimony the SEC and the accounting disclosure requirements have not fully kept up with the derivatives revolution. What specific changes are needed in this area given that they have really outpaced the regulatory schemes of—that is what you are talking about. And you may be aware that in the context of Congressional consideration, as has just been talked about here, of the financial rescue package that had considerable debate about the appropriateness of current standards for mark-to-market accounting of financial derivatives. Are you familiar with this discussion? And do you have any comments regarding the appropriateness of the current standards of what we ought to be looking at?

Mr. HU. Woody Allen once said, “I took a speed reading course. Read *War and Peace* in 20 minutes. It involves Russia.” In the 2 minutes I have, I can only touch very, very lightly on some of these issues. In terms of the kinds of disclosures, I am concerned about the move against mark-to-market. Yes, it causes some instability in terms of—to the extent that people put credence on those numbers. But the mark-to-market is an effort to provide information beyond historical information. And so, I would think that the general idea of hiding, in a sense, mark-to-market novation, or hiding attempts at valuation generally is not a good thing, that it is counter to the kinds of disclosures that we want.

Similarly, for instance, one of the issues has been this move towards internationally accepted accounting standards. As a general idea, it does make sense to move to internationally recognized standards. But there are material differences. So that for instance, under our current U.S. rules, we have a categorization of level one *versus* level two *versus* level three assets. The level three being the most difficult to value portion. I think that that kind of—and that is not required under international standards. I think that that kind of information is very useful, in general, in terms of sunlight disclosure. I am concerned about this kind of—some of these calls in terms of getting rid of mark-to-market or in terms of racing towards internationally accepted standards without recognizing the differences.

In terms of SEC—in terms of some SEC disclosures, getting back to the AIG situation, I guess, if you really read very carefully the AIG disclosures, there are 10-Ks and things like that. You can find some statements in terms of problems at AIG Financial Products. But certainly they don’t jump out at you. And I am wondering whether, for instance, as you know, after Enron, the SEC took many steps to increase disclosure requirements as to off balance sheet liabilities and other things that kind of relate to derivatives. I am wondering whether, in effect, we have to—we ought to re-examine these SEC disclosures requirements in light of AIG and some of these other companies. So that is the 2 minute version.

Mr. ETHERIDGE. Thank you. Thank you, Mr. Chairman.

The CHAIRMAN. I thank the gentleman. The gentleman from Georgia, Mr. Marshall.

Mr. MARSHALL. Thank you, Mr. Chairman. Mr. Pickel, that we have directed the Secretary to give us a report, making recommendations concerning whether additional regulation is appropriate doesn't mean that we are sort of abdicating our traditional role of trying to figure that out for ourselves. Ms. Taylor, in your testimony, I was a little confused about whether you were talking about transparency to the clearing house and the regulators or some greater transparency, some—your system would serve some function that exchanges serve where price discovery is concerned. So you would be publishing information about OTC transactions that are cleared on your clearing—on whatever your platform is?

Ms. TAYLOR. That is correct. We would be publishing—from the clearing house point-of-view, we would be publishing primarily the official marking prices that we used which would be able to be used for market participants to base other marks off of. From the trading systems, we would also be publishing real-time trade data and the prices associated with that.

Mr. MARSHALL. How would you go about telling people what you were describing? Many of these transactions are very specific custom transactions.

Ms. TAYLOR. The transactions that will be listed for trading on the trading platform will be in fairly standardized contracts.

Mr. MARSHALL. Okay. Let me go to you, Professor Hu. I enjoyed your preliminary thoughts here on the subject. I would love to hear more thoughts. If you don't mind, I might even call you up after just so the two of us can talk.

Mr. HU. Absolutely.

Mr. MARSHALL. There has been a lot of concern lately that some of the problems have been caused, at least some of the downside has been ushered in by naked short selling and a lot of criticism of that, temporary suspension of that. We have in the insurance area, typically, prohibitions on taking insurance on somebody else's life unless you have a direct interest in that person's life. And we are very careful to try to make sure that there not be moral hazard that encourages people to cause the death of another or the failure of another, the accident of another, that sort of thing. In your preliminary thoughts here, you made reference to the availability of CDSs to individuals who were merely skeptical about the performance on the underlying instrument or entity or what have you. Have you wondered whether or not there isn't some unacceptable moral hazard presented by merely the availability of CDSs or other derivatives to individuals who are just betting that there is going to be a collapse?

Mr. HU. I think there is actual real value to being able to speculate. That is that I think that short sellers who, in a sense, bet on the fate of—

Mr. MARSHALL. If I could interrupt. I am talking about OTC. I am not talking about price discovery being served by people on both sides of the transaction.

Mr. HU. Oh. But it is so hard to separate, in a sense, the ability to sell short and the role of short sellers from people buying credit default swaps. So that, in a sense, they are substitutes for each

other now. So that for instance, if you ban short selling, well you can go into the credit default swaps market. So, in terms of the role of short sellers and in terms of credit default—people who buy credit default swaps, to some extent they do play a social role, a valuable social role. Now that said, to the extent for instance that they spread false rumors and things like that, of course the SEC should go after—

Mr. MARSHALL. Would it be helpful to all of us if we required that short selling and—whether it is buying an insurance policy or what have you, and we have concluded that this is useful. That it needs to be public, that it needs to be totally transparent; this just can't be done secretly.

Mr. HU. Indeed. One of the articles—one of the underlying articles cited in the written testimony, the article calls for much greater disclosure of these kinds of issues, precisely for these kind of issues.

Mr. MARSHALL. Mr. Short—and Ms. Taylor, I am sorry. I only have 5 minutes here. We are all concerned that this could just be lip gloss, that, in fact, a great deal of additional protection wouldn't be provided. I understand how clearing does enhance the likelihood that the counterparties are appropriately collateralized, that they have the appropriate reserves, that mark-to-market would have good effects in that regard. But suppose you did business with AIG. The two of you are competing. One of you won the business. In part, you got the business with the AIG Financial Products because you weren't really requiring a whole lot. It was good for you financially. Then AIG collapses, what happens then? Who steps up and makes good on those products that AIG has been trading, clearing in your operations so that the parties are essentially made whole?

Mr. SHORT. It is the clearinghouse through comprehensive margining and risk management controls.

Mr. MARSHALL. With regard to your counterparties in this transaction. But I am saying that failed. And all of a sudden there is this massive failure. So the clearing house itself has to step up. Ms. Taylor, if I understood you correctly, you have about \$6 billion that is available to cover—

Ms. TAYLOR. A little over \$7 billion.

Mr. MARSHALL. A little over \$7 billion. And if it is a \$100 billion problem, we are just out of luck, right? There is \$7 billion to cover part of it. We have an \$85 billion problem.

Ms. TAYLOR. Actually I take your point. But I think that the size of our fund is governed by the size of the exposure that we anticipate having to face in a worst case. So the other piece of this that everybody needs to think about with adding a clearing house, the open notional exposure that exists in the over-the-counter CDS markets right now is very exaggerated based on the fact that there is no multilateral netting. So we would actually expect probably a ten fold decrease in the size of the open notional exposure and therefore the size of any potential issues.

Mr. MARSHALL. Are you effectively saying that the open notional exposure is probably about ten times less than the \$60-some-odd trillion figure?

Ms. TAYLOR. We would expect a very significant benefit from—on a real risk basis that would be true. It would come down significantly, probably at the 80 to 90 percent level.

Mr. MARSHALL. My time is up. Thank you.

The CHAIRMAN. I thank the gentleman. The gentleman from Ohio, Mr. Space.

Mr. SPACE. Thank you, Mr. Chairman. Professor Hu, in Mr. Pickel's testimony, he concludes, in reference to the current market conditions, that credit default swaps were the cause, or were even a large contributor to that turmoil, is inaccurate. Given your testimony and regarding the interconnectedness of credit default swaps, do you agree with that statement?

Mr. HU. I think that it is always difficult to separate causation from correlation. But in terms of, for instance, the AIG situation, it is their activities relating to the credit default swaps and perhaps mistakes they made in pricing those credit default swaps that led to one of the largest bailouts in history; and a continuing bailout, it seems, in terms of additional moneys. And so I think that in terms of in some—it is unfair to make—to exaggerate the role of credit default swaps. But in terms of the AIG situation, I think that it is hard to disentangle credit derivatives from the failure of the entity itself. And very quickly, in terms of Congressman Marshall's comment about moral hazard, it is interesting, ironic that the moral hazard is especially great when it is not naked in the sense of credit default swaps but when the person actually has a loan agreement, a credit agreement because he has the control rights plus bad incentives. So it is kind of an ironic twist to this whole kind of debt decoupling issue.

Mr. SPACE. Right. Mr. Pickel, I will give you a chance to respond. I think everyone understands that credit default swaps were not the only reason for the turmoil we are in. Certainly ill-advised lending practices is at the very root of it. But I find it somewhat disturbing that you minimize the role that credit default swaps have played in this contagion which has infested the market. I find equally diserving your statement that your association is not engaged in clearing initiatives as if to suggest that they are not important or that regulation is not called for. Can you offer your response to Mr. Hu's or Professor Hu's assessment of the AIG situation and the role that CDS has played in that failure?

Mr. PICKEL. Well, there is no—obviously there was significant seller of protection, roughly about \$440 billion notional, according to their financial statements. What they were doing via those contracts was taking on exposure to mortgage obligations, principally super senior tranches of collateralized debt obligations that had been written ultimately on mortgages that were extended by banks. So those mortgages were put into mortgage-backed securities. These collateralized debt obligations were created. And at that point in time the holders of those obligations decided that it would be prudent to purchase some protection which they purchased from AIG. AIG was willing to take on that risk to those underlying mortgage exposure.

A couple of other factors clearly played into the situation there. Professor Hu mentioned the mark-to-market situation. Keep in mind that in the AIG situation, they have had mark-to-market

losses, so losses on the books. But those actual tranches that they have written protection on were highly rated and have declined in value. But there has not been an actual default on those as far as I am aware.

The other thing was, as I mentioned in my oral testimony, they had agreed to only provide collateral in the event of a downgrade in rating. And when they had the mark-to-market losses, the rating agencies downgraded them, that led them to having to post collateral, led to a liquidity problem. We feel—and this is very much the clearing model—that it is far more effective to be utilizing collateral regularly in your trading relationship, partly because of the credit protection that provides, but also it provides discipline in that relationship.

So I think those are some of the things that we would focus on in terms of lessons learned from AIG. As far as our involvement with clearing initiatives, again, our association focuses on the infrastructure that exists for the OTC derivatives business. We are certainly supportive of the clearing initiatives, but there is enough effort and work being put into those initiatives that we are not in a position to endorse those specifically.

Mr. SPACE. Thank you. My time has expired.

The CHAIRMAN. I thank the gentleman. The gentleman from Minnesota, Mr. Walz.

Mr. WALZ. Well, thank you, Mr. Chairman. And I would like to take just a few minutes to look at this. I think it is an intriguing point being brought up by Professor Hu on this interconnectedness. Because it still comes back to the issue—and I am not going to leave this analogy alone—open the window. I am going to let the voices of the country come back in on this interconnectedness. As we talk here, it cannot be removed from their reality. Because in that case, no matter what happens, their perceived reality is reality. Professor Hu, could you restate that little tidbit of wisdom from the AIG manager, the CDS back in 2007? I want to hear exactly what that person said.

Mr. HU. Okay. And he said—let's see here. "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"—well, he was correct in that. He didn't lose just \$1—"in any of those," referring to credit fault transactions.

Mr. WALZ. And what was his compensation?

Mr. HU. Over the 8 years, the last 8 years, \$280 million in compensation. And on his leaving, apparently he got a consulting contract of \$1 million a month.

Mr. WALZ. Is he still receiving that?

Mr. HU. No. I think it ended shortly before the House Oversight hearing.

Mr. WALZ. At this point, it would be hard for me to not be flippant. So what is at stake here and the issue I come to again is its trusting confidence. And Mr. Pickel, I am going to stay away from it because quite honestly, I am having a hard time understanding the position you are coming from. I am listening to this. But this resistance to coming forward on this just seems so out-of-sync. The image in my mind is the band continuing to play on the *Titanic*. It is hard for me to shake that because this issue and the destruc-

tion that it has brought to the confidence in the American economy is so great, and I will be the first one. And this is what I want to explore, the interconnectedness issue. Because lord knows, there are others that are fiddling with you on this one. The point that I think is interesting, and we have to be, I think, very aware of.

Professor Hu, you brought this up and just re-stressed it. The issue of bond ownership and credit default swaps can have that perverse situation where the creditor is going to benefit from the failure. How do we avoid that?

Mr. HU. I think as a first step disclosure—and let me illustrate in terms of this issue, and that is that this issue not only comes up—may come up outside of bankruptcy, but in bankruptcy proceedings. That is, normally in bankruptcy proceedings, the bankruptcy judge basically allocates voting power in terms of reorganization plans based on how much they have lent to the company. But if that person, that person who has lent the money in a sense has reduced its economic exposure because of credit default swaps or other means, you end up with a person who may have very low true economic exposure to a debtor having a humongous number of votes.

So there is a mis-allocation, if you will, of votes in terms of reorganization. So that just as you might want to give more votes to shareholders in corporations when they have more shares, they have more of an incentive to see the company do well; that kind of presumption that is in bankruptcy proceedings, that if you have lent more, then you have more of an incentive to see a successful reorganization might not hold. Bankruptcy judges, right, as they get—hopefully as they get more sophisticated about these issues, and we insist on disclosure, right, could in a sense make the right allocations in terms of voting power. But that is just a first step.

Mr. WALZ. Well it has been brought up several times, this issue of moral hazard; those of us who want to believe the market is working. I am still having a hard time seeing where that manager had a moral hazard in this; with having such a clearly—either incompetent, inept, or blinded—view of what was happening in his area of expertise and yet the payoff appears to have been tremendous. And anything that we do, I am just curious what the framework is going to look like.

Mr. HU. Well, for instance, this relates to the disclosure point as well. And you can tell, one of the reasons I have focused on disclosure is that disclosure is the most kind of incremental step one can take in terms of regulation; that is, as opposed to substantive regulation. And in terms of disclosure—and at fairly low cost—so that if you had a better sense in terms of how exactly various—key rocket scientists—key people within AIG Financial Products, what the incentive structure would look like, that is that you would see very conspicuously, hey you could make a fortune if X, that that may in a sense cause capital markets to look more closely or in terms of the payoff structure for the CEO. To what extent do the results of AIG Financial Products figure in to the overall compensation; those kinds of measures.

Mr. WALZ. Well, I thank you. I yield back. Thank you, Mr. Chairman.

The CHAIRMAN. I thank the gentleman. The gentleman from North Dakota, Mr. Pomeroy.

Mr. POMEROY. Thank you, Mr. Chairman. I want to follow up with Professor Hu. I find your testimony very interesting. And it raises questions in my own mind about whether or not a clearing house is going to adequately deal with this. Needless to say, I have had my confidence in sophisticated market participants severely shaken by the times we are in. It made sense to me at an earlier point that—well, these folks know what they are doing. And yet clearly they didn't. I note you quoting AIG's form 10-K, the threshold amount of credit—on page 5 of your testimony. Threshold amount of credit losses must be realized before AIG Financial Products has any payment obligation, is negotiated by AIGFP for each transaction, to provide a likelihood of any payment obligation by AIGFP under each transaction is remote even in severe recessionary market scenarios. I mean, they could not have been more mistaken. I would vote right now for a law that makes people put on their fancy Mercedes "I wrecked the economy" bumper stickers, for all those responsible in this kind of gross misjudgment. And the anger as referenced earlier by my friend, Mr. Walz, is absolutely palpable.

You indicate that—and apparently you have written an article about cognitive biases undermining derivative models, the tendency to ignore low probability catastrophic events.

Now, if I understand how that relates to this situation, you had product pricing based not on any underwriting of transactions, but based on basically a formula applied to a tranche of transactions whose character was evaluated by a rating agency.

Mr. HU. Indeed. In that 1993 piece, 5 years before long-term capital, when genius failed, I was basically pointing out in terms of like—in terms of the—this particular cognitive bias, you actually saw that in terms of what some people considered good principles of financial modelling when it came to derivatives. So that I cited—I quoted one person as saying that in designing a financial model, you ought to ignore marginally relevant states of the world. Sure sounds like a first cousin to that comment from the 10-K report that I cited, that you just referred to. So the issue is that when you design—when rocket scientists design these models, they basically—it basically works most of the time.

So the analogy that I have used is, it is like a safety belt that works except in serious crashes. So that precisely when you want the model to work best, it is most likely to fail. So for instance, assumptions like the usual financial model in terms of—assume continuous liquidity, for instance. Well, we all know, markets seize up. The pricing doesn't work. The hedging strategies you have used don't work. So that there is a—when people think in terms of rocket scientists, because all of the Greek letters that they are constantly referring to, the Ph.D.s in astrophysics and that sort of stuff, in fact, you have to kind of take those models with some skepticism in terms of—

Mr. POMEROY. Warren Buffett apparently has been quoted as saying, "Beware of mathematicians bearing formulas."

Mr. HU. Beware of geeks bearing gifts.

Mr. POMEROY. Tom Friedman in today's column writes, the Y.B.G. and I.B.G. lending. "You will be gone, and I will be gone," the parties doing the transaction. They still get their bonuses. They are far from the scene. They have no ultimate stake in the consequences. Is this what we have seen in this marketplace?

Mr. HU. This is one of the concerns I talked about in that 1993 piece. That is, that the rocket scientist may be three banks away by the time the risks show up. That often with these products, the profits—"profits are immediately obvious." But the risks lurk and may pop up later on and often in high magnitude. And the trick is—the problem is, it is a real difficult problem of incentive structure. You do want—

Mr. POMEROY. Professor, I get that. But it seems to me, any system response that doesn't ultimately look at the solvency of the risk-acquiring party on a risk-reserving basis or look at the credibility of the credit-triggering party, a third party like a rating agency. You know if you don't get your hands around those, you basically have simply a kind of a collective operation of a system, but it can go off-track without anticipating a catastrophic meltdown.

Mr. HU. That is a very good point. In terms of that risk reserving idea that you have talked about, one of the things I have looked at a couple of weeks ago in connection with AIG's 10-K and proxy and so forth. I was looking at what they said about, in the sense, how they designed their incentive structure. And basically, they made the right noises, that is, looking at the long-term performance and that sort of thing, balancing short-term risk with long term and so forth. But it clearly is a very difficult issue in terms of institutional design for any corporation, not just AIG. I think that what that leads to, because it is so difficult, is that we may need in a sense, for instance, higher capital adequacy requirements. We may need to be a little bit worried about relying too much on the internal models that these financial institutions use in terms of capital adequacy. So that I think that in terms of—so that one of their possible responses is to perhaps rethink a little bit some of the capital adequacy rules that we are moving to.

Mr. POMEROY. May I ask one more question? I see my time is just about up. This is of Ms. Taylor. Can a clearing house deal with the valuation of solvency of the risk-acquiring party? Is that an essential part of a clearing house function or not?

Ms. TAYLOR. I am sorry. I didn't quite follow the question.

Mr. POMEROY. Okay. The clearing house requires transparency, the scoring of trades.

Ms. TAYLOR. Yes.

Mr. POMEROY. Is there an evaluation of whether or not the ultimate risk-acquiring party is solvent for the cumulative risks they are acquiring?

Ms. TAYLOR. Yes. We have a number of ways of gauging the—the clearing house would do that in a very real and very real-time sense for the members of the clearing house. We do it on a once-removed basis for the customers of clearing members. But we monitor the financial health of the clearing members and the exposure that they pose *versus* their capital resources and *versus* stress testing the—

Mr. POMEROY. You are able to do that because of the standardized nature of the contracts traded?

Ms. TAYLOR. We are helped by the standardized nature of the contracts traded. We are helped by the mark-to-market. We are helped by the transparency of the prices. We are helped by our ability to access the books and records of the clearing member entities. So we are helped in a number of ways.

Mr. POMEROY. Thank you.

The CHAIRMAN. I thank the gentleman. I don't know, Professor, anybody can answer. I was reading a story yesterday or the day before in the *Financial Times* or someplace where they were criticizing the SEC ban on short selling. Well, they were saying that by leaving the credit default swaps out there, they actually enhance their position to accomplish kind of the same thing through these swaps. And that it was very short-sighted to stop the short selling in securities and not stop it over here on the swaps; is that true? And can you explain that?

Mr. HU. I think that clearly there were interrelationships in terms of selling—you know the ban on short selling and the other markets. And I think that that points out the interdependence of markets and the need for comprehensive rethinking in terms of equities *versus* equity derivatives, or in terms of loans *versus* credit derivatives. I think that that is called for at this point. The kind of structure we set up was set up in the 1930s before a lot of these products really took off. In particular, in terms of the OTC derivatives market as opposed to the exchange rate.

The OTC derivatives market is the financial laboratory in a very important sector of our economy, the third most important sector of our economy. I think that at this point with the derivatives revolution, that kind of fundamental rethinking is necessary. I don't know whether we ought to go for the Treasury plan, Treasury Secretary Paulson's ideas. But certainly a rethinking, a comprehensive look. In the meantime, there are a number of incremental steps that can be taken, such as in terms of disclosure.

The CHAIRMAN. I thank the gentleman. And I thank all the Members.

Mr. PICKEL. Mr. Chairman, just to comment briefly on that. I think Mr. Sirri, in the first panel, talked about, they were looking at the interconnectedness between the equity prices and the trading in CDS. I think that to the extent that one is influencing the other, clearly the SEC is overlooking the securities markets there, the stock markets and needs to understand how parties may be utilizing other instruments if they are truly manipulating the price of equities.

So I think that that kind of interconnectedness is something that is appropriate to look at. And similarly, even if it is just related to CDS, the authorities that they have regarding fraud and manipulation under the CFMA are there and he alluded to those in his—

The CHAIRMAN. Well, that is illusory. I mean, I was reading this other story about how somebody used these swaps to force a city in California into bankruptcy. And now they claim that they are going after counties and cities because their justification is that their books are inadequate and they are not telling the truth and they are not taxing people enough, whatever. So they are driving

these people into the ground. There is a lot of stuff going on here. You know, and I mean your folks need to get real. If they don't do that, they are going to get regulated.

You know, we will keep them from trying to screw this up. There are going to be people that are going to do things that would be very bad in terms of—they would be the wrong solution. And we are going to, in this Committee, try to help get the right solution. But by God, we are going to know what is going on with this stuff out in the open. We, in the farm bill, put in real-time price reporting for livestock so our farmers can find out every morning what is going on, who is doing what and what the big guys are up to. If we can do that with livestock, we can sure as heck do it with this. And we should. So, we will be doing more hearings. I thank the Members. I thank the members of the panel. And this Committee is adjourned.

[Whereupon, at 1:51 p.m., the Committee was adjourned.]

[Material submitted for inclusion in the record follows:]

SUBMITTED STATEMENT OF HON. MICHAEL V. DUNN, COMMISSIONER, COMMODITY
FUTURES TRADING COMMISSION

I support the testimony being given today. Clearing has proven an efficient, effective method for addressing both counterparty and systemic risk. It provides greater transparency and accountability for financial risks. Clearing, however, is not enough. It does not address a central problem that is a significant cause of our current crisis, the lack of Federal authority to adopt regulations necessary to address financial risks related to swaps.

Our current crisis has laid bare the flaw at the heart of the Commodity Future Modernization Act of 2000's exclusion of swaps from the CFTC's jurisdiction. Current events have proven categorically that relying on investors and institutions to monitor their own counterparty risk as a method to guard against systemic financial risks for our country is not sufficient.

Congress must revisit its determination to exclude swaps markets from regulation and make sure that Federal regulators are in a position to see and assess systemic financial risks. The CFTC's model of principle-based regulation combined with rigorous market surveillance and stringent capital requirements has fostered innovation while at the same time ensuring market integrity.

The diversity and complexity of over-the-counter markets provides a serious regulatory challenge. How do you ensure that market participants have access to effective, efficient, innovative risk management tools while also ensuring those tools do not jeopardize market integrity?

Clearing swap transactions is central to managing systemic financial risk related to swaps. The larger and more standardized the markets, the more vital it is that those markets have centralized clearing.

No agency is in a position to extend oversight into the over-the-counter markets without additional resources, and the Commission is no different. But the costs of those additional resources are perhaps the best bargain the public will ever get in terms of the enhanced financial security they can provide.

SUBMITTED STATEMENT OF PATRICK M. PARKINSON, DEPUTY DIRECTOR, DIVISION OF
RESEARCH AND STATISTICS, BOARD OF GOVERNORS, FEDERAL RESERVE SYSTEM

Chairman Peterson, Ranking Member Goodlatte, and Members of the Committee, I am pleased to offer this statement on the over-the-counter (OTC) credit derivatives market, particularly credit default swaps (CDS). First, I will provide some information on credit derivatives, the markets in which those instruments are traded, the risks that their use entails, and some key practices for managing those risks. Then I will discuss the oversight of the credit derivatives markets and joint efforts by supervisors and market participants to strengthen the infrastructure of those markets, including efforts to foster central counterparty (CCP) clearing and exchange trading of credit derivatives. Finally, I will discuss the public policy objectives that should guide consideration of regulatory changes for these markets.

The OTC Credit Derivatives Market

Background

A credit derivative is a financial contract whose value is derived from the value of debt obligations issued by one or more reference entities. The predominant type of credit derivative is a CDS. In a CDS, a "protection buyer" pays premiums to a "protection seller." In return, in the event of a default or other specified credit event, the protection seller is obligated to pay the protection buyer the notional, or par, value for the debt, thereby transferring the risk of default from the buyer to the seller. Most reference entities are corporations, including corporations rated investment-grade as well as those with lower ratings. Over the last few years, CDS referencing mortgage-backed securities and other asset-backed securities (CDS on ABS) also have been actively traded. A single-name CDS references a single corporation or ABS, while a multi-name CDS references a basket of reference entities or, more commonly, an index composed of many single-name CDS.

Markets in Which Credit Derivatives Are Traded

Although credit derivatives have been listed on exchanges, to date, the vast majority of credit derivatives have been executed bilaterally with derivatives dealers in OTC markets. The dealers include about 12 to 15 large, globally active commercial and investment banks. The principal centers for trading are in London and New York. Trades are typically executed over the telephone or through voice brokers. Use of various electronic trading platforms to facilitate bilateral execution of CDS has been growing, especially in Europe, but remains fairly limited. Other than dealers,

the most active participants in CDS markets are asset managers, including both hedge fund managers and managers of regulated investment companies.

Estimates of the size of the global market for CDS indicate that the market was growing very rapidly through year-end 2007. Global market estimates published by the Bank for International Settlements (BIS) show that the notional amount outstanding at that time was \$58 trillion, about twice the level just a year earlier. The gross replacement cost of those contracts, which measures the current market value of the protection against credit events that this \$58 trillion of contracts represents, was about \$2 trillion at year-end. Growth of index and other multi-name CDS has been especially rapid in recent years, and those instruments now account for more than 40 percent of both the notional amount and the current market value of all CDS. More recent data on CDS are available from the Depository Trust and Clearing Corporation's (DTCC) Trade Information Warehouse, which was put in place in 2006 and now contains an electronic copy of the vast majority of CDS trades. CDS registered in the warehouse totaled \$35 trillion in early October, down significantly from \$44 trillion in April.

The very rapid growth of the credit derivatives market reflected their perceived value for transferring credit risks. The single-name CDS markets typically are far more liquid than the underlying bond or loan markets, in large measure because the cost of taking short positions is much lower. Fixed-income asset managers use credit derivatives to obtain or adjust their credit exposures. Portfolio managers at banks use single-name CDS to manage concentrations of risk to their largest borrowers. Furthermore, the very liquid markets for CDS indexes allow asset managers to adjust the risk profile of their entire debt portfolios much more quickly and at much lower cost than was possible before these instruments were available. The availability of CDS also facilitates underwriting and making markets in the underlying debt markets.

Risks of Using Credit Derivatives

The use of credit derivatives entails risks as well as benefits. The types of risk are essentially the same as those associated with financial activity generally—market risk, credit risk, operational risk, legal risk, and reputational risk. Of particular importance is counterparty credit risk—that is, the risk that a counterparty to a credit derivatives contract could fail to perform its contractual obligations, resulting in losses to the nondefaulting counterparty. For example, in the case of a CDS, if the protection seller itself becomes insolvent, the protection buyer would lose the value of that protection and would need to replace it by purchasing protection from another seller. If the premiums required by the market for protection against default by the reference entity had risen since the protection had been purchased from the insolvent seller, the protection buyer would be exposed to a loss equal to the present value of the difference between the premiums paid on the new contract and the premiums paid on the original contract.

Key Practices for Managing Risks

Participants in the credit derivatives market and other OTC derivatives markets seek to mitigate the inherent counterparty credit risks by carefully selecting and monitoring their counterparties, by documenting their transactions under standard legal agreements that permit them to net gains and losses across contracts with a defaulting counterparty, and by entering into agreements that require counterparty exposures to be collateralized. Market participants effectively preclude firms from acting as dealers if they are not rated A or higher. Dealers evaluate the credit worthiness of their counterparties and assign them internal credit ratings. Those who are rated equivalent to below investment grade by their counterparties usually are required to enter into collateral agreements that include initial margin requirements as well as variation margin requirements. Transactions with hedge funds typically are supported by collateral agreements, as are transactions between dealers. Laws in the United States and many other jurisdictions have been amended in recent years to clarify that netting and collateral agreements are legally enforceable. Still, the measurement and management of counterparty credit risks on credit derivatives are challenging.

Oversight of the OTC Credit Derivatives Market

Prudential Supervision of Derivatives Dealers

Oversight of the credit derivatives market comes through the prudential supervision of the market's dealers. Most transactions in the market are intermediated by dealers, and all major dealers are banks that are subject to prudential regulation by U.S. or foreign banking regulators. Over the last 10 years, the prudential supervisors have devoted considerable attention to the dealers' management of the risks

associated with activities in the credit derivatives market and other OTC derivatives markets. A major focus has been management of dealers' exposures to each other and to hedge funds, with more limited attention until recently to exposures to insurance companies, which also were writing significant amounts of protection purchased by dealers.

The volatility and illiquidity in financial markets over the past year have provided a severe test of major dealers' counterparty risk-management practices. Thus far, the results with respect to hedge fund exposures have been remarkably good. Although quite a few hedge funds have performed very poorly, counterparty credit losses to their dealer counterparties have been negligible. By contrast, the financial difficulties of some monoline financial guarantors have forced some of the firms that act as dealers to write down substantially the value of credit protection on residential mortgage-backed securities and other structured securities that the dealers had purchased. Because the guarantors had been considered highly creditworthy and because the exposures against which they sold protection were considered to pose very little credit risk, their CDS counterparties had not required most of the monoline guarantors to enter into collateral agreements.

For the monoline insurers and more recently for AIG, losses on credit derivatives reflect a failure to understand and manage the risks associated with complex financial products effectively. Similar issues have been evident at some very large commercial banks, which assumed some of the same exposures, but usually through holding structured securities rather than writing CDS on such securities. As emphasized in the report of the Senior Supervisors Group, financial institutions need to make appropriate changes in their risk-management practices, improve internal incentives and controls, and ensure that traditional credit risk management disciplines are in place for such complex products.¹ Their supervisors need to strengthen supervisory oversight in these and other relevant areas. Practices with respect to management of exposures to complex instruments need to cover all such exposures, whether assumed through holding structured securities or through selling CDS on such securities.

Supervisory Efforts To Strengthen the Infrastructure of the OTC Credit Derivatives Market

In addition to their efforts to ensure that individual derivatives dealers manage the risks associated with credit derivatives and other OTC derivatives effectively, prudential supervisors, under the leadership of the Federal Reserve Bank of New York (FRBNY), have been working with dealers and other market participants since September 2005 to strengthen arrangements for clearing and settling OTC derivatives transactions. For too many years, post-trade processing of OTC derivatives transactions remained decentralized and paper-based despite enormous growth in transactions volumes. Among other problems, dealers reported large backlogs of unconfirmed trades, a significant portion of which had been outstanding for 30 days or more. The failure to confirm trades promptly can exacerbate counterparty credit risks by allowing errors in counterparties' records of their transactions to go undetected, which could lead them to underestimate exposures or to fail to collect margin when due. Such backlogs also could significantly complicate and delay the close-out and replacement of trades with a defaulting counterparty.

By 2005, backlogs of unconfirmed trades were especially large in the credit derivatives market. With encouragement and close monitoring by their prudential supervisors, the dealers worked with market participants to address these weaknesses. By making greater use of available platforms for electronic confirmation of CDS trades, they quickly reduced the backlogs. By September 2006, the dealers reported that, in the aggregate, they had reduced confirmations outstanding more than 30 days by 85 percent. In 2006, the dealers agreed to expand their efforts to tackle backlogs in the equity derivatives market, again by making greater use of electronic confirmation services.

Although these achievements were impressive, the financial turmoil during the summer of 2007 convinced prudential supervisors and other policymakers that further improvements in the market infrastructure were needed. Specifically, CDS backlogs grew almost fivefold from June to August 2007, reversing much of the previous improvement. Although the backlogs subsequently receded, this episode demonstrated that backlog reductions were not sustainable during volume spikes. Moreover, it underscored that, in many respects, the post-trade processing performance of the OTC derivatives markets still lags significantly the performance of more ma-

¹ Senior Supervisors Group (2008), "Observations on Risk Management Practices during the Recent Market Turbulence," March 6, www.newyorkfed.org/newsevents/news/banking/2008/SSG_Risk_Mgt_doc_final.pdf.

ture markets and still has the potential to compromise market participants' management of counterparty credit risks and other risks.

In their reports on the financial market turmoil, both the President's Working Group on Financial Markets (PWG) and the Financial Stability Forum (FSF) asked prudential supervisors, under the leadership of the FRBNY, to take further actions to strengthen the OTC derivatives market infrastructure.² Specifically, they asked the supervisors to insist that the industry set ambitious standards for trade data submission and resolution of trade-matching errors. More timely and accurate submission of trade data is critical to avoiding the buildup of backlogs following volume spikes. They also asked supervisors to ensure that the industry promptly incorporates into standard CDS documentation a protocol that would permit cash settlement of obligations following a default or other credit event involving a reference entity, based on the results of an auction. Adoption of the cash settlement protocol is intended to address concerns that a physical settlement process for CDS could be disorderly in the event of large-scale or multiple contemporaneous defaults. Finally, the PWG and FSF also recommended that the supervisors ask the industry to develop a longer-term plan for an integrated operational infrastructure for OTC derivatives that covers all major asset classes and product types and addresses the needs of other market participants as well as dealers.

The FRBNY convened a meeting of supervisors and market participants on June 9 to discuss how to address the PWG and FSF recommendations. They agreed on an agenda for bringing about further improvements in the OTC derivatives market infrastructure. With respect to credit derivatives, this agenda included: (1) further increasing standardization and automation, with the ultimate objective of matching trades on the date of execution; (2) incorporating an auction-based cash settlement mechanism into standard documentation; (3) reducing the volume of outstanding CDS contracts via greater use of services that orchestrate multilateral terminations; and (4) developing well-designed central counterparty services to reduce systemic risks. Dealers already have made progress in multilaterally terminating CDS contracts, as reflected in the significant drop between April and October of this year in the value of contracts registered in the Trade Information Warehouse, and they have committed to accelerating those efforts. Dealers also agreed to extend the infrastructure improvements in the credit derivatives market over time to encompass the markets for OTC equity, interest rates, foreign exchange, and commodity derivatives.

Potential Changes in Market Infrastructure

Central Counterparty Clearing of Credit Derivatives

A central counterparty (CCP) is an entity that offers to interpose itself between counterparties to financial contracts, becoming the buyer to the seller and the seller to the buyer. Trades on derivatives exchanges routinely are cleared through a CCP, in part so that market participants can accept the best bids or offers without considering the creditworthiness of the party making the bid or offer. Indeed, in electronic exchanges, the use of a CCP permits anonymous trading. CCP services also have been offered to counterparties in OTC derivatives markets. For example, since September 1999, LCH.Clearnet Limited has operated SwapClear, a London-based CCP for interest rate swaps between dealers. SwapClear provides clearing for almost 50 percent of global single-currency swaps between dealers.

A CCP has the potential to reduce counterparty risks to OTC derivatives market participants and risks to the financial system by achieving multilateral netting of trades and by imposing more-robust risk controls on market participants. However, a CCP concentrates risks and responsibility for risk management in the CCP. Consequently, the effectiveness of a CCP's risk controls and the adequacy of its financial resources are critical. If its controls are weak or it lacks adequate financial resources, introduction of its services to the credit derivatives market could actually increase systemic risk. In the first significant test of the effectiveness of a CCP for OTC derivatives' default procedures, SwapClear recently wound down \$9 trillion of OTC interest rate contracts when Lehman Brothers, one of its clearing members, defaulted. The collateral Lehman Brothers had posted covered all losses on its positions, and thus the clearinghouse did not have to use any of its other financial resources.

²President's Working Group on Financial Markets (2008), "Policy Statement on Financial Market Developments," March, www.treasury.gov/press/releases/reports/pwgpolycystatemktturmoil_03122008.pdf; Financial Stability Forum (2008), "Report of the Financial Stability Forum on Enhancing Market and Institutional Resilience," April 7, www.fsforum.org/publications/r_0804.pdf.

Several plans are now under development to provide CCP services to the credit derivatives market. A CCP that seeks to offer its services in the United States would need to obtain regulatory approval. The Commodity Futures Modernization Act of 2000 included provisions that permit CCP clearing of OTC derivatives and require that a CCP be supervised by an appropriate authority, such as a Federal banking agency, the Commodity Futures Trading Commission (CFTC), the Securities and Exchange Commission (SEC), or a foreign financial regulator that one of the U.S. authorities has determined to satisfy appropriate standards. A CCP for credit derivatives with standardized terms that was not regulated by the SEC would need an exemption from securities clearing agency registration requirements.

If a CCP for credit derivatives sought to organize as a bank subject to regulation by the Federal Reserve or if we were consulted by any other regulator of a proposed CCP, we would evaluate the proposal against the “Recommendations for Central Counterparties,” a set of international standards that were agreed to in November 2004 by the Committee on Payment and Settlement Systems (CPSS) of the central banks of the Group of Ten countries and the Technical Committee of the International Organization of Securities Commissions (IOSCO).³

If one or more CCPs for credit derivatives that meet the CPSS-IOSCO standards are introduced, the Federal Reserve will encourage market participants to use those services to the fullest extent possible. We hope to see developers of CCPs move expeditiously in order that CDS market participants can quickly realize the risk management benefits of a CCP. We also strongly encourage such CCPs to clear trades for a broad range of active market participants, either directly or through intermediaries. Active market participants, including asset managers as well as dealers, should be excluded from participating only if not doing so would entail risks to the CCP that it cannot mitigate effectively.

The CFTC, SEC, and the Federal Reserve recognize their mutual interests in ensuring that a CCP for credit derivatives is organized and managed prudently. We are working on a Memorandum of Understanding (MOU) to ensure that we all will have the information necessary for carrying out our different responsibilities with respect to these markets regardless of the form in which a CCP is organized and regardless of which agency is the primary regulator.

Exchange Trading of Credit Derivatives

An exchange is a mechanism for executing trades that allows multiple parties to accept bids or offers from other participants. Trades on an exchange usually are intermediated by a CCP. Exchange trading requires a significant degree of standardization of contracts. In many cases, counterparties to OTC derivatives trades seek to customize the terms of trades to meet very specific risk-management needs, so many OTC trades are not amenable to exchange trading. However, many OTC derivatives, including many credit derivatives have become sufficiently standardized that exchange trading is feasible and the scope for exchange trading probably could be expanded by further standardization of contracts while still meeting risk-management needs.

Where exchange trading of OTC credit derivatives is feasible, it can produce several benefits. First, trades executed on an exchange usually are intermediated by a CCP, and a well-designed CCP can reduce risks to counterparties and the financial system. Second, an electronic exchange can be designed so that trades are locked in at execution, essentially achieving trade matching in real time and eliminating confirmation backlogs. Third, exchange trading has the potential to increase market liquidity by allowing participants to directly trade against bids and offers posted by a broad range of parties, including asset managers as well as derivatives dealers. Finally, exchange trading has the potential to significantly increase transparency with respect to bids and offers and the depth of markets at those bids and offers. For these reasons, policymakers should encourage trading of credit derivatives on exchanges if the terms of the contracts are sufficiently standardized to make exchange trading feasible. However, they should not lose sight of the fact that one of the main reasons the credit derivatives market and other OTC markets have grown so rapidly is that market participants have seen substantial benefit to customizing contract terms to meet their individual risk-management needs. They should continue to be allowed to bilaterally negotiate customized contracts where they see benefits to doing so, subject to continued oversight of the dealers by their prudential supervisors.

³Committee on Payment and Settlement Systems and Technical Committee of the International Organization of Securities Commissions, Bank for International Settlements (2004), “Recommendations for Central Counterparties,” November, www.bis.org/publ/cpss64.htm.

Policy Issues in Considering Regulatory Changes

In considering potential regulatory changes for credit derivatives or CDS, policy-makers should carefully review the source of problems to date. Thus far, the most significant problems with CDS have arisen with management of counterparty exposures on credit protection on highly rated structured credit products purchased from monoline insurance companies. It is important to note that the financial difficulties of Bear Stearns were not associated with CDS activity, and concerns about losses to the firm's derivatives counterparties were not the primary factor motivating the Federal Reserve's decision to extend credit to facilitate the firm's acquisition. That decision was driven primarily by the fear that the collapse of Bear Stearns would have caused other dealers to lose access to critical funding from the triparty repurchase agreement markets. Similarly, Lehman Brothers did not fail because of CDS activity. Furthermore, closeout of contracts with Lehman Brothers by its counterparties provided the first major test of procedures to handle a default by a significant counterparty, and evidence to date suggests that those procedures were very effective at mitigating losses to Lehman's counterparties.

Any discussion of changes to the regulatory framework for credit derivatives should clearly specify the public policy objectives of regulation and how particular regulatory changes would contribute to achieving them. The objectives that have provided the foundation for regulation of derivative markets in the United States can be summarized as: deterring market manipulation, protecting any unsophisticated market participants from fraud and counterparty losses, promoting transparency, containing systemic risks, and promoting product innovation that facilitates risk management. In light of recent experience, the objectives most often cited in discussions about shoring up our regulatory regime are manipulation, transparency, and systemic risk.

Clearly, there are concerns about manipulation involving CDS. These concerns can be addressed by clarifying the SEC's authority with respect to CDS. Policing manipulation requires information, however. Mandating participation in DTCC's trade warehouse for credit derivatives and giving the SEC access to that data would seem the fastest, most effective, and least costly means of bolstering its ability to police manipulation.

Some market observers have expressed concern about the opaqueness of OTC derivatives markets generally. Market transparency has several dimensions—the stock of trades outstanding, trade volumes, and pricing. Data on outstanding trades in the global market currently are available from the BIS, and these data could be enhanced through more frequent and detailed reporting. As noted above, the vast majority of CDS trades are registered in DTCC's trade warehouse, and this warehouse is a possible vehicle for more detailed and timely data than are available through the periodic BIS survey. Creation of a CCP also offers the potential for detailed and timely data on volumes and positions outstanding for the contracts cleared by the CCP. Pricing data is meaningful only for standardized products. Greater standardization will come through exchange trading, in turn facilitating price transparency both on the terms at which traders are willing to deal and on the ultimate transaction price. The economic benefits of transparency are well known, and policy-makers should promote transparency more vigorously. We should not, however, limit derivatives activity to contracts that can be exchange-traded and cleared. Promotion of innovation in risk management products remains an important policy objective, and much of that innovation will always occur away from the more standardized products that are exchange-traded and cleared.

Finally, there are concerns that our regulatory regime must be changed to better contain systemic risk. Work by prudential supervisors is already underway that addresses the weaknesses of major market participants in measuring and managing their counterparty credit risk; as recent experience with market participants' monoline counterparties has shown, there is room for substantial improvement. This step is fundamental to containing systemic risk because it limits the potential for any large market participant to be the catalyst for such risk. In addition, U.S. authorities are coordinating with counterparts in other jurisdictions through the group organized by the FRBNY to ensure that the clearance and settlement of OTC derivative trades occurs in a sound and prudent manner and that this activity is not a source of systemic risk.

OTC derivative markets are global markets requiring global coordination of regulation to address systemic risk. Available evidence suggests that more trading of CDS occurs in London than in the United States. Regulatory remedies that focus only on the United States will not address perceived problems. U.S. authorities and their foreign counterparts have an established mechanism through the FRBNY group to foster domestic and international cooperation. Domestic authorities also are hardening their cooperation through creation of a MOU related to a CCP for credit

derivatives. Uncoordinated, unilateral regulatory efforts, by U.S. authorities or other authorities, simply cannot achieve the public policy objectives of regulation.

Conclusions

The credit derivatives market is an important innovation that provides significant benefits to the banks and asset managers that use these instruments and to the financial system generally. However, their use entails risks, including counterparty credit risks, that market participants need to manage effectively. Supervisors need to continue to pay close attention to individual dealers' management of the risks associated with intermediating the credit derivatives market and other derivatives markets. In addition, they need to address the weaknesses in dealers' management of risks from complex financial instruments, whether CDS or securities, identified by the Senior Supervisors Group. Supervisors also need to continue to foster collective actions by dealers and other market participants to move rapidly toward the goal of implementing a clearing and settlement infrastructure for the credit derivatives market and other OTC derivatives markets that is as efficient as the infrastructure for more mature markets. Supervisors and other policymakers should encourage the introduction and use of well-designed CCP clearing services for credit derivatives, greater standardization of contracts, and the trading of standardized contracts on exchanges. These steps will address concerns about containment of systemic risk as well as produce ancillary benefits with respect to deterring market manipulation and enhancing transparency.

SUBMITTED STATEMENT OF ERIC R. DINALLO, J.D., SUPERINTENDENT, INSURANCE
DEPARTMENT, STATE OF NEW YORK

Testimony to the United States Senate Committee on Agriculture, Nutrition, and Forestry Hearing on "The Role of Financial Derivatives in the Current Financial Crisis"

By Superintendent Eric Dinallo New York State Insurance Department

Tuesday, October 14, 2008, Dirksen Senate Office Building, Room 106

I would like to thank Chairman Tom Harkin, Ranking Member Saxby Chambliss and the Members of the Senate Committee on Agriculture, Nutrition, and Forestry for inviting me to testify today at this hearing on the role of financial derivatives in the current financial crisis.

My name is Eric Dinallo and I am Insurance Superintendent for New York State. I have been asked to discuss with you today one particular kind of derivative—credit default swaps—which have played a major role in the financial problems we now face.

Let me first establish why the New York State Insurance Department is a relevant authority on credit default swaps. I will expand on these issues at greater length, but to provide a context, I will start with a brief summary.

As credit default swaps were developed, there was a question about whether or not they were insurance. Since initially they were used by owners of bonds to hedge their risk or seek protection or insurance in the case of a default by the issuer of the bonds, this was a reasonable question. In 2000, under a prior Administration, the New York Insurance Department was asked to determine if certain credit default swaps were insurance and said no. That is a decision we have since revisited and reversed as incomplete. I will provide more detail on these important decisions shortly.

In addition, since I took office in January 2007, the impact of credit default swaps has been one of the major issues we have had to confront. First, we tackled the problems of the financial guaranty companies, also known as bond insurers or monolines. Credit default swaps were a major factor in their problems. More recently, we have been involved in the bailout of AIG. Again, management of credit default swaps was the biggest source of that company's problems.

Through these experiences, we have needed to carefully study the history and issues surrounding credit default swaps. And we have learned the hard way about their impact on markets and companies.

I am honored to have this opportunity to share with you what we have learned from this experience.

First, let's discuss what a credit default swap is and the different kinds of credit default swaps. A credit default swap is a contract under which the seller, for a fee, agrees to make a payment to the protection buyer in the event that the referenced entity, usually a company or other issuer of some kind of bond, experiences any number of various "credit events", such as bankruptcy, default, or reorganization.

If something goes wrong with the referenced entity, the protection buyer can put the bond to the protection seller and be made whole, or a net payment can be made by the seller to the buyer.

Originally, credit default swaps were used to transfer and thus reduce or mitigate risk for the owners of bonds. If you owned a bond in company X and were concerned that the company might default, you bought the swap to protect yourself. Literally the buyer “swaps” risk of default with someone else. That is why it is called a credit default swap. The swaps could also be used by banks who loaned money to a company. This type of swap is still used for hedging purposes.

Over time, however, swaps came to be used not to reduce risk, but to create or assume it. This second type of swap is little more than a gamble on the value of a particular reference obligation. Institutions that did not own the obligation bought and sold credit default swaps to place a directional bet on a company’s credit worthiness. In early May, we began to use the term “naked credit default swaps” to describe swaps bought by speculators because in that case the swap purchasers do not own the underlying obligation. The protection becomes more valuable as the company becomes less creditworthy. This is similar to naked shorting of stocks.

I have argued that these naked credit default swaps should not be called swaps because there is no transfer or swap of risk. Instead, risk is created by the transaction. Indeed, you have no risk on the outcome of the day’s third race at Belmont until you place a bet on horse number five to win.

We believe that the first type of swap, let’s call it the covered or “sartorial” swap, is insurance. The essence of an insurance contract is that the buyer has to have a material interest in the asset or obligation that is the subject of the contract. That means the buyer owns property or a security and can suffer a loss from damage to or the loss of value of that property. With insurance, the buyer only has a claim after actually suffering a loss.

With the covered swaps, if the issuer of a bond defaults, then the owner of the bond has suffered a loss and the swap provides some recovery for that loss. The second type of swap contains none of these features.

Because the credit default swap market is not regulated, we do not have valid data on the number of swaps outstanding, how many are naked, who bought, who sold and on which issuers they have been written. Estimates of the market were as high as \$62 trillion, though lately the market has been reduced to an estimated \$55 trillion. By comparison, as of the second half of this year, there was only about \$6 trillion in corporate debt outstanding, \$7.5 trillion in mortgage-backed debt and \$2.5 trillion in asset-backed debt, according to data from the Securities Industry and Financial Markets Association. That’s a total of about \$16 trillion in private sector debt. So it appears that swaps on that debt could total at least three times as much as the actual debt outstanding.

When we were dealing with finding a solution for AIG, we knew the company had written almost half a trillion dollars in swaps, but we had no idea how much in swaps had been written on AIG itself or by whom. That meant we did not know what the broader effect of an AIG bankruptcy would be. Also, in our work on the bond insurers, we could not determine the total credit default swaps written on companies such as MBIA and Ambac.

As one of the efforts to stop the current financial crisis, the SEC suspended shorting the stock of 700 companies and all naked shorting of stocks. But nothing was done about the shorting of credit through credit default swaps, though there are much larger numbers involved.

Now, I think it would be useful for your purposes to go into some of the history, including important legislative decisions.

Gambling, betting or speculating on movements in securities or commodities prices without actually owning the referenced security or commodity is nothing new. As early as 1829, “stock jobbing”, an early version of short selling, was outlawed in New York. The Stock Jobbing Act was ultimately repealed in 1858 because it was overly broad and captured legitimate forms of speculation. However, the question of whether to allow bets on security and commodity prices outside of organized exchanges continued to be an issue.

“Bucket shops” arose in the late nineteenth century. Customers “bought” securities or commodities on these unauthorized exchanges, but in reality the bucket shop was simply booking the customer’s order without executing on an exchange. In fact, they were simply throwing the trade ticket in the bucket, which is where the name comes from, and tearing it up when an opposite trade came in. The bucket shop would agree to take the other side of the customer’s “bet” on the performance of the security or commodity. Bucket shops sometimes survived for a time by balancing their books, but were wiped out by extreme bull or bear markets. When their books

failed, the bucketeers simply closed up shop and left town, leaving the “investors” holding worthless tickets.

The Bank Panic of 1907 is famous for J.P. Morgan, the leading banker of the time, calling all the other bankers to a meeting and keeping them there until they agreed to form a consortium of bankers to create an emergency backstop for the banking system. At the time there was no Federal Reserve. But a more lasting result was passage of New York’s anti-bucket shop law in 1909. The law, General Business Law Section 351, made it a felony to operate or be connected with a bucket shop or “fake exchange.” Because of the specificity and severity of the much-anticipated legislation virtually all bucket shops shut down before the law came into effect, and little enforcement was necessary. Other states passed similar gaming or bucket shop laws. Interestingly, to this day, companies wishing to use the world “exchange” must receive permission from New York State.

Thus, the various bucket shop laws essentially prohibit the making or offering of a purchase or sale of security, commodity, debt, property, options, bonds, *etc.*, upon credit or margin, without intending a *bona fide* purchase or sale of the security, commodity, debt, property, options, bonds, *etc.* If you think that sounds exactly like a naked credit default swap, you are right. What this tells us is that back in 1909, 100 years ago, people understood the risks and potential instability that comes from gambling on securities prices.

With the growth of various kinds of derivatives in the late 20th Century, there was legal uncertainty as to whether certain derivatives, including credit default swaps, violated state bucket shop and gambling laws.

The Commodity Futures Modernization Act of 2000 (“CFMA”), signed by President Clinton on December 21, 2000, therefore created a “safe harbor” by (1) preempting state and local gaming and bucket shop laws except for general anti-fraud provisions, and (2) exempting certain derivative transaction on commodities and swap agreements, including credit default swaps, from CFTC regulation.

Thus CFMA stated: “This Act shall supersede and preempt the application of any state or local law that prohibits or regulates gaming or the operation of bucket shops.”

CFMA also amended the Securities and Exchange Acts of 1933 and 1934 to make it clear that the definition of “security” does not include certain swap agreements, including credit default swaps, and that the SEC is prohibited from regulating those swap agreements, except for its anti-fraud enforcement authority.

Therefore, by ruling that credit default swaps were not gaming and not a security, the way was cleared for the growth of the market. But there was one other issue. If some swaps—covered swaps—were considered insurance, then they would be regulated by state insurance departments. The capital and underwriting limits in insurance regulation could have threatened the rapid growth in the market for these derivatives.

So at the same time, in 2000, the New York Insurance Department was asked a very carefully crafted question. “Does a credit default swap transaction, wherein the seller will make payment to the buyer upon the happening of a negative credit event and such payment is not dependent upon the buyer having suffered a loss, constitute a contract of insurance under the insurance law?”

Clearly, the question was framed to ask only about naked credit default swaps with no proof of loss. Under the facts we were given, the swap was not “a contract of insurance”, because the buyer had no material interest and the filing of claim does not require a loss. But the entities involved were careful not to ask about covered credit default swaps. Nonetheless, the market took the Department’s opinion on a subset of credit default swaps as a ruling on all swaps and, to be fair, the Department did nothing to the contrary.

In sum, in 2000 as a society we chose not to regulate credit default swaps, whether as insurance, as a security or gaming.

Why did that matter? As we have seen, the financial system has been placed in peril because there was no comprehensive management of counterparty risk. Deals were made privately between two parties. These bilateral arrangements mean that there are no standards for the solvency of counterparties, who can assign the credit default swaps to other parties. The buyer does not know how much risk the seller is taking on. There are no requirements for the seller to hold reserves or capital against the risks it is taking on by selling swaps. And no one knows who owns or where the credit default swaps ultimately reside.

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.

Unlike insurance, credit default swaps are marked-to-market. That means, the value of the swap reflects the current market value, which can swing sharply and suddenly. Value changes require the sellers to post collateral. Sudden and sharp changes in the credit rating of the issuer of the bonds or of the bonds themselves can produce large swings in the value of the swaps and thus the need to post large and increasing amounts of collateral. That capital strain can produce sudden liquidity problems for sellers. The seller may own enough assets to provide collateral, but the assets may not be liquid and thus not immediately accessible. When many sellers are forced to sell assets, the price of those assets falls and sellers are faced with taking large losses just to meet collateral requirements. As the prices of the assets are driven down by forced sales, mark-to-market losses increase and the collateral posting cycle continues. Meanwhile, the underlying assets may continue to perform—paying interest and principal in full.

The above was a substantial part of the problem at AIG. A ratings downgrade on September 15 produced immediate collateral calls. The company did not have sufficient liquid assets.

In addition, chains of counterparty exposures mean that if any one link in the chain—any one counterparty—fails, others with exposure to that counterparty may also fail setting off a chain reaction. Many financial institutions bought protection from AIG, and there was great uncertainty as to whether all of these institutions could survive AIG's failure.

Was the AIG bailout necessary? I believe it was. Thanks to the protective moat created by state regulation, AIG's insurance operations were insulated from the problems in other AIG subsidiaries and are solid, profitable companies. Many of AIG's companies are leaders in their markets. They have substantial value. But that value could not be realized over a weekend. The bailout will provide time for an orderly restructuring of AIG's operations. It is possible that AIG will survive, as a smaller but much stronger insurance-focused enterprise. At least some of its operations will be sold.

Some argue that the company should have been filed for bankruptcy, as Lehman did. AIG has business relations with just about every major bank in the world. At a time when the financial system and in particular the credit markets are already deeply troubled, the risks of allowing AIG to file for bankruptcy were, in my opinion, just too great. The New York Federal Reserve Bank and the Treasury appear to share that view.

But that systemic risk does underline the need for us to heed New York Governor David Paterson's call to regulate the credit default swap market. In a recent statement, Governor Paterson said, "The absence of regulatory oversight is the principal cause of the Wall Street meltdown we are currently witnessing. This is why New York took the crucial next step of planning to regulate an area of the market which had previously lacked appropriate oversight, but that is indisputably as regulatable as insurance. I strongly encourage the Federal Government to follow our approach and bring stronger regulatory oversight to these markets. New York stands ready to work expeditiously with all concerned to find a workable solution to this problem."

In an interview with *The New York Times*, Governor Paterson called credit default swaps "gambling" and noted that they were a major cause of AIG's problems. He told the paper that "when we peeled back the onion, we found out that AIG had so many credit default swaps that we couldn't calculate how much money they probably had" lost.

On September 22, Governor Paterson announced that New York State is prepared, beginning in January, to regulate part of the credit default swap market which has to date been unregulated. The state is prepared to provide clear regulatory guidance where credit default swaps are used as "insurance" to protect or "hedge" the value of investments held by the purchaser. These transactions are, both functionally and legally, financial guaranty insurance policies.

As I noted, the 2000 decision by the Insurance Department only considered naked credit default swaps. Last month, we determined that covered credit default swaps are insurance and therefore potentially subject to state regulation.

What would be the benefit of treating covered credit default swaps as insurance? Insurers must hold capital and reserves against risks. Insurers are subject to underwriting restrictions that ensure diversification. Insurers are not permitted to write policies with acceleration events, downgrade triggers or collateral calls. While financial guaranty insurance companies have been downgraded, they have maintained their solvency and liquidity. In short, if they were regulated as insurance, buyers of covered credit default swaps would be assured that they could actually have protection when they need it.

What New York State is doing fits our role as insurance regulators. We are providing an appropriate way for those with an insurable interest to protect themselves. Our goal is to ensure the terms of credit default swaps are written as a mechanism for protecting buyers against actual losses and not for betting on the credit quality of a third party. We will also ensure that whoever sells protection is solvent, in other words, can actually pay the claims. There is currently no such protection for parties to credit default swaps that use them as insurance.

The primary goal of insurance regulation is to protect policyholders by ensuring that providers of insurance are solvent and able to pay claims on policies they issue. The goal of regulating these swaps is not to stop sensible economic transactions, but to ensure that sellers have sufficient capital and risk management policies in place to protect the buyers, who are in effect policyholders and to ensure stable markets.

However, we recognize that carving up the credit default swap market is not the ideal solution. And we recognize that there are some valid uses of naked swaps to provide liquidity in the market for risk transfer. There may be different valid ways of having a material interest besides directly owning a bond, such as being long a stock, owning part of a syndicated loan or having a receivable. Also, it may be valid to use the swaps for various sophisticated trading strategies.

Governor Paterson's announcement that New York was ready to regulate part of the market starting January 1 framed the dialogue and pushed forward the discussion of regulating the entire market. The day after Governor Paterson's announcement, SEC Chairman Cox asked for the power to regulate the credit default swap market. And shortly afterward, the New York Federal Reserve began a series of meetings to discuss how to proceed.

There are a number of possible effective means of regulating the entire market, including an exchange, a clearing corporation or a centralized counterparty. Properly designed and operated, any solution would include margin requirements to ensure that there is sufficient capital and liquidity. There should be security funds and other mechanisms to manage counterparty default equitably and predictably. It should provide transparency, both with regard to prices and with regard to the amount of exposure by all counterparties. These measures would ensure that credit default swaps could be a tool for managing risk, without becoming a risk to the entire financial system. We support this effort to find and implement an effective holistic solution.

Credit default swaps played a major role in the financial problems at AIG, Bear Stearns, Lehman and the bond insurance companies. One of the major causes of this financial crisis was not how lax or tight we regulated or how easy or hard we enforced, but what we chose not to regulate. Clearly, it is time to start regulating credit default swaps.

As Governor Paterson said on September 22, New York stands ready to work expeditiously with all concerned to find a workable solution to the problem of how to regulate credit default swaps.

Thank you and I would be happy to answer any questions.

HEARING TO REVIEW THE ROLE OF CREDIT DERIVATIVES IN THE U.S. ECONOMY

THURSDAY, NOVEMBER 20, 2008

HOUSE OF REPRESENTATIVES,
COMMITTEE ON AGRICULTURE,
WASHINGTON, D.C.

The Committee met, pursuant to call, at 10:35 a.m., in Room 1300, Longworth House Office Building, Hon. Collin C. Peterson [Chairman of the Committee] presiding.

Members present: Representatives Peterson, Holden, McIntyre, Etheridge, Boswell, Baca, Scott, Marshall, Herseth Sandlin, Cuellar, Costa, Salazar, Space, Walz, Gillibrand, Kagen, Pomeroy, Barrow, Donnelly, Mahoney, Childers, Goodlatte, Lucas, Moran, King, Neugebauer, Foxx, Conaway, and Latta.

Staff present: Adam Durand, John Konya, Scott Kuschmider, Rob Larew, Clark Ogilvie, John Riley, Rebekah Solem, Kristin Sosanie, Bryan Dierlam, Tamara Hinton, Kevin Kramp, and Jamie Mitchell.

OPENING STATEMENT OF HON. COLLIN C. PETERSON, A REPRESENTATIVE IN CONGRESS FROM MINNESOTA

The CHAIRMAN. The Committee on Agriculture hearing to review the role of credit derivatives in the U.S. economy will come to order.

Mr. Goodlatte is on his way, so I am going to start with my opening statement, and we think by the time I am finished he will be here, and we can proceed.

I thank the Members and the witnesses for being with us today, and I want to welcome everyone to today's hearing, the second in as many months that this Committee has called to review the role of credit derivatives in the U.S. economy.

Today, this Committee will hear about the recent events in the credit default swap market, the possibility of establishing over-the-counter clearing of such contracts, and the Memorandum of Understanding that was recently signed by the CFTC, the SEC and the Federal Reserve Board.

One thing we learned at the October hearing is that very few people know much about the credit default swaps market and even fewer people know the significant role that they have played in the financial and credit crisis that has threatened the stability of our economy.

The market for these products has risen a thousand percent over the last 7 years, with contracts becoming more specialized and complicated over time. Although I would say the more I look at

these contracts, I am not sure they are as complicated as people make them out to be. That may be a myth that is out there. I think it is complicated in terms of trying to price them and so forth.

Anyway, as we have seen, the changes in the price of a credit default swaps contract outstanding against a particular firm can have real effects in the financial health of the company itself. The sudden collapse and gradual fallout of the insurance giant AIG and the difficulties experienced by other financial firms in recent months have served to demonstrate that the CDS market is extremely opaque and market positions as a result are nearly impossible to value during times of stress.

We need our regulators to have a clear view of the market. The most promising development appears to be the commitment of regulators and the industry to establish clearinghouses along the lines of those the commodity futures markets use to provide transparency and greater assurance of counterparty performance.

I think one of the things we can do right away to start opening up and cleaning up the swaps market is to use the CFTC model of a transparent and aboveboard central clearing process. To that end, there has been recent discussion among Federal regulators about combining forces to oversee the central clearing of swaps trades.

In the recent MOUs signed by the CFTC, SEC, and Federal Reserve, the three agencies committed to cooperate in the establishment and oversight of clearing platforms in the swaps market. As is noted in testimony submitted today, there are proposals under consideration that would lead to a clearinghouse regulated by the Fed and another by the CFTC.

While the Fed has no experience in regulating the type of central clearing counterparty under consideration, the CFTC has long experience in just that area. I am not aware of any allegation that the CFTC has failed as a clearinghouse regulator, and I hope in the course of this hearing to understand better why there is consideration of giving the Fed this new job in an area where they have no history, while the CFTC can take over that function within their existing mission.

As I understand it, the CFTC has a statute, they have law, they have a long history, but with the Fed, there is no statute, there is no underlying law; and it looks to me like either people are trying to look like they are being regulated when they are not, or it is going to take a long time to get that put together. So that is part of what we want to try to figure out here today.

Unfortunately, the debate over the risk these swaps and their disentanglement posed to the economy was completely missing from the bailout bill that was pushed by Treasury Secretary Henry Paulson and passed by this Congress. It took, in my opinion, the wrong approach and does not begin to get at the problems caused by these unregulated financial sectors.

Furthermore, recent comments by Secretary Paulson would seem to acknowledge that the TARP now in place is now going nowhere. He already acknowledged that the asset purchase plan he was pushing will not work because very few, if any, holders of the toxic debt are interested in selling at a loss, no matter what the stakes. Instead, we have exposed taxpayers to hundreds of billions of dol-

lars more in debt that will be paid off by our children and grandchildren and probably borrowed from China.

At some point, our regulators in the next Congress will have to get to the root of the problem before it is too late and allow for some real oversight of these markets to provide transparency and accountability for both buyers and sellers, and to reduce systemic risk.

So I again welcome everybody to the Committee.

[The prepared statement of Mr. Peterson follows:]

PREPARED STATEMENT OF HON. COLLIN C. PETERSON, A REPRESENTATIVE IN
CONGRESS FROM MINNESOTA

Good morning. I want to welcome everyone to today's hearing, the second in as many months that this Committee has called to review the role of credit derivatives in the U.S. economy. Today, this Committee will hear about the recent events in the credit default swaps market, the possibility of establishing over-the-counter clearing of such contracts, and the Memorandum of Understanding that was recently signed by the Commodity Futures Trading Commission, the Securities and Exchange Commission, and the Federal Reserve Board.

One thing we learned at October's hearing is that very few people know much about the credit default swaps market and even fewer people know the significant role they have played in the financial and credit crisis that has threatened the stability of our economy.

The market for these products has risen a thousand percent over the last 7 years with contracts becoming more specialized and complicated over time. And as we have seen, the changes in price of a credit default swaps contract outstanding against a particular firm can have real effects in the financial health of the company itself.

The sudden collapse and gradual fallout of the insurance giant AIG and the difficulties experienced by other financial firms in recent months have served to demonstrate that the CDS market is extremely opaque and that market positions, as a result, are nearly impossible to value during times of stress.

We need our regulators to have a clear view of the market. The most promising development at this time appears to be the commitment of regulators and the industry to establish clearing houses along the lines of those the commodity futures markets use, to provide transparency and greater assurance of counterparty performance. I think one of the things we can do right away to start opening up and cleaning up the swaps markets is to use the CFTC model of transparent and above-board central clearing process.

To that end, there has been recent discussion among Federal regulators about combining forces to oversee central clearing of swaps trades.

In a recent Memorandum of Understanding signed by the CFTC, SEC, and Federal Reserve, the three agencies commit to cooperate in the establishment and oversight of clearing platforms in the swaps market.

As is noted in testimony submitted today, there are proposals under consideration that could lead to a clearinghouse regulated by the Fed and another by the CFTC. While the Fed has no experience in regulating the type of central clearing counterparty under consideration, the CFTC has long experience in just that area. I'm not aware of any allegation that the CFTC has failed as a clearinghouse regulator and I hope in the course of this hearing to understand better why there is consideration of giving the Fed this new job in an area in which it has no history, while the CFTC can take over that function within its existing mission.

Unfortunately, the debate over the risk these swaps and their disentanglement pose to the economy was completely missing from the bailout bill that was pushed by Treasury Secretary Henry Paulson and passed by Congress. It took the wrong approach and does not begin to get at the problems caused by these unregulated financial sectors.

Furthermore, recent comments by Secretary Paulson would seem to acknowledge that the Troubled Asset Relief Plan now in place is going nowhere. He's already acknowledged that the asset purchase plan he was pushing will not work because very few, if any, holders of the toxic debt are interested in selling at a loss, no matter what the stakes. Instead, we have exposed taxpayers to hundreds of billions more in debt that will be paid off by our children and grandchildren.

At some point, our regulators and the next Congress will have to get to the root of the problem before it is too late and allow for some real oversight of these markets, to provide transparency and accountability for both buyers and sellers, and to reduce systemic risk.

At this time I would yield to my friend and colleague, the Ranking Member from Virginia, Mr. Goodlatte, for an opening statement.

The CHAIRMAN. At this time, I would yield to my friend and colleague, the Ranking Member from Virginia, Mr. Goodlatte, for an opening statement.

**OPENING STATEMENT OF HON. BOB GOODLATTE, A
REPRESENTATIVE IN CONGRESS FROM VIRGINIA**

Mr. GOODLATTE. Well, thank you, Mr. Chairman.

I want to thank you for calling today's hearing on the role of credit derivatives in the U.S. economy. Today's hearing is part of a continued effort by this Committee to further gain information and insight into the complex nature of credit default swaps and how they should be regulated.

Credit default swaps do serve a valid purpose in the marketplace. They are essential for managing risk. The financial problems that we have seen in recent months are not the result of their mere existence but rather because, right now, no one can confidently price them or measure their true performance, or know the depth and breadth of this market, or be assured of the creditworthiness of its counterparty. There should be appropriate regulation, but it should be done in such a way that respects the nature of the marketplace and considers the real limits of government intervention.

Recently, Federal regulatory bodies established a Memorandum of Understanding regarding credit default swaps. I support this measure which will allow for information sharing and will encourage cooperation among regulatory authorities.

Also, there is a consensus among regulators that there is a need for a clearing mechanism for credit default swaps. This will provide the transparency needed to understand the market, as well as measure counterparty performance.

I am encouraged that we are collectively moving forward with this idea of a clearing mechanism. This will provide a number of benefits to all parties involved. It will improve the transparency of the credit default swaps market, it will improve risk management, and it will create a method for price discovery.

However, as we move forward, it is important to make clear that it is no solution to the problems to merge the Commodity Futures Trading Commission with the Securities and Exchange Commission. This is not going to solve anything, and it is not an approach that we should pursue.

I look forward to your testimony and your answers to the questions posed by the Committee Members, Mr. Chairman. Thank you, and I yield back.

The CHAIRMAN. I thank the gentleman.

All Members' statements will be made part of the record.

Again, we welcome the witnesses to the table: Mr. Ananda Radhakrishnan, Director of the Division of Clearing and Intermediary Oversight of the CFTC; Patrick Parkinson, Deputy Director, Division of Research and Statistics for the Board of Governors of the Federal Reserve; Erik Sirri, Director of the Division of Trad-

ing and Markets for the SEC; and Mr. Eric Dinallo, Superintendent, State of New York Insurance Department.

So, gentleman, welcome to the Committee.

We will start with you, Mr. Radhakrishnan. Am I right on that?

Mr. RADHAKRISHNAN. Yes, sir.

The CHAIRMAN. Your statements will be made part of the record. We would encourage you to summarize and try to stay within the 5 minutes because we've got a lot of stuff going on today. So welcome to the Committee.

**STATEMENT OF ANANDA RADHAKRISHNAN, DIRECTOR,
DIVISION OF CLEARING AND INTERMEDIARY OVERSIGHT,
COMMODITY FUTURES TRADING COMMISSION,
WASHINGTON, D.C.**

Mr. RADHAKRISHNAN. Thank you, Chairman Peterson and Ranking Member Goodlatte and the other distinguished Members of this Committee. I am pleased to appear here today to discuss risk management for credit default swaps.

I will focus my remarks on the ongoing process to develop a clearing solution for CDS products and the recent MOU that was signed by the CFTC, the Federal Reserve and the SEC. This Committee may be aware that there are two entities that are being seriously considered to provide a clearing solution for credit default swaps. One of them is the Chicago Mercantile Exchange, and the other is the IntercontinentalExchange. There are other entities that are also seeking to provide a solution, but it is my understanding that these two entities are furthest along.

As the Chairman pointed out, the Federal regulator for the Chicago Mercantile Exchange is the CFTC, and the ICE proposal has been structured to my understanding as a limited public trust company under the auspices of the State of New York. They will be seeking to join the Federal Reserve; and, therefore, the Board of Governors will be the regulator for that entity.

During the past several weeks, staff of the CFTC, the Fed and SEC have engaged in a collaborative review of these entities to evaluate their proposals for compliance with applicable statutory regulatory requirements, and specifically for the CME, the core principles that Congress gave us in the CFMA for derivatives clearing organization.

As the gentleman alluded to, there was an MOU signed by the CFTC, the Fed and the SEC. Generally speaking, the MOU is a statement of the intent of the three agencies to cooperate, coordinate and share information in connection with the respective oversight responsibilities of each agency regarding central counterparties for CDS products.

The MOU also explicitly recognized that a central counterparty for CDSs may be one or more of the following: a state-chartered bank that is a member of the Fed, a DCO that is under the jurisdiction of the CFTC, or a clearing agency that is under the jurisdiction of the SEC. This reflects the statutory scheme that was set up by Congress with the passage of the CFMA.

Specifically, section 409 of the Federal Deposit Insurance Corporation Improvement Act of 1991, also known as FDICIA, which was enacted as part of the CFMA, provided for over-the-counter de-

rivative instruments to be cleared by what is known as a Multilateral Clearing Organization, or an MCO, that is either regulated by the CFTC, the SEC, the Federal Reserve, or, in some cases, by a foreign clearing organization.

In that same statute, OTC derivative instruments are defined, in my opinion, quite expansively to include, among other things, any agreement, contract or transaction that is a credit spread, or credit swap, or that is a swap on one or more occurrences of any event, equity security or other equity instrument, debt security or other debt instruments. In short, instruments known as CDSs fall under the FDICIA's definition of over-the-counter derivative instruments.

We believe Congress intended to bring the benefits of multilateral clearing to the over-the-counter credit markets without imposing legal ambiguity or regulatory redundancy that would create a disincentive to clearing these unregulated instruments. So over the years, through the supervision of DCOs, the CFTC has developed extensive institutional knowledge and regulatory expertise regarding derivatives clearing. Further, the clearing model used by DCOs has worked well for many years for a wide variety of products without a single clearinghouse default.

DCOs process millions of transactions per day using fully automated clearing systems that reduce the likelihood of processing delay and error, and we believe that this model should work equally well for CDS transactions.

I thank you for your leadership on this critical issue and am pleased to answer any questions that you may have.

[The prepared statement of Mr. Radhakrishnan follows:]

PREPARED STATEMENT OF ANANDA RADHAKRISHNAN, DIRECTOR, DIVISION OF CLEARING AND INTERMEDIARY OVERSIGHT, COMMODITY FUTURES TRADING COMMISSION, WASHINGTON, D.C.

Chairman Peterson, Ranking Member Goodlatte, and other distinguished Members of the Committee, I am pleased to have this opportunity to appear today to discuss risk management for over-the-counter credit default swaps (CDS). My name is Ananda Radhakrishnan and I serve as the Director of the Division of Clearing and Intermediary Oversight at the CFTC. I am here today testifying in that capacity and not on behalf of the Commission.

Acting Chairman Lukken testified before the Committee on October 15 on this subject, so I will try not to be redundant, but rather focus on recent events related to the CDS markets, including the ongoing process to develop a clearing solution for CDS products and the Memorandum of Understanding (MOU) recently signed by the CFTC, the Federal Reserve (Fed), and the Securities and Exchange Commission (SEC).

As the Committee is aware, concerns have been raised regarding the role that over-the-counter CDS products may have played in contributing to the recent credit crisis. Staff of the CFTC, the Fed, and the SEC believes that centralized clearing of CDS instruments would bring transparency and financial integrity to the CDS market, which would be an important step in resolving the current crisis and restoring the strength and integrity of the U.S. financial markets as a whole. As such, the agencies have been working together to identify potential clearing solutions for CDS products.

Several entities—most prominently, the Chicago Mercantile Exchange (CME) and the IntercontinentalExchange (ICE)—recently have submitted proposals to clear CDS. The primary Federal regulator for these entities will be the CFTC (for the CME proposal) and the Fed (for the ICE proposal). In addition, the entities plan to obtain exemptions from the SEC from certain securities law provisions. During the past several weeks, staff of the CFTC, Fed, and SEC have engaged in a collaborative review of these entities to evaluate their proposals for compliance with applicable statutory and regulatory requirements, such as the core principles for derivatives

clearing organizations (DCOs) established by the Commodity Futures Modernization Act of 2000 (CFMA).

Another example of agency cooperation is the MOU entered into by the CFTC, Fed, and SEC. Generally speaking, the MOU is a statement of intent to cooperate, coordinate and share information in connection with the respective oversight responsibilities of each agency regarding central counterparties for CDS.

Among its specific provisions, the MOU provides that the agencies will consult with each other and share information regarding matters such as: (i) the review and approval of any proposed central counterparty; (ii) material proposed changes to the rules, policies or procedures of a central counterparty; and (iii) the financial condition, risk management systems, internal controls, liquidity and financial resources, operations, and governance of central counterparties. The MOU also contains provisions regarding permissible uses of information exchanged under the MOU and confidentiality of that information.

The MOU deliberately does not address the specifics of any particular clearing proposal for CDS, nor does it commit any of the agencies to take any action (or refrain from any action) with respect to any particular clearing proposal or central counterparty. It recognizes the importance of efficient supervision and regulation of central counterparties to reduce duplicative efforts. It avoids, however, addressing any issues respecting the jurisdictional authority of the agencies over various central counterparties.

However, as the MOU expressly recognizes, a central counterparty for CDS may be one or more of the following: a state-chartered bank that is a member of the Fed, a DCO under the jurisdiction of the CFTC, or a Clearing Agency under the jurisdiction of the SEC. This reflects the statutory scheme set up by Congress with the passage of the CFMA.

Pursuant to Section 409 of the Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA), which was enacted as part of the CFMA, over-the-counter derivative instruments may be cleared by any multilateral clearing organization (MCO) that is regulated by the CFTC, the SEC or the Fed (or by foreign clearing organizations under certain circumstances). Over-the-counter derivative instruments are defined expansively in Section 408(2) of FDICIA to include, among other things, any agreement, contract, or transaction that is a credit spread or credit swap or that is a swap on one or more occurrences of any event, equity security, or other equity instrument, debt security or other debt instrument. In short, instruments known as CDS fall under FDICIA's definition of over-the-counter derivative instruments.

Contemporaneously with authorizing the clearing of over-the-counter derivative instruments by any MCO, Congress excluded the trading of over-the-counter financial derivative instruments under CFTC and SEC jurisdiction. However, there remains legal uncertainty whether the act of clearing changes the legal status of an OTC derivative. We believe Congress intended to bring the benefits of multilateral clearing to the over-the-counter credit markets without imposing legal ambiguity and regulatory redundancy that would create a disincentive to clearing these unregulated instruments. That principle is recognized in the MOU that was entered into last week, which emphasized the importance of promoting the effective and efficient supervision and regulation of central counterparties and reducing duplication of effort by the agencies.

Over the years, through supervision of the DCOs, the CFTC has developed extensive institutional knowledge and regulatory expertise regarding derivatives clearing. Further, the clearing model used by DCOs has worked well for many years for a wide variety of products, without a single clearinghouse default. DCOs process millions of transactions per day, using fully automated clearing systems that reduce the likelihood of processing delay and error. This model should work equally well for CDS transactions.

We at the CFTC will continue to work collaboratively and cooperatively with our colleagues at the Fed and the SEC, and with international regulators, to bring transparency and financial integrity to the CDS market through clearing and infrastructure improvements, and to enhance and improve effective risk management and market oversight. It is our hope that these efforts will help restore the strength and integrity of the U.S. financial markets.

Thank you for your leadership on this critical issue. I am pleased to answer any questions you may have.

The CHAIRMAN. Thank you very much.
Mr. Parkinson, welcome to the Committee.

**STATEMENT OF PATRICK M. PARKINSON, DEPUTY DIRECTOR,
DIVISION OF RESEARCH AND STATISTICS, BOARD OF
GOVERNORS, FEDERAL RESERVE SYSTEM, WASHINGTON,
D.C.**

Mr. PARKINSON. Thank you, Chairman Peterson, Ranking Member Goodlatte and Members of the Committee. I appreciate the opportunity to provide an update on recent initiatives by the Federal Reserve to enhance the markets in which credit default swaps and other over-the-counter derivatives trades are settled.

I would like to emphasize that the Federal Reserve has taken these actions in coordination with the President's Working Group on Financial Markets and other domestic and international supervisors of key market participants.

In March, the PWG made recommendations to enhance the market infrastructure for CDS and other OTC derivatives. In light of recent developments, last week the PWG announced a broader set of public policy objectives to guide efforts to address the full range of challenges associated with OTC derivatives, including risk management of OTC derivatives and the transparency and integrity of CDS markets, as well as further measures to strengthen the market infrastructure.

The PWG's top near-term priority is to oversee the implementation of CCP clearing for CDS. In the past month, authorities in the United States and abroad have sought to speed the development of CCPs for CDS. Four organizations plan to offer clearing for CDS. The primary Federal regulators for two of those organizations would be U.S. authorities, in one case, the Commodity Futures Trading Commission and, in the other case, the Federal Reserve Board. The primary regulators for the other two would be authorities in the United Kingdom and Germany.

In addition, the two U.S. CCPs, for credit derivatives to obtain an exemption from the SEC from securities clearing agency registration requirements. The CFTC, SEC and Federal Reserve recognize their mutual interests in ensuring that all CCPs for credit derivatives are organized and managed prudently.

We have been jointly examining the risk management and financial resources of the two organizations that will be supervised by U.S. authorities against the *Recommendations for Central Counterparties*, a set of international standards that were agreed to in 2004 by the Committee on Payment and Settlement Systems of the central banks of the Group of 10 countries and the Technical Committee of the International Organization of Securities Commissions.

Last week, the CFTC, SEC, and Federal Reserve signed a Memorandum of Understanding that established a framework for ongoing consultation and information sharing relating to CCPs for CDS. The MOU is particularly important because it created a mechanism to ensure that we all have the information necessary for carrying out our respective responsibilities related to the markets regardless of the form in which the CCP is organized and regardless of which agency is the primary regulator.

Numerous other efforts are under way to build a more resilient infrastructure for OTC derivatives. Major dealers recently committed to broad improvements in back office processes for equity,

interest rate, commodity and foreign exchange products as well as credit products. These commitments include greater use of electronic processing of trades, speedier confirmation of trades, and expanded use of central trade repositories, in part to enhance market transparency.

Dealers as well as other large market participants also have redoubled their efforts to terminate economically redundant trades that contribute to operational risks. To date in 2008, more than \$24 trillion of the notional amount of the CDS trades has been terminated.

Although the creation of the CCPs for CDS will provide an important new tool for managing counterparty credit risk, enhancements to the risk-management policies and procedures for market participants will continue to be a high priority for supervisors. Many transactions that transfer credit risk between market participants will continue to be executed and managed on a bilateral, decentralized basis because they are not sufficiently standardized to be cleared through a CCP. Supervisors recognize financial institutions need to make changes to their risk-management practices for OTC derivatives to ensure the traditional credit risk management disciplines are in place for complex products, regardless of whether they take the form of CDS or of securities. Efforts to implement these changes continue through the Senior Supervisors Group, in which supervisors from the jurisdictions with major OTC derivatives dealers are represented. Such cooperative groups have offered an important tool for ensuring that supervisors set consistent standards for all participants in these global markets.

Many market observers have expressed concern about the opaqueness of OTC derivatives markets generally, not just of the CDS markets. The Depository Trust Clearing Corporation's Trade Information Warehouse, a contract repository, contains an electronic record of a large and growing share of CDS trades. DTCC recently began publishing aggregate market data based upon these reports. However, these data currently are not comprehensive. The PWG has called for a record of all CDS that are not cleared through a CCP to be retained in the DTCC warehouse or a similar repository and for regulators to have access to the data on CDS housed at the CCPs and repositories. Furthermore, the PWG has called for public reporting of prices, trading volumes, and aggregate open interest.

In conclusion, credit derivatives and other OTC derivatives are integral to the smooth functioning of today's financial market. With appropriate oversight and prudent risk management by users of these products, derivatives can provide significant benefits to financial market participants and to the financial system generally. The Federal Reserve is working cooperatively with other domestic and international authorities to strengthen the infrastructure through which CDS trades are cleared and settled, and to address weaknesses that have been identified in the risk management practices of major participants. Efforts to strengthen the infrastructure also will help support significant improvements in transparency, which in turn can enhance efficiency in market integrity.

Thank you.

[The prepared statement of Mr. Parkinson follows:]

PREPARED STATEMENT OF PATRICK M. PARKINSON, DEPUTY DIRECTOR, DIVISION OF RESEARCH AND STATISTICS, BOARD OF GOVERNORS, FEDERAL RESERVE SYSTEM, WASHINGTON, D.C.

Chairman Peterson, Ranking Member Goodlatte, and Members of the Committee, I appreciate this opportunity to provide an update on recent initiatives by policy-makers to enhance the markets in which credit default swaps (CDS) and other over-the-counter (OTC) derivatives trade and are settled. On October 15, I provided the Committee with a more extensive statement about the nature of OTC credit derivatives markets, prudential oversight of those markets, potential changes in market infrastructure, and the policy issues that should be considered in evaluating regulatory changes. Today, I will briefly review the key conclusions of that statement and then discuss the Federal Reserve's recent actions to strengthen market infrastructure, enhance risk management, and increase transparency for these products. I would like to emphasize at the outset that the Federal Reserve has taken these actions in coordination with the President's Working Group on Financial Markets (PWG) and other domestic and international supervisors of key market participants.

Summary of October 15 Statement

As noted in my earlier statement, supervisors have worked with market participants since 2005 to strengthen the infrastructure of credit derivatives markets through such steps as greater use of electronic confirmation platforms, adoption of a protocol that requires participants to request counterparty consent before assigning trades to a third party, and creation of a contract repository, which maintains an electronic record of CDS trades. Looking forward, the most important potential change in the infrastructure for credit derivatives is the creation of one or more central counterparties (CCPs) for CDS. The Federal Reserve supports CCP clearing of CDS because, if properly designed and managed, CCPs can reduce risks to market participants and to the financial system. In addition to clearing of CDS through CCPs, the Federal Reserve believes that exchange trading of sufficiently standardized contracts by banks and other market participants can increase market liquidity and transparency and thus should be encouraged.

Policy discussions of potential regulatory changes for CDS have focused on preventing market manipulation, improving transparency, and mitigating systemic risk. Manipulation concerns can be addressed by clarifying the Securities and Exchange Commission's (SEC) authority with respect to CDS. Data from a contract repository provide a means for enhancing transparency, a topic I will discuss in greater depth later. To better contain systemic risk, prudential supervisors already have begun to address the weaknesses of major market participants in measuring and managing their counterparty credit risks. This step is fundamental to containing systemic risk because it helps limit the potential for any single large market participant to be the catalyst for transmission of such risk.

Strengthening Infrastructure, Enhancing Risk Management, and Increasing Transparency

PWG's Policy Objectives for OTC Derivatives

In March, the PWG made recommendations to enhance the market infrastructure for CDS and other OTC derivatives. In light of recent developments, last week the PWG announced a broader set of policy objectives to guide efforts to address the full range of challenges associated with OTC derivatives, including risk management of OTC derivatives and the transparency and integrity of CDS markets, as well as further measures to strengthen market infrastructure.¹

Central Counterparties for CDS and Other Infrastructure Issues

The PWG's top near-term priority is to oversee the implementation of CCP clearing for CDS. In the past month, authorities in the United States and abroad have sought to speed the development of CCPs for CDS. Four organizations plan to offer clearing for CDS. The primary Federal regulators for two of these organizations would be U.S. authorities—in one case, the Commodity Futures Trading Commission (CFTC), and in the other case, the Federal Reserve Board (and its supervisory delegee, the Federal Reserve Bank of New York). The primary regulators for the two others would be authorities in the United Kingdom and Germany. In addition, the two U.S. CCPs for credit derivatives plan to obtain an exemption from the SEC from

¹ President's Working Group on Financial Markets (2008), "Policy Statement on Financial Market Developments," March, www.treas.gov/press/releases/reports/pwgpolicystatementkturmoil_03122008.pdf; President's Working Group on Financial Markets (2008), "PWG Policy Objectives," November 14, www.treasury.gov/press/releases/reports/policyobjectives.pdf.

securities clearing agency registration requirements. The CFTC, SEC, and Federal Reserve recognize their mutual interests in ensuring that all CCPs for credit derivatives are organized and managed prudently. We have been jointly examining the risk management and financial resources of the two organizations that will be supervised by U.S. authorities against the “Recommendations for Central Counterparties,” a set of international standards that were agreed to in 2004 by the Committee on Payment and Settlement Systems (CPSS) of the central banks of the Group of 10 countries and the Technical Committee of the International Organization of Securities Commissions.²

Last week, the CFTC, SEC, and Federal Reserve signed a Memorandum of Understanding (MOU) that established a framework for ongoing consultation and information sharing related to CCPs for CDS. The MOU is particularly important because it created a mechanism to ensure that we all will have the information necessary for carrying out our respective responsibilities related to these markets regardless of the form in which a CCP is organized and regardless of which agency is the primary regulator.

As outlined in my October statement, numerous other efforts are under way to build a more resilient infrastructure for OTC derivatives in addition to the development of a CCP for CDS. Major dealers recently committed to broader improvements in back-office processes for equity, interest rate, commodity, and foreign exchange products as well as credit products. These commitments include greater use of electronic processing of trades, speedier confirmation of trades, and expanded use of central trade repositories, in part to enhance market transparency. Dealers as well as other large market participants also have redoubled their efforts to terminate economically redundant trades that contribute to operational risk. To date in 2008, more than \$24 trillion of the notional amount of CDS trades has been terminated.

Risk Management

Although the creation of CCPs for CDS will provide an important new tool for managing counterparty credit risk, enhancements to the risk-management policies and procedures for market participants will continue to be a high priority for supervisors. Many transactions that transfer credit risk between market participants will continue to be executed and managed on a bilateral, decentralized basis because they are not sufficiently standardized to be cleared through a CCP. Such OTC transactions are integral to the functioning of today’s financial markets. Supervisors recognize, however, that financial institutions need to make changes in their risk-management practices for OTC derivatives by improving internal incentives and controls and by ensuring that traditional credit risk-management disciplines are in place for complex products, regardless of whether they take the form of CDS or of securities. Efforts to implement these changes continue through the Senior Supervisors Group, in which supervisors from the jurisdictions with major OTC derivatives dealers are represented.³ Such cooperative groups offer an important tool for ensuring that supervisors set consistent standards for all participants in these global markets.

Transparency

Many market observers have expressed concern about the opaqueness of OTC derivatives markets generally. The Depository Trust Clearing Corporation’s (DTCC) Trade Information Warehouse, a contract repository, contains an electronic record of a large and growing share of CDS trades. DTCC recently began publishing aggregate market data based upon these records each week. Information is provided, for example, on index, *versus* single-name, contracts; reference entities on which the contracts are written; and maturities of contracts. However, these data currently are not comprehensive. The PWG has called for a record of all CDS that are not cleared through a CCP to be retained in the DTCC warehouse or a similar repository and for regulators to have access to the data on CDS housed at CCPs and repositories. Furthermore, the PWG has called for public reporting of prices, trading volumes, and aggregate open interest.

Conclusion

Credit derivatives and other OTC derivatives are integral to the smooth functioning of today’s financial markets. With appropriate oversight and prudent risk management by users of these products, derivatives can provide significant benefits

²Committee on Payment and Settlement Systems and Technical Committee of the International Organization of Securities Commissions, Bank for International Settlements (2004), “Recommendations for Central Counterparties,” November, www.bis.org/publ/cpss64.pdf.

³Senior Supervisors Group (2008), “Observations on Risk Management Practices during the Recent Market Turbulence,” March 6, www.newyorkfed.org/newsevents/news/banking/2008/SSG_Risk_Mgt_doc_final.pdf.

to financial market participants and to the financial system generally. The Federal Reserve is working cooperatively with other domestic and international authorities to strengthen the infrastructure through which CDS trades are cleared and settled and to address weaknesses that have been identified in the risk-management practices of major market participants. Efforts to strengthen the infrastructure also will help support significant improvements in transparency, which in turn can enhance efficiency and market integrity.

The CHAIRMAN. Thank you very much.
Mr. Sirri, welcome to the Committee.

**STATEMENT OF ERIK R. SIRRI, DIRECTOR, DIVISION OF
TRADING AND MARKETS, U.S. SECURITIES AND EXCHANGE
COMMISSION, WASHINGTON, D.C.**

Mr. SIRRI. Thank you, Chairman Peterson, Ranking Member Goodlatte and Members of the House Committee on Agriculture. I am pleased to have the opportunity to be here again, today to testify regarding credit default swaps.

As you know, the CDS market has experienced explosive growth in recent years. I think it is important to note that the CDS can serve important economic purposes, including the management of risk exposure to a particular credit or to an entire sector.

The current CDS market operates solely on a bilateral basis, an over-the-counter system that has grown many times the size of the market for the underlying credit derivatives. Recent events have focused attention on the systemic risks that are posed by CDS. Moreover, the deterioration of credit markets generally has increased the likelihood of CDS payouts, which are prompting CDS buyers to seek additional margin from their counterparties. These margin calls have strained counterparties' balance sheets and may be forcing asset sales that contribute to a downward pressure on the cash securities market.

In addition to this risk that CDS poses systemically to financial stability, CDS also presents risks of manipulation and fraud for our markets.

The SEC has great interest in credit default swaps in part because of their impact on securities markets and the Commission's responsibility to maintain fair, orderly and efficient markets. These markets are directly affected by CDS because the credit protection is written on the financial claims of issuers, which we regulate.

The Commission's current authority with respect to OTC CDS, which generally are securities-based swap agreements under the CFMA, is limited to enforcing anti-fraud prohibitions under the Federal securities laws, including prohibitions on insider trading. I note, however, that if CDS were standardized as a result of central clearing or exchange trading or other changes in the market and no longer subject to individual negotiation, the swap exclusion from the securities laws under the CFMA would be unavailable.

Under current law, however, the SEC is statutorily prohibited from promulgating any rules regarding CDS trading in the over-the-counter market. Thus, the tools necessary to oversee OTC CDS markets effectively and efficiently do not exist.

In addition, there is a risk of manipulation and fraud in the CDS market in part because trade reporting and disclosure are limited. One way to guard against mis-information and fraud is to create mandatory systems of record-keeping and the reporting of all CDS

trades to the SEC. Ready information on trades and positions of dealers would also aid the SEC in its enforcement of anti-fraud and anti-manipulation rules.

Notwithstanding the lack of statutory authority to require the reporting of record-keeping in the CDS market, the SEC is doing what it can under existing statutory authority. Most recently, the Commission announced a sweeping expansion of its ongoing investigation into possible market manipulation involving certain financial institutions. The expanded investigation will require hedge fund managers and other persons with positions in CDSs to expose their positions in the Commission and provide certain information under oath.

Investigations of over-the-counter CDS transactions have been far more difficult and time-consuming than those involving other markets because information on CDS transactions gathered from market participants have been incomplete and inconsistent.

SEC staff is actively participating with other financial supervisors and industry members in efforts to establish one or more central counterparties for credit default swaps. This would be an important first step in reducing systemic and operational risks in the CDS market, and the Commission staff fully support these efforts.

The Commission staff, along with Fed and CFTC staff, have been evaluating proposals to establish CCPs for the CDS. SEC staff has participated in on-site assessments of these Federal counterparty proposals, including review of the risk management systems.

The SEC brings to this exercise its experience of more than 30 years in regulating the clearance and settlement of securities, including derivatives on securities. The Commission will use this expertise in its regulatory and supervisory authority over any CCPs for CDS that may be established to strengthen the market infrastructures and to protect investors.

To facilitate the speedy establishment of one or more CCPs for these credit default swaps and to encourage market participants to voluntarily submit their CDS trades to a central counterparty, the Commission staff is preparing conditional exceptions from the requirements of the securities laws for Commission consideration. SEC staff has been discussing the potential scope and condition of these draft exemptions with each prospective CCP and has been coordinating with relevant U.S. and foreign regulators.

In addition, last Friday, Chairman Cox signed a Memorandum of Understanding with the Fed and CFTC. This MOU establishes a framework for consultation and information sharing on issues related to central counterparties for CDS. Cooperation and coordination under the MOU will enhance each agency's ability to effectively carry out its respective regulatory responsibilities, minimize the burden on CCPs, and reduce duplicative efforts.

In addition to reducing counterparty and operational risk inherent in the CDS market and thereby helping to mitigate the potential systemic impacts, a CCP may also help reduce negative effects and misinformation and rumors that can occur during high-volume periods. A CCP would be a source of records regarding CDS transactions. Of course, to the extent that participation in a CCP is voluntary, its value is a device to prevent and detect manipulation

and other fraud and abuse in the CDS market may be greatly limited.

Exchange trading of CDS would also add efficiency to the market for these instruments. It is not uncommon for derivative contracts that are initially developed in the OTC market to become exchange traded as the market for the product matures. While the contracts traded in the OTC market are subject to individual bilateral negotiation, on-exchange it efficiently creates a market for a standardized form of the contract.

These standardized exchange traded contracts typically coexist with more varied and negotiated OTC contracts. Exchange trading of credit derivatives could enhance both pre- and post-trade transparency to the market that would enhance efficient pricing of credit derivatives. Exchange trading could reduce liquidity risk by providing a centralized marketplace that allows participants to efficiently initiate and close out positions at the best available prices.

In crafting any regulatory solution, it is important to keep in mind the significant role that CDS trading plays in today's financial markets, as well as the truly global nature of the CDS market. Further, the varied nature of market participants in CDS and the breadth of this market underscore the importance of cooperation among U.S. financial supervisors at the Federal and state levels, as well as supervisors internationally.

Thank you for this opportunity to discuss these important issues, and I am happy to take any questions.

[The prepared statement of Mr. Sirri follows:]

PREPARED STATEMENT OF ERIK R. SIRRI, DIRECTOR, DIVISION OF TRADING AND MARKETS, U.S. SECURITIES AND EXCHANGE COMMISSION, WASHINGTON, D.C.

Chairman Peterson, Ranking Member Goodlatte, and Members of the House Committee on Agriculture:

I am pleased to have the opportunity today to again testify regarding the credit default swaps (CDS) market. My testimony today summarizes the key points from my testimony before this Committee 5 weeks ago and updates it to reflect the Commission's activities since then.

CDS can serve important purposes. They can be employed to closely calibrate risk exposure to a credit or a sector. CDS can be especially useful for the business model of some financial institutions that results in the institution making heavily directional bets, and others—such as dealer banks—that take both long and short positions through their market-making and proprietary trading activities. Through CDS, market participants can shift credit risk from one party to another, and thus the CDS market may be an important element to a particular firm's willingness to participate in an issuer's securities offering.

The current CDS market operates solely on a bilateral, over-the-counter basis and has grown to many times the size of the market for the underlying credit instruments. In light of the problems involving AIG, Lehman, Fannie, Freddie, and others, attention has focused on the systemic risks posed by CDS. The ability of protection sellers (such as AIG and Lehman) to meet their CDS obligations has raised questions about the potentially destabilizing effects of the CDS market on other markets. Also, the deterioration of credit markets generally has increased the likelihood of CDS payouts, thus prompting protection buyers to seek additional margin from protection sellers. These margin calls have strained protection sellers' balance sheets and may be forcing asset sales that contribute to downward pressure on the cash securities markets.

In addition to the risks that CDS pose systemically to financial stability, CDS also present the risk of manipulation. Like all financial instruments, there is the risk that CDS are used for manipulative purposes, and there is a risk of fraud in the CDS market.

The SEC has a great interest in the CDS market because of its impact on the securities markets and the Commission's responsibility to maintain fair, orderly,

and efficient securities markets. These markets are directly affected by CDS due to the interrelationship between the CDS market and the securities that compose the capital structure of the underlying issuers on which the protection is written. In addition, we have seen CDS spreads move in tandem with falling stock prices, a correlation that suggests that activities in the OTC CDS market may in fact be spilling over into the cash securities markets.

OTC market participants generally structure their activities in CDS to comply with the CFMA's swap exclusion from the Securities Act and the Exchange Act. These CDS are "security-based swap agreements" under the CFMA, which means that the SEC currently has limited authority to enforce anti-fraud prohibitions under the Federal securities laws, including prohibitions against insider trading. If CDS were standardized as a result of centralized clearing or exchange trading or other changes in the market, and no longer subject to individual negotiation, the "swap exclusion" from the securities laws under the CFMA would be unavailable.

Progress on Establishing a Central Counterparty for CDS

As announced on November 14th, a top priority for The President's Working Group on Financial Markets, in which the SEC Chairman is a member, is to oversee the implementation of central counterparty services for CDS. A central counterparty ("CCP") for CDS could be an important step in reducing the counterparty risks inherent in the CDS market, and thereby help mitigate potential systemic impacts.

By clearing and settling CDS contracts submitted by participants in the CCP, the CCP could substitute itself as the purchaser to the CDS seller and the seller to the CDS buyer. This novation process by a CCP would mean that the two counterparties to a CDS would no longer be exposed to each others' credit risk. A single, well-managed, regulated CCP could vastly simplify the containment of the failure of a major market participant. In addition, the CCP could net positions in similar instruments, thereby reducing the risk of collateral flows.

Moreover, a CCP could further reduce risk through carefully regulated uniform margining and other robust risk controls over its exposures to its participants, including specific controls on market-wide concentrations that cannot be implemented effectively when counterparty risk management is uncoordinated. A CCP also could aid in preventing the failure of a single market participant from destabilizing other market participants and, ultimately, the broader financial system.

A CCP also could help ensure that eligible trades are cleared and settled in a timely manner, thereby reducing the operational risks associated with significant volumes of unconfirmed and failed trades. It may also help to reduce the negative effects of misinformation and rumors that can occur during high volume periods, for example when one market participant is rumored to "not be taking the name" or not trading with another market participant because of concerns about its financial condition and taking on incremental credit risk exposure to the counterparty. Finally, a CCP could be a source of records regarding CDS transactions, including the identity of each party that engaged in one or more CDS transactions. Of course, to the extent that participation in a CCP is voluntary, its value as a device to prevent and detect manipulation and other fraud and abuse in the CDS market may be limited.

The Commission staff, together with Federal Reserve and CFTC staff, has been evaluating proposals to establish CCPs for CDS. SEC staff has participated in on-site assessments of these CCP proposals, including review of their risk management systems. The SEC brings to this exercise its experience over more than 30 years of regulating the clearance and settlement of securities, including derivatives on securities. The Commission will use this expertise, and its regulatory and supervisory authorities over any CCPs for CDS that may be established, to strengthen the market infrastructure and protect investors.

To facilitate the speedy establishment of one or more CCPs for CDS and to encourage market participants to voluntarily submit their CDS trades to the CCP, Commission staff are preparing conditional exemptions from the requirements of the securities laws for Commission consideration. SEC staff have been discussing the potential scope and conditions of these draft exemptions with each prospective CCP and have been coordinating with relevant U.S. and foreign regulators.

In addition, last Friday, Chairman Cox, on behalf of the SEC, signed a Memorandum of Understanding (MOU) with the Federal Reserve Board and the Commodity Futures Trading Commission. This MOU establishes a framework for consultation and information sharing on issues related to CCPs for CDS. Cooperation and coordination under the MOU will enhance each agency's ability to effectively carry out its respective regulatory responsibilities, minimize the burden on CCPs, and reduce duplicative efforts.

Other Potential Improvements to OTC Derivatives Market

As explained above, the SEC has limited authority over the current OTC CDS market. The SEC, however, is statutorily prohibited under current law from promulgating any rules regarding CDS trading in the over-the-counter market. Thus, the tools necessary to oversee this market effectively and efficiently do not exist. Chairman Cox has urged Congress to repeal this swap exclusion, which specifically prohibits the SEC from regulating the OTC swaps market.

Recordkeeping and Reporting to the SEC

The repeal of this swap exclusion would allow the SEC to promulgate record-keeping requirements and require reporting of CDS trades to the SEC. As I discussed in my earlier testimony, a mandatory system of record-keeping and reporting of all CDS trades to the SEC, is essential to guarding against misinformation and fraud. The information that would result from such a system would not only reduce the potential for abuse of the market, but would aid the SEC in detection of fraud in the market quickly and efficiently.

Investigations of over-the-counter CDS transactions have been far more difficult and time-consuming than those involving cash equities and options. Because these markets lack a central clearing house and are not exchange traded, audit trail data is not readily available and must be reconstructed manually. The SEC has used its anti-fraud authority over security-based swaps, including the CDS market, to expand its investigation of possible market manipulation involving certain financial institutions. The expanded investigation required hedge fund managers and other persons with positions in CDS and other derivative instruments to disclose those positions to the Commission and provide certain other information under oath. This expanded investigation is ongoing and should help to reveal the extent to which the risks I have identified played a role in recent events. Depending on its results, this investigation may lead to more specific policy recommendations.

However, because of the lack of uniform record-keeping and reporting to the SEC, the information on security-based CDS transactions gathered from market participants has been incomplete and inconsistent. Given the interdependency of financial institutions and financial products, it is crucial for our enforcement efforts that we have a mechanism for promptly obtaining CDS trading information—who traded, how much and when—that is complete and accurate.

Recent private sector efforts may help to alleviate some of these concerns. For example, Deriv/SERV, an unregulated subsidiary of DTCC, provides automated matching and confirmation services for over-the-counter derivatives trades, including CDS. Deriv/SERV's customers include dealers and buy-side firms from more than 30 countries. According to Deriv/SERV, more than 80% of credit derivatives traded globally are now confirmed through Deriv/SERV, up from 15% in 2004. Its customer base includes 25 global dealers and more than 1,100 buy-side firms in 31 countries. While programs like Deriv/SERV may aid the Commission's efforts, from an enforcement perspective, such voluntary programs would not be expected to take the place of mandatory record-keeping and reporting requirements to the SEC.

In the future, Deriv/SERV and similar services may be a source of reliable information about most CDS transactions. However, participation in Deriv/SERV is elective at present, and the platform does not support some of the most complex credit derivatives products. Consequently, not all persons that engage in CDS transactions are members of Deriv/SERV or similar platforms. Greater information on CDS trades, maintained in consistent form, would be useful to financial supervisors. In addition to better record-keeping by market participants, ready information on trades and positions of dealers also would aid the SEC in its enforcement of anti-fraud and anti-manipulation rules. Finally, because Deriv/SERV is unregulated, the SEC has no authority to obtain the information stored in this facility for supervision of risk associated with the OTC CDS market and can only obtain it if given voluntarily or by subpoena.

Market Transparency

Market transparency is another improvement to the CDS market that the Commission supports. The development of a CCP could facilitate greater market transparency, including the reporting of prices for CDS, trading volumes, and aggregate open interest. The availability of pricing information can improve the fairness, efficiency, and competitiveness of markets—all of which enhance investor protection and facilitate capital formation. The degree of transparency, of course, depends on participation in the CCP, which currently is not mandatory.

Exchange Trading

A CCP also could facilitate the exchange trading of CDS because the CDS would be in standardized form. Exchange trading of credit derivatives could add both pre- and post-trade transparency to the market that would enhance efficient pricing of credit derivatives. Exchange trading also could reduce liquidity risk by providing a centralized market that allows participants to efficiently initiate and close out positions at the best available prices.

Some of the prospective CCPs for CDS are proposing to offer some type of trading facility. In addition, we anticipate that other entities may develop trading platforms for CDS. The SEC believes it is important that the CCPs be open to clearing trades in eligible CDS from any participant that meets a fair and objective set of access criteria, including a participant that operates an exchange or other trading facility.

In crafting any regulatory solution, it is important to keep in mind the significant role CDS play in today's financial markets, as well as the truly global nature of the CDS market. Further, the varied nature of market participants in CDS and the breadth of this market underscore the importance of cooperation among U.S. financial regulators and supervisors at the Federal and state level, as well as regulators and supervisors internationally.

Thank you for this opportunity to discuss these important issues. I am happy to take your questions.

The CHAIRMAN. I thank the gentleman.

Mr. Dinallo, welcome to the Committee.

**STATEMENT OF ERIC R. DINALLO, J.D., SUPERINTENDENT,
INSURANCE DEPARTMENT, STATE OF NEW YORK, NEW
YORK, NY**

Mr. DINALLO. Thank you, Mr. Chairman, Ranking Member Goodlatte, and Members of the Committee.

I think we can all agree that credit default swaps have played a major role in the economic meltdown that we are going through at this time. The market grew to in excess of \$60 trillion, which I am sure some of you have heard is larger than the entire economic output of the globe on an annual basis. Indeed, you could buy probably all of the stock in the world for far less than that amount. It is surprising that we got to a point where the largest financial services mechanism in the globe that humankind had ever invented was essentially unregulated.

I have not said, as the Ranking Member said, which I agree with, that this was the causation of all that we are going through. I do think it was, in fact, a catastrophic enabler for what we went through. Because at the end of the chain of CDOs and other arcana of our securities industry there was this belief that we had this backstop of some sort of insurance product, which to a large extent we really didn't have.

You often hear CDS referred to as insurance. It is offered as insurance in the sense it is a credit default guarantee, but, as you've said, only about 20 or 30 percent of the market actually performs that function, the hedge, the valuable hedging instrument.

I agree we need to basically deal with risk on the bond and credit market. But at least 80 percent grew into what Wall Street calls a directional bet or a situation where you have absolutely no exposure to the underlying credit event, because you don't hold the bonds or you don't hold the CDO.

I think it is important as you go forward to keep that distinction in mind. Because as you decide upon the regulatory mechanism that you want to put in place, at least from an insurance perspec-

tive, capitalization, solvency, and surplus are usually the earmarks of making a guarantee against a future outcome.

The essential difference, which I just sort of thought about today, between investments, which aren't guaranteed and generally are not promised, as insurance is, essentially, insurance is a certain guarantee or promise against an outcome and a payment upon that event; which is how, to a large extent, CDSs were appropriately held out and were appropriately necessary. We didn't have a mechanism to short or be negative on the credit market, which is far in excess of the equity market.

It is sort of interesting that we did stop the shorting of, I think, 800 financial stocks for a long time and all naked shorting, but we really didn't do much about a much larger part of the market, which goes to how we deal with the credit and the bond side.

So, in some way it is the first time in history, sadly, that you don't have all the participants lined up against the bankruptcy. In other words, usually all members of a transaction want to avoid the worst-case scenario; and they tend to line up and pull on the same rope against an insolvency. But here you have more people rooting for insolvency and failures of institutions than you have actually on the other side. Because there is the 80/20 rule that I described where you have more people holding the naked credit default swaps than what I would call the sartorial credit default swaps. I think that creates a drama that to a large extent has been somewhat self-fulfilling.

When you place a bet on a football game, you can't really actually have an impact on the outcome of the game. You sit there, and you may hope one team wins, and you have a bet with your friend or a bookie. But the credit default swaps actually impact the outcome of the game. Because, as those rates increase, the rating agencies and other participants in the market take keen interest in them and, in fact, cite them for the actions, including rating down grades. So, there is a real cyclical feedback nature to them that has to be considered.

From a regulatory point of view, the frustration that some of us have had is that we have no idea how much CDS was written on the institutions that we were regulating over—in other words Ambak, MBIA, AIG. When you think about what you are going to do with those institutions, whether you are going to let them go into insolvency or not, we still don't know how much credit default swaps were written on them as a reference instrument. We know how much they had written, how much AIG had written but not how much was written on them as a target.

So, a lot of this is why we went to the position that we went in September where we announced we are going to regulate part of the market, that insurance part of the market, that sartorial part as insurance product. As we said on January 1st, because it had all the hallmarks of insurance and fit our history, we are going to start to regulate that.

But I want to tell you, I want to sort of announce today I think it is very important that everyone should know that, because of the great progress that has been made—it was our hope that we would both make sure there was solvency behind the insurance type transactions and cause a robust debate about this—and because of

the great progress that has been made on the Federal side, the formation of it looks like at least two solutions and the MOU. I am here to tell you that at least for now we are suspending that January 1st date because we don't want a segmented market. We have always wanted a holistic solution, and it looks like we are headed towards a holistic outcome. So I am happy about that.

I would urge, again, to have five *indicia* behind that solution; and I will conclude that we are suspending it because it looks like we are heading towards a solution that will have, I hope, these five clear margin rules: some sort of guaranty fund or ultimate solvency behind these commitments, rules of event determination that everyone agrees on so there is no dispute when there has been a default or insolvency, rules of dispute resolution so everyone agrees how to resolve disputes about that topic, and, finally, although this one is somewhat controversial, some kind of central counterparty or some kind of central counterparty enumeration of exactly who has how much risk in this market so one can decide whether someone is overburdened or dangerously exposed.

The Department and I think those five *indicia* are essential, but it looks like the solutions that we're talking about are going to embody something remarkably like that. Progress is such that we think it is worth waiting for a whole solution, because we never purported to be able to offer that.

Thank you very much.

[The prepared statement of Mr. Dinallo follows:]

PREPARED STATEMENT OF ERIC R. DINALLO, J.D., SUPERINTENDENT, INSURANCE
DEPARTMENT, STATE OF NEW YORK, NEW YORK, NY

I would like to thank Chairman Collin C. Peterson, Ranking Member Bob Goodlatte and the Members of the House Agriculture Committee for inviting me to testify today at this hearing to review the role of credit derivatives in the U.S. economy.

My name is Eric Dinallo and I am Insurance Superintendent for New York State.

What I would like to discuss with you today is one particular kind of derivative—credit default swaps—which have played a major role in the financial problems we now face.

Let me first establish why the insurance regulator for New York is a relevant authority on credit default swaps. I will expand on these issues at greater length, but to provide a context, I will start with a brief summary.

As credit default swaps were developed, there was a question about whether or not they were insurance. Since initially they were used by owners of bonds to seek protection or insurance in the case of a default by the issuer of the bonds, this was a reasonable question. In 2000, under a prior Administration, the New York Insurance Department was asked to determine if swaps were insurance and said no. That is a decision we have since revisited and reversed as incomplete. I will provide more detail on these important decisions shortly.

In addition, since I took office in January 2007, the impact of credit default swaps has been one of the major issues we have had to confront. First, we tackled the problems of the financial guaranty companies, also known as bond insurers. Credit default swaps were a major factor in their problems. More recently, we have been involved in the rescue of AIG. Again, credit default swaps were the biggest source of that company's problems.

Through these experiences, we have needed to carefully study the history and issues surrounding credit default swaps. And we have learned the hard way their impact on markets and companies.

I am honored to have this opportunity to share with you what we have learned from this hard won experience.

First, let's discuss what a credit default swap is and the different kinds of credit default swaps. A credit default swap is a contract under which the seller, for a fee, agrees to make a payment to the protection buyer in the event that the referenced security, usually some kind of bond, experiences any number of various "credit

events”, such as bankruptcy, default, or reorganization. If something goes wrong with the referenced entity, the protection buyer can put the bond to the protection seller and be made whole. Or a net payment can be made by the seller to the buyer.

Originally, credit default swaps were used to transfer and thus reduce risk for the owners of bonds. If you owned a bond in company X and were concerned that the company might default, you bought the swap to protect yourself. The swaps could also be used by banks who loaned money to a company. This type of swap is still used for hedging purposes.

Over time, however, swaps came to be used not to reduce risk, but to assume it. Institutions that did not own the obligation bought and sold credit default swaps to place what Wall Street calls a directional bet on a company’s credit worthiness. Swaps bought by speculators are sometimes known as “naked credit default swaps” because the swap purchasers do not own the underlying obligation. The protection becomes more valuable as the company becomes less creditworthy. This is similar to naked shorting of stocks.

I have argued that these naked credit default swaps should not be called swaps because there is no transfer or swap of risk. Instead, risk is created by the transaction. For example, you have no risk on the outcome of the third race until you place a bet on horse number five to win.

We believe that the first type of swap, let’s call it the covered swap, is insurance. The essence of an insurance contract is that the buyer has to have a material interest in the asset or obligation that is the subject of the contract. That means the buyer owns property or a security and can suffer a loss from damage to or the loss of value of that property. With insurance, the buyer only has a claim after actually suffering a loss.

With the covered swaps, if the issuer of a bond defaults, then the owner of the bond has suffered a loss and the swap provides some recovery for that loss. The second type of swap contains none of these features.

Because the credit default swap market is not regulated, we do not have valid data on the number of swaps outstanding and how many are naked. Estimates of the market were as high as \$62 trillion. By comparison, there is only about \$6 trillion in corporate debt outstanding, \$7.5 trillion in mortgage-backed debt and \$2.5 trillion in asset-backed debt. That’s a total of about \$16 trillion in debt private sector debt.

Now, I think it would be useful to go into some of the history.

Betting or speculating on movements in securities or commodities prices without actually owning the referenced security or commodity is nothing new. As early as 1829, “stock jobbing”, an early version of short selling, was outlawed in New York. The Stock Jobbing Act was ultimately repealed in 1858 because it was overly broad and captured legitimate forms of speculation. However, the issue of whether to allow bets on security and commodity prices outside of organized exchanges continued to be an issue.

“Bucket shops” arose in the late nineteenth century. Customers “bought” securities or commodities on these unauthorized exchanges, but in reality the bucket shop was simply booking the customer’s order without executing on an exchange. In fact, they were simply throwing the trade ticket in the bucket, which is where the name comes from, and tearing it up when an opposite trade came in. The bucket shop would agree to take the other side of the customer’s “bet” on the performance of the security or commodity. Bucket shops sometimes survived for a time by balancing their books, but were wiped out by extreme bull or bear markets. When their books failed, the bucketeers simply closed up shop and left town, leaving the “investors” holding worthless tickets.

The Bank Panic of 1907 is famous for J.P. Morgan, the leading banker of the time, calling all the other bankers to a meeting and keeping them there until they agreed to form a consortium of bankers to create an emergency backstop for the banking system. At the time there was no Federal Reserve. But a more lasting result was passage of New York’s anti-bucket shop law in 1909. The law, General Business Law Section 351, made it a felony to operate or be connected with a bucket shop or “fake exchange.” Because of the specificity and severity of the much-anticipated legislation virtually all bucket shops shut down before the law came into effect, and little enforcement was necessary. Other states passed similar laws.

Section 351 prohibits the making or offering of a purchase or sale of security, commodity, debt, property, options, bonds, etc. without intending a *bona fide* purchase or sale of the security, commodity, debt, property, options, bonds, etc. If you think that sounds exactly like a naked credit default swap, you are right. What this tells us is that back in 1909, 100 years ago, people understood the risks and potential instability that comes from betting on securities prices and outlawed it.

With the growth of various kinds of derivatives in the late 20th Century, there was legal uncertainty as to whether certain derivatives, including credit default swaps, violated state bucket shop and gambling laws.

The Commodity Futures Modernization Act of 2000 (“CFMA”), signed by President Clinton on December 21, 2000, created a “safe harbor” by (1) preempting state and local gaming and bucket shop laws except for general anti-fraud provisions, and (2) exempting certain derivative transaction on commodities and swap agreements, including credit default swaps, from CFTC regulation.

CFMA also amended the Securities and Exchange Acts of 1933 and 1934 to make it clear that the definition of “security” does not include certain swap agreements, including credit default swaps, and that the SEC is prohibited from regulating those swap agreements, except for its anti-fraud enforcement authority.

So by ruling that credit default swaps were not subject to state laws or SEC regulation, the way was cleared for the growth of the market. But there was one other issue. If the swaps were considered insurance, then they would be regulated by state insurance departments. The capital and underwriting limits in insurance regulation would threaten the rapid growth in the market for these derivatives.

So at the same time, in 2000, the New York Insurance Department was asked a very carefully crafted question. “Does a credit default swap transaction, wherein the seller will make payment to the buyer upon the happening of a negative credit event and such payment is not dependent upon the buyer having suffered a loss, constitute a contract of insurance under the insurance law?”

Clearly, the question was framed to ask only about naked credit default swaps. Under the facts we were given, the swap was not insurance, because the buyer had no material interest and the filing of claim does not require a loss. But the entities involved were careful not to ask about covered credit default swaps. Nonetheless, the market took the Department’s opinion on a subset of credit default swaps as a ruling on all swaps.

In sum, in 2000 as a society we chose not to regulate credit default swaps.

Why did that matter? As we have seen, the financial system has been placed in peril because there was no comprehensive management of counterparty risk. Deals were made privately between two parties. These bilateral arrangements mean that there are no standards for the solvency of counterparties. The buyer does not know how much risk the seller is taking on. And there are no requirements for the seller to hold reserves or capital against the risks it is taking on by selling swaps.

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.

Unlike insurance, credit default swaps are marked-to-market. That means, the value of the swap reflects the current market value, which can swing sharply and suddenly. Value changes require the sellers to post collateral. Sudden and sharp changes in the credit rating of the issuer of the bonds or of the bonds themselves can produce large swings in the value of the swaps and thus the need to post large and increasing amounts of collateral. That capital strain can produce sudden liquidity problems for sellers. The seller may own enough assets to provide collateral, but the assets may not be liquid and thus not immediately accessible. When many sellers are forced to sell assets, the price of those assets falls and sellers are faced with taking large losses just to meet collateral requirements. As the prices of the assets are driven down by forced sales, mark-to-market losses increase and the collateral posting cycle continues. Meanwhile, the underlying assets may continue to perform; paying interest and principal in full.

The above is a substantial part of the problem at AIG. A ratings downgrade on September 15 produced immediate collateral calls. The company did not have sufficient liquid assets.

In addition, chains of counterparty exposures mean that if one counterparty fails, others with exposure to that counterparty may also fail, setting off a chain reaction. Many financial institutions bought protection from AIG, and there was great uncertainty as to whether all of these institutions could survive AIG’s failure.

Was the AIG rescue necessary? I believe it was. Thanks to the protective moat created by state regulation, AIG’s insurance operations were insulated from the problems in other AIG subsidiaries and are solid, profitable companies. Many of AIG’s companies are leaders in their markets. They have substantial value. But that value could not be realized over a weekend. The rescue will provide time for an orderly restructuring of AIG’s operations. It is possible that AIG will survive, as a smaller but much stronger insurance-focused enterprise. At least some of its operations will be sold.

Some argue that the company should have been filed for bankruptcy, as Lehman did. AIG is a “systemically important company.” It has business relations with just about every major bank in the world. At a time when the financial system and in particular the credit markets are already deeply troubled, the risks of allowing AIG to file for bankruptcy were, in my opinion, just too great. The New York Federal Reserve Bank and the Treasury appear to share that view.

On September 22, we announced that New York State would, beginning in January, regulate the insurance part of the credit default swap market which has to date been unregulated—the part which the Insurance Department has jurisdiction to regulate.

That announcement played an important role in spurring national discussion about a comprehensive regulatory structure for the CDS market. The result has been exactly what was envisioned—a broad debate and discussion about the best way to bring controls and oversight to this huge and important market and concrete progress toward a centralized risk management, trading and clearing system. After our announcement, SEC Chairman Cox asked for the power to regulate the credit default swap market. The New York Federal Reserve began a series of meetings with the dealer community to discuss how to proceed.

We believe that there are appropriate uses for credit default swaps. We acknowledge that some amount of speculation can provide useful information and market liquidity. We also recognize that the best route to a healthy market in credit default swaps is not to divide it up among regulators. It would not be effective or efficient for New York to regulate some transactions under the insurance law, while other transactions are either not regulated or regulated under some other law. The best outcome is a holistic solution for the entire credit default swap market.

Last Friday the Presidents Working Group, which the New York Insurance Department has advised on insurance-related matters, announced a Memorandum of Understanding among the Federal Reserve, the SEC and CFTC to cooperatively implement a central counterparty plan for CDS transactions. While these plans have not been finalized, we are hopeful that this will be the first step toward comprehensive Federal oversight.

The New York Federal Reserve Bank and the New York Banking Department are working with one of the proposed central counterparties to establish a New York trust company to serve as a clearing house for credit default swaps. Processing this application is a top priority of the Superintendent of Banks and the Banking Department.

Effective regulation of credit default swaps should include the following provisions:

- All sellers must maintain adequate capital and post sufficient trading margins to minimize counterparty risk.
- A guaranty fund should be created that ensures that a failure of one seller will not create a cascade of failures in the market.
- There must be clear and inclusive dispute resolution mechanisms.
- To ensure transparency and permit monitoring, comprehensive market data should be collected and made available to regulatory authorities.
- The market must have comprehensive regulatory oversight, and regulation cannot be voluntary.

Based on the developments reported on by the President’s Working Group, it is clear they are committed to comprehensive and effective Federal oversight of credit default swaps. My conversations with your Members and the Members of the Senate have also persuaded me that Congress is committed to producing a complementary legislative framework. As this process unfolds during the next Congress, my office will be actively following and assisting the Federal Government’s efforts. Accordingly, New York will delay indefinitely our plan to regulate part of this market.

We understand that the market for credit default swaps is large and complex and it will take time to complete a holistic solution. But while we support these beginning efforts, we also recognize that they do not yet constitute a completely transparent and fully regulated market. We urge the industry, Federal agencies and Congress to continue working until that essential goal is reached. At that point, we will be prepared to consider any necessary changes in state law to prevent problems that might arise from the fact that some swaps are insurance.

The unregulated marketplace in credit derivatives was a central cause of a near systemic collapse of our financial system. Credit default swaps played a major role in the financial problems at AIG, Bear Stearns, Lehman and the bond insurance companies. A major cause of our current financial crisis is not the effectiveness of current regulation, but what we chose not to regulate. This lack of regulation has

been devastating for thousands of New Yorkers and every taxpayer in the United States. We must see that this does not happen again.

New York stands ready to work expeditiously with all concerned to find a workable solution to the problem of how to regulate credit default swaps.

Thank you and I would be happy to answer any questions.

The CHAIRMAN. I thank the gentleman.

I have a lot of questions and I think a lot of Members do.

What I am trying to understand is why this thing is bogged down here. Apparently, the SEC is requiring that in order to give their go-ahead we have to accede to the fact that these things are securities or something; or you are going to reserve the right or something. Could you clarify?

I had a discussion with your boss, Mr. Cox, a month ago. He indicated they were going to try to move. I keep being told that this is going to get done, and it keeps dragging out. So how soon is this going to get resolved that the SEC is going to agree in a way that these things can move ahead as soon as possible?

At the G20 summit last weekend, the only thing of any substance that came out of there that everybody agreed on was that we needed to get this clearing in place as soon as possible. That seemed like everybody agreed to that, but it is not happening.

Now this Committee is going to Europe a week from Sunday, and we are going to meet with the London people, and we are going to meet with the people in Germany. So we are going to talk to the other two who are potentially involved in this. But I have become convinced that this needs to get done as soon as possible. So what is holding this up, and how soon is this going to get done?

Mr. Sirri.

Mr. SIRRI. Thank you for the question.

I think each of the regulators are committed to getting this done as soon as possible. We are working constructively together. We are working with the applicants. Right now, we are at a stage where we are processing their applications. They come to us with exemptive applications, in the case of the SEC.

Our Chairman, Chairman Cox, has been very clear with the staff that he wants to be sure we are not standing in the way of expeditious process to get these going. We have internal schedules we are trying to work through to get these done. As far as I know, those schedules are proceeding apace. I think we expect to be finished with this work in mid-December.

The CHAIRMAN. Okay.

Why is it that the SEC thinks that once you put these swaps on a regulated clearing situation that that turns them into a security? Am I wrong about that?

This seems to be the bone of contention, that somehow or another it turns them into a security and, therefore, the SEC is going to get involved in regulating areas that they never have before. What is that all about?

Mr. SIRRI. It is interesting. With regard to over-the-counter instruments, the SEC over-the-counter securities-based swaps, the SEC is the only agency that has authority in that market.

The CHAIRMAN. That is only manipulation and fraud.

Mr. SIRRI. Anti-fraud and anti-manipulation——

The CHAIRMAN. That is not what the issue is, in my opinion, frankly.

Mr. SIRRI. No, that is exactly right. The reason why we don't have any broader authority there is because the CFMA specifies that, as long as the swap is subject to individual negotiation, we don't have authority. So the key phrase is whether or not it is subject to individual negotiation.

When a swap is brought onto a central counterparty or onto an exchange, it is no longer subject to individual negotiation as far as its material terms, anymore than a share of equity of IBM is subject to individual negotiation on the New York Stock Exchange. Once that is true, then that exclusion no longer applies and our authority kicks in.

Now, that said, it is very clear that we want to offer exemptions, exemptions from clearing agency registration, exemptions from exchange registration, from broker/dealer registration and such to expeditiously get these central counterparties up and running. We think it is important for systemic and other risk-management purposes to get going, and we intend to offer those exemptions quickly.

The CHAIRMAN. If that is the case, then wouldn't the thousands of energy over-the-counter swaps that are being cleared by ICE and NYMEX as we speak become future contracts by that reasoning?

Mr. SIRRI. In this country, we do not have the central counterparty for clearing over-the-counter derivatives yet. This would be our first set of organized counterparties.

The CHAIRMAN. We will get into this more.

The other thing I want to understand, Mr. Parkinson, where this deal came from, ICE, how they came to decide that they were going to become a bank, apparently, so they could get under your regulation and what that is all about.

I may be paranoid, but is that what is going on here? Are they trying to become a bank so that they can have access to the \$700 billion, or are they just trying to not be regulated by the CFTC? Did they come to you and ask for this, or did you go to them? How did this all transpire? Do you know?

Mr. PARKINSON. Yes. I will start by saying, since they made this decision in advance of Congress passing the TARP legislation, I don't think it had anything to do with that. The background here is that particular effort has changed its structure when Clearing Corp was acquired by ICE, but when it was first begun it was through this Clearing Corp vehicle; and Clearing Corp substantially is owned by a number of the major OTC derivatives dealers. Those dealers today are all organized as banks. So they have a long experience, number one, dealing with the Federal Reserve as a supervisor.

The CHAIRMAN. Well, they weren't all organized as banks, right? Didn't some of them become banks after——

Mr. PARKINSON. Yes, yes. Some of them were investment banks prior to recent events.

The CHAIRMAN. They didn't have a history.

Mr. PARKINSON. I think, nonetheless, they had a history of relationship with the Fed.

In particular, the other thing is that since 2005, our New York Reserve Bank has been leading this effort of domestic and international supervisors of the dealers working together with the dealers and with buy-side participants to strengthen the infrastructure

of the CDS markets. That goes back to 2005. So they had a history of working with us in that area.

Finally, as Ananda indicated, the Commodity Futures Modernization Act tried to facilitate clearing. It required the regulation of clearing, but it allowed them to decide how they would be organized and effectively who would regulate them, with the choices being the CFTC, SEC or a banking regulator. So there were statutory provisions out there that facilitated their making that choice and gave them the option.

The CHAIRMAN. Have you ever done this within the Fed? Is there any clearing mechanism like this that you have ever done in the Fed?

Mr. PARKINSON. We have never been the primary regulator of a central counterparty clearing service. However, I think we have a wealth of related experience. I would cite four things.

First, as I noted, today, all of the major dealers are organizers, banks subject to our supervisor and a——

The CHAIRMAN. These are the same dealers that had this back-room operation that is 2 years behind the times and all screwed up. I don't have a lot of confidence in them, frankly.

So, you don't even have a statute to base this on, do you? What are you going to use as the regulation or the base for what you are going to do? You are going to, supposedly, use these international standards which are a guideline so these guys can keep doing what they have been doing? That is what it looks like to me, that they want to keep doing what they have been doing. They don't want to change, so they want to set up something where they can write their own rules. Frankly, I am not going to go along with that, at least for this Member. I don't trust them as far as I can throw them.

Mr. PARKINSON. Well, they are not going to be allowed to write their own rules. They will have to conform to both international standards you mentioned.

The CHAIRMAN. Is that in the statute? How do we know that that is going to be done?

Mr. PARKINSON. If they want to organize as a bank and become a member of the Federal Reserve system, they have to file an application with the Federal Reserve. We are not obligated to accept that application. We will accept that application only if, after discussing with the SEC and the CFTC their proposal in evaluating against those standards and other applicable standards, we think it has been designed and will be operated in a manner that is safe and sound and generally reduces system risk. So they will have to conform to those standards, or they will not be able to avail themselves of the organizational option.

The CHAIRMAN. How do we know? What control do we have as Members of Congress? There is not a statute there that we have written. We are basically taking your word that you are following some kind of a standard. That is my concern. Are you going to come to Congress and ask that this be put in the statute and there be clear regulation like we have with the CFTC, or are you going to do this however you decide to do it in the Fed?

Mr. PARKINSON. I think we think we have adequate authority to discharge this responsibility and make sure that they do meet the high standards we are going to set.

But I think Chairman Bernanke, in talking about regulatory restructuring, there has really been only one thing where we have been clear about a need for new authority; and that is we would like more formal powers to conduct the operations we are already conducting as overseer of the payment system, and as overseer and regulator of a variety of clearing and settlement systems, including this idea of organizing as a limited purpose trust company is not at all novel. The depository trust company, which the major repository and settlement system for equities and corporate debt in the United States, is organized in the same way; and there we have been coordinating and cooperating with the SEC in oversight of that since it was formed, I believe, in 1970.

The CHAIRMAN. Well, I have gone way over my time, but I need to know a lot more about this, and I am concerned why we are getting another entity that has no experience into this.

Ananda, you look like you want to say something, or are you just paying attention?

Mr. RADHAKRISHNAN. Just paying attention. Thank you, sir.

The CHAIRMAN. The gentleman from Virginia, Mr. Goodlatte.

Mr. GOODLATTE. Well, thank you, Mr. Chairman.

I am going to get Mr. Radhakrishnan involved here. Because what I am hearing so far—and I want to follow up on the Chairman's questions—are a lot of legalistic arguments about something that there is growing consensus that we need to do, that we don't have transparency, we don't have easy ways to value these complex transactions. And yet, instead of figuring out the most logical way to move forward and create that transparency to create a clearinghouse mechanism, we are having a jurisdictional fight amongst bureaucracies.

So let me ask each one of the bureaucracies to tell us what your organization's experience is in overseeing central counterparties for derivatives transactions. Please provide some details as to how you would design an effective credit default swap oversight program.

Mr. Radhakrishnan, we will start with you.

Mr. RADHAKRISHNAN. Thank you, sir.

As this Committee is aware, the CFTC has some 33 years of experience in overseeing clearinghouses for exchanges since the inception of the CFTC.

Mr. GOODLATTE. And how long ago was that?

Mr. RADHAKRISHNAN. The CFTC was formed in 1975. Until 2000, my understanding is that the oversight of clearinghouses was part and parcel of the oversight of exchanges because the Commodity Exchange Act did not have specific provisions for the oversight of a clearinghouse. However, that changed in 2000 when Congress passed the CFMA and specifically provided for 14 core principles for derivatives clearing organizations, or DCOs, or clearinghouses; and the Commission has promulgated regulations to amplify those statutory provisions. So——

Mr. GOODLATTE. In other words, you are close to being ready to go, if you got consensus on being able to do this?

Mr. RADHAKRISHNAN. Yes, sir. Because we believe we have the statutory scheme and we have the experience to regulate the Chicago Mercantile Exchange as the CCP for credit default swaps.

Mr. GOODLATTE. Let me ask, Mr. Parkinson, what your organization's experience is in overseeing central counterparties for derivative transactions.

Mr. PARKINSON. Well, as I already stated, we have no experience as primary regulator of the CCP, but we have a wealth of related experience in term of oversight of the major dealer counterparties and the credit derivatives markets in terms of oversight of payment systems, because payment systems are integral to any clearance insolvent system, including a CCP.

In the oversight and security settlement system, as I mentioned a moment ago, the depository trust company, a key part of the infrastructure, is organized as a member bank. In that context, because the National Securities Clearing Corporation is so intertwined with DTCC, we have worked with the SEC who is the primary regulator of the National Securities Clearing Corporation in looking at the operations of that CCP.

Finally, I would say we played a very leading role in the development of the international standards in this area, the recommendations for central counterparties that central banks and securities and commodities regulators jointly developed back in 2004, and I think we are ready to go.

In terms of the question that has been raised several times, why hasn't this happened already, we are all being very careful evaluating these proposals against existing standards because we want to make sure they are designed and operating prudently before allowing them to go into operation. But as soon as we are convinced that they are so designed and operated, we will give them approval to begin operations.

Mr. GOODLATTE. Do you have a written, detailed plan, as the CFTC has, on how you would move forward? Is this something that is immediately implementable?

Mr. PARKINSON. I think it is implementable as soon as the three authorities at the table have reached agreement that the design of the proposal to organize it as a member bank meets applicable standards.

Mr. GOODLATTE. Mr. Sirri.

Mr. SIRRI. The SEC has a comprehensive statutory authority to regulate clearing and settlement for securities. So, on the securities side, with respect to cash instruments, as Pat said, DTCC is a custodian, NSCC is a central counterparty there, we are the primary regulator. On the derivatives side, as you asked, we regulate the options clearing corporation which serves as a central counterparty for a number of listed options exchanges. So we have been doing this since 1975, regulating central counterparties clearing and settlement for both derivatives that are struck on securities as well as those securities themselves.

Mr. GOODLATTE. Mr. Dinallo, shed some light on this dispute. How would you proceed from here? If you were Chairman of the panel of the three entities that are seated next to you and you had to find a way to move forward, what would you do?

Mr. DINALLO. I think there is nothing inherently wrong with permitting two solutions, actually, to arise and letting market participants begin to engage in sort of a decision process around that, as long as it has the *indicia* that I ticked off. I think that there is some benefit to that, and I think this may in fact be the better way to go than having to decide on either.

There is the case that you will inevitably have a situation where the banks—which have had their issues, to be sure, as the Chairman pointed out—will end up becoming the counterparty to almost all of the CDSs. There has to be a way to put upon them the proper capital requirements to have you be certain, as Members of Congress, that the right money, so to speak, is set aside against those commitments.

The Fed is going to become, essentially, the regulator for all of those; and that is a participation that one should not underestimate in making sure that we don't have a systemic risk in this particular market again. But I will concede that the history as to this kind of a futures type market is clearly with the experience of the CFTC just on the historical record. But, the new kind of regulatory regime you see coming and the fact that every investment bank has become a Fed supervised entity creates a tension that you may not want to break quite yet as you see how it works out.

Mr. GOODLATTE. In other words, instead of breaking the tie amongst the three, we could break the log jamb by taking action to enable one or more of them to move forward and then let the marketplace determine what would happen.

Mr. DINALLO. Well, I think the market is so avid to get this right; and one reason why New York is stepping back from this, at least for now, is to help, not have additional, although I thought well-intended and helpful complication but also a helpful instigator. I think that speed counts and if the CFTC can be first in class, because it is first, there is a merit there, and then you will see other participants try to compete with that.

Mr. GOODLATTE. Thank you.

Thank you, Mr. Chairman.

The CHAIRMAN. I thank the gentleman.

The gentleman from Pennsylvania, Mr. Holden.

Mr. HOLDEN. Thank you, Mr. Chairman.

Mr. Sirri, you stated that the review process will be completed in mid-December?

Mr. SIRRI. Those are our goals, yes.

Mr. HOLDEN. Operations, I assume, would be able to take effect shortly thereafter?

Mr. SIRRI. [Nonverbal response.]

Mr. HOLDEN. Will this clearinghouse be required to meet certain standards and be prepared to continue operating during the stresses related to natural or man-made disaster? Who will decide how much margin should be reserved for these products and at what level the margin should be set? Can you describe the guaranteed fund process and how much will be held in this fund?

Mr. SIRRI. Sure. There are multiple parts to your question. Let me answer each one.

The first point you raised, I think, was natural disasters, something we would group generally in the issue of business continuity.

Business continuity, the ability to withstand various kinds of shocks from natural disasters, power outages, retention of data, all sorts of things, are a standard part of robustness and planning that go through oversight of a central counterpart or a clearing process. I think all three of these agencies working together understand how important that is.

So as we speak today, we are working with the various applicants who have come to us to ask for the ability to operate a central counterparty for a number of risk management issues. You have raised an operational risk management issue, and that is one of the ones that we are dealing with.

The second portion of your question related to margin and to the size of the central counterparty. Our subjects have active discussion. All three agencies sent staff to Chicago to meet with the counterparties. We went in and examined them. We looked at the financial, the risk models. Reports have come back.

We are working now to establish just those kind of parameters you are talking about: What are the appropriate levels of margin? What are the appropriate sizes for the clearing fund? Those two quantities interact, depending on the risk management, depending on the margin; and that will affect the size of the clearing fund and so forth.

I don't have firm answers for those, because those are actively the things that we are discussing. Those are core to the point of this question. Because central counterparties' purpose, or one of their primary purposes for us, is to reduce systemic risk. So getting business continuity right and financial risk management right is right at the heart of what we are after.

Mr. HOLDEN. Mr. Radhakrishnan, Mr. Parkinson, do you want to add anything to that?

Mr. RADHAKRISHNAN. I would agree with Mr. Sirri.

In the core principles that we have, we do have specific core principles to take care of system safeguard issues. We do have a core principle that looks at financial resources. We do have a core principle that requires clearinghouses to have risk management systems to adequately manage the risk they are taking.

The CFTC's approach has always been to review the proposal that a clearinghouse has to set margin and to create the guaranty fund. In other words, we don't have a prescriptive regime, and we believe that is what Congress intended when they passed the CFMA, and it has worked well so far. So our job is to look at the proposal that a clearinghouse would have to set the margin and then determine whether it is reasonable. In the case of this particular initiative, we are requiring each of the participants to get a validation of their margining model.

As far as the guaranty fund is concerned, usually in the futures' world a guaranty fund is a function of the amount of risk, so the more risks the clearinghouse takes the larger the guaranty fund will be, and that makes sense as well.

Mr. HOLDEN. Mr. Parkinson.

Mr. PARKINSON. Thanks.

I agree with everything that has been said by Erik and Ananda; and I would just note that those standards we apply, the recommendations for central counterparty, address both the business

continuity issues, the margin issues, and the issues relating to the size of the guaranty fund.

Mr. HOLDEN. Mr. Parkinson's testimony states that the President's Working Group is calling for a record of all credit default swaps that are not cleared to be retained in the Depository Trust and Clearing Corporation Trade Information Warehouse. Should there be a mandatory reporting requirement for CDS and/or over-the-counter derivatives that market participants might elect not to clear? Is there any danger of such a disclosure requirement driving transactions to a less transparent shore?

Mr. PARKINSON. I think what we called for will not all necessarily be in the Depository Trust and Clearing Corporation's repository, but, in general, for all the OTC derivatives markets, not just the CDS markets, that OTC trades be reported in trade repository and that regulators have access to the information in those repositories.

Mr. HOLDEN. Anyone else care to comment at all?

Mr. DINALLO. I would only comment that I think, after what we have gone through, regulators and Congress should not be shy about demanding some sort of accountability around these instruments, and that there is not a tremendous amount of off-exchange activity here. There are certain bespoke transactions that might be so complicated that they would be off-exchange, but those could receive no action, so to speak, moments in safe harbors. But I think it is no longer the right way to go to be afraid of offshore activity when we just went through what we did largely through the decision of what we chose not to regulate.

Mr. HOLDEN. Thank you, Mr. Chairman.

The CHAIRMAN. I thank the gentleman.

The gentleman from Texas, Mr. Neugebauer.

Mr. NEUGEBAUER. Thank you, Mr. Chairman.

You said you are very close to having everything in place to providing and overseeing a central clearinghouse. I think you mentioned CME was close to that; is that correct?

Mr. RADHAKRISHNAN. That is correct, sir.

As my colleagues have pointed out, a joint team has been looking at the proposal of ICE as well as the CME. Once the team comes to the conclusion that both organizations are ready to go, then as far as we are concerned the CME can offer these services; and we will be ready to regulate.

Mr. NEUGEBAUER. So you are waiting for the Federal Reserve and the SEC to sign off on that because of this agreement that you entered into; is that correct?

Mr. RADHAKRISHNAN. I wouldn't call it a "sign-off process," sir. To me, that would be ceding the jurisdiction of the CFTC to another, which I suspect Congress will not like. We are collaborating on this, and I think we all have a joint interest in making sure that the bodies that are ultimately to provide the service have in fact, what I would call, passed muster.

Mr. RADHAKRISHNAN. So it is more of a collaborative process to review the proposals, but once we all agree that they have reviewed the proposals, then, as the regulator of the CME, it would be up to us to tell the CME that they can go ahead and provide the service.

Mr. NEUGEBAUER. Do you do this on any other kinds of securities or financial instruments?

Mr. RADHAKRISHNAN. Normally, we do not. Normally, under the statute, the CME has the right to self-certify that it is going to clear a particular product; and they have exercised that many times. But I guess, given the unique nature of this venture, and given the importance that it has for the economy, and given the fact that nobody has provided the service yet, the CME believes that it is also in its interest to make sure that all of the Federal regulators who are interested in this subject agree that they can go ahead and offer their service.

Mr. NEUGEBAUER. Maybe I did not understand, but I am still trying to figure out who is going to be in control here or who is the primary regulator. Or are we going to submit, to check these securities, to multiple regulatory authorities? How has that been worked out?

Mr. RADHAKRISHNAN. In my view, sir, the only regulator for the CME is the CFTC, because the CME has chosen to offer its service in its capacity as a derivatives clearing organization.

Mr. NEUGEBAUER. So, if you are the primary regulator, why are you getting a sign-off from these other entities if they are not going to have jurisdiction——

Mr. RADHAKRISHNAN. I think what we have decided to do, because of the critical nature of this venture, we have decided that it does make sense to cooperate with our fellow regulators. Also, we might learn something from them, and I think we have learned a lot of things from our discussions. So I would look upon this as a collaborative venture and not as a situation where we have basically ceded our authority to the other regulators that are represented at this table.

Mr. NEUGEBAUER. Mr. Parkinson, it has been mentioned that the Federal Reserve Bank of New York might be a clearinghouse as well, for these transactions.

Mr. PARKINSON. No. I think what you are referring to is, again, the ICE proposal. They proposed to get a charter from New York State as a limited purpose trust company, which is a kind of bank, and then apply to be a member of the Federal Reserve system, specifically of the Federal Reserve Bank of New York. So that is where the Federal Reserve Bank of New York comes in.

Mr. NEUGEBAUER. So they would be under your jurisdiction?

Mr. PARKINSON. Yes. Yes.

Just to sort of answer the question you gave to Ananda, again, we are the ones that decide whether it is appropriate to grant that bank membership in the Federal Reserve System; and also New York State plays an important role because they have to decide whether to give it a charter. But we are evaluating these proposals jointly and collaboratively, and I think we would be very reluctant to proceed if we thought that either of the other agencies had serious concerns. We certainly would want to hear them out very thoroughly as to what those concerns would be, and would want to try to address those concerns before going forward.

I do not sense that we look at the issues of risk management with respect to CCP in significantly different ways. I am not ex-

pecting that there will be big differences of opinion as to the robustness of these proposals.

Mr. NEUGEBAUER. Mr. Sirri.

Mr. SIRRI. I think, with regard to the SEC's interest, a distinction needs to be made here.

In the organizational form of the central counterparties, in the choice by that central counterparty, they could choose to organize as a derivatives clearing organization, in which case the CFTC comes into play. Instead, they could choose to organize as a New York bank, in which case the Fed comes into play.

In each of those instances, as to the instrument that is traded, we believe there are strong arguments that it is a security. That is what triggers our coming into play.

Our authority is based on the attributes of the instrument that is traded. The CDS that is novated into a central counterparty, we believe there is a strong argument that it becomes a security, one even stronger when it becomes exchange-traded.

Mr. NEUGEBAUER. So your position is, whichever route that one would choose, you are going to have jurisdiction regardless?

Mr. SIRRI. Our jurisdiction comes from the attributes of the instrument that is traded. As we understand it, the attributes of that instrument would likely make them securities.

Mr. HOLDEN [presiding.] The chair thanks the gentleman.

The gentleman from Iowa.

Mr. BOSWELL. Thank you, Mr. Chairman.

I am just going to say this: This is a learning process for quite a few of us. We do not have your expertise. When we go back to the people on the streets in our districts, they are saying, "Where has the Reserve been? Where has the SEC been? Where has the CFTC been?" They are getting pretty angry about it; they are pretty upset, as you could probably appreciate.

So I would like for you to give me some assurance that we are on top of this. I think that is where Chairman Peterson was kind of going. I would like to know just a little bit more about the clearinghouse.

Whenever you create a clearinghouse for any financial instrument, you are concentrating risk away from holders of the instruments into the clearinghouse. It would appear there is obviously a great deal of risk associated with those credit default swaps. So how does your agency test the financial security of the clearinghouse under your jurisdiction to ensure it can meet stress events like defaults of clearing members, even if such an event is considered a low-probability scenario? How do you deal with that, any of the three of you?

Mr. RADHAKRISHNAN. Let me take a crack at that, Congressman. Thank you for that question.

You are correct. Whenever there is a clearing solution to a group of financial instruments for which there is none, it does concentrate the risk in one party, but the key is how well that central counterparty manages the risk. As we have seen in the regulated futures arena, Congress has decided that it is essential that every exchange be cleared by a DCO, and that is what the law provides.

So, in this instance, the key elements are the methodology for managing the risk. In this respect, as I had mentioned in an an-

swer to an earlier question, the CFTC has traditionally looked at the methodology to see whether it is reasonable. The CFTC has not prescribed the methodology by which risks should be managed purely because, prior to 2000, we did not have the authority to do that. But, it makes a lot of sense because the question is: Why should we substitute our judgment for that of the professionals whose job it is to do this? Now, our job is to see that it is reasonable.

The other thing that we look at is the financial resources that a clearinghouse will have in case a clearing participant defaults. The financial resources can take many forms; the primary form is margin. How much margin do you collect from the clearing participants?

Then the secondary form is, what other resources does the clearinghouse have that it can resort to in the event that it has to perform because one of its clearing participants cannot perform? Usually, that takes the form of a clearing fund or a guaranty fund. It may take the form of a certain amount of the capital of the clearinghouse itself. It may take the form of an insurance policy. Sometimes, to make sure that there is sufficient liquidity, it may also take the form of a committed line of credit so that the clearinghouse has the ability to get funds right away, so that it can pay on the other side.

What we do is monitor the ongoing operations of a clearinghouse. We conduct periodic reviews of the clearinghouse.

The CFTC has a unit called the Risk Surveillance Unit, and we are in the position of looking at significant positions of every customer on all of our regulated exchanges, and we are able to look at the risk that significant customers pose to clearing firms.

Then the next step is the risk that a clearing firm can pose to a clearinghouse. This is a fairly new capability that we have developed, but we will continue to develop it and will, hopefully, learn more from our experiences.

Mr. BOSWELL. Would anybody else like to comment?

Okay. I will wait until the next round. I have other questions, but my time is about up.

Mr. HOLDEN. The chair thanks the gentleman.

The gentleman from Texas.

Mr. CONAWAY. Thank you, Mr. Chairman.

My good friend, Mr. Boswell, is correct. There is a lot of learning going on here this morning, we hope.

It is illogical to have \$60-plus trillion in notional value of derivatives based on actual debt of, say, \$16 trillion, because it is so inverted like that. If your clearinghouse captures all \$60 trillion in this activity and you have your margins or whatever your capital requirements are, will that, in effect, limit, in the future at least, this inverted circumstance where you have four times the notional value of derivatives *versus* the actual underlying assets or debt? Can somebody come up with \$60 trillion worth of capital to be the counterparty? How does that work mechanically?

Mr. SIRRI. Let me take a stab at that one.

I think what you are observing is that the amount of cover that is written on a group of underlying instruments is much larger than those instruments themselves. Thus, people, whether they are

side bets or are risk management, are taking risk management positions on those. The central counterparty will help in that way because the concern, of course, is that you get some kind of a large flow resulting from a default of one of the underlying reference entities.

The point of margin is to create a system so that along the way, each day, capital is shifted; funds are shifted from someone who lost to someone who gained.

So the idea is, yes, a central counterparty would help in such a situation. It would reduce systemic risk from the large number of notional values of CDSs that are out there.

Mr. CONAWAY. But is it realistic to hold out the premise that, on the fifth day of business, they will have captured all of this \$60 trillion worth of activity? Just from a volume standpoint of going from 0 to 100 miles an hour does not make a lot of sense.

Mr. SIRRI. Look, the framework that we have been talking about here for the central counterparties we are talking about is optional in that the central counterparty will hold itself out as being open for business, and the dealers will need to bring their business there.

Mr. CONAWAY. So how long do you think it will take to migrate?

Mr. SIRRI. I think it is anybody's guess. It remains to be seen. There are reasons to do it.

In particular, the customers of the dealers, many of them hedge funds, are concerned about the credit risk posed by the dealers themselves. They are forced to bring it on. The force to keep it off is that there are economic reasons not to standardize a contract. People will make more money in the over-the-counter markets for a given transaction than in the standardized. Those two forces will have to balance.

As regulators, I think we are trying to craft a system that is not so burdensome as to drive people away, but that is sufficiently robust so we accomplish our goals.

Mr. CONAWAY. Mr. Dinallo, the underlying credit default swap, in my view, is an insurance contract. As an insurance regulator, how did we get to a circumstance where we let companies like AIG write insurance contracts without the traditional reserve circumstances? If you are writing life insurance, you have to put them up.

Did that, in fact, happen, and was AIG writing these insurance contracts without reserve requirements? If that is the case, starting at that level and requiring a reserve, like balances for folks who are writing the original credit default swap, is that a part of the regulatory scheme that states ought to be doing?

Mr. DINALLO. Yes, I think my answer is very complementary to Mr. Sirri's, and it actually goes to this inversion observation that you have made.

It is true, as I said in my opening, that what we would call a covered CDS, where you actually have exposure to the referenced entity, is clearly an insurance transaction. AIG, out of its unregulated, non-insurance entity—essentially, the hedge fund that was bolted onto AIG at the holding company level—wrote \$460 billion worth of that; and there was not nearly the solvency and capital

requirements that are associated with a normal insurance undertaking.

Mr. CONAWAY. Is that something the states ought to be working on?

Mr. DINALLO. What I did say earlier was that we had said that we were going to regulate those covered ones as insurance products. The problem is that you create a segmented market when you do that, because there are probably always going to be some naked CDSs out there, and there are appropriate reasons for that. So what we have done in New York, announced today, is to put that in abeyance against the January date until we see how this more holistic solution works out.

I will just say that I think it is very important, your point about inversion. The way you stop inversion is, if you basically put everyone onto one of these exchanges, it becomes more expensive, and the sort of flyers that everybody took on the future and/or demise of our companies and of our credit vehicles goes down a lot because it becomes too expensive just to take these free——

Mr. CONAWAY. Mr. Chairman, if I might follow up on one other question.

If I am relying on an AIG in contract, if I am buying a security and I am looking at it to say, "Well, that has got an AIG guarantee on it and that is backed by reserves and I know it actually can collect." Why is that a bad thing *versus* someone who chose naked CDSs? Why does it diminish that market?

Because the reason I am buying a security is that it has got a AAA rating from some folks who did not know what they were doing, and it has got AIG guarantees which were obviously worthless. Why is it not requiring the insurance companies or the writers of these insurance contracts to have the standard reserve requirements that you have actuarially determined? Why is that a bad thing?

Mr. DINALLO. In my opening, I think I politely implored the Committee to make sure that whatever solution we ended up with, that there were sufficient capitalization surplus reserves, too. Because I think what I said was that CDSs in their covered form, the ones that you are talking about, are really more akin to insurance, and therefore, they are a guarantee. You are basically guaranteeing against the adverse outcome. They are not investments in the sense that investments are not guaranteed. Securities are not guaranteed; they are merely a reflection of an investment position.

So I think you are wholly correct that we have to look at the tilt of capitalization behind CDSs more like insurance and less like other forms of financial services.

Mr. CONAWAY. All right.

Thank you, Mr. Chairman.

Mr. HOLDEN. The chair thanks the gentleman.

The gentleman from Georgia.

Mr. MARSHALL. Thank you, Mr. Chairman.

Mr. Sirri, it seems to me that the SEC's argument for having jurisdiction simply because over-the-counter swaps have been cleared is a bit of a stretch. It is also clear that it adds a layer of regulation that could discourage people from wanting to clear. So I am kind of curious to know what you think the SEC brings to the table that

is worthwhile if, in fact, it asserts jurisdiction just as a policy matter.

I guess I would like to hear from Mr. Radhakrishnan as to what his view is of the added value that the SEC might bring to the table. A sort of dual regulation problem seems to me to be potentially problematic.

Mr. SIRRI. Sure. It is a good question.

I think the SEC has a set of basic charges that it has had since its inception in 1934. Amongst those are the maintenance of fair, orderly and efficient markets, investor protection, anti-manipulation authority, and protections against insider trading.

Mr. MARSHALL. You have both of those now, the latter, too, and you would not lose that with regard to OTC swaps that are cleared.

Mr. SIRRI. If they were no longer subject to individual negotiation, we would lose our anti-fraud authority, so that is a curiosity. You could actually have a situation where we would have over-the-counter anti-fraud authority, but if it is no longer subject to individual negotiation, that authority would vanish.

Mr. MARSHALL. And part of your concern here is that you would no longer have the authority to investigate fraud?

Mr. SIRRI. I think the point you have raised is a good one. It does not go to the fine legal point. I think we police markets. We are fundamentally a market regulator. That is one of the things we do. There are investor protection issues that are out there.

Mr. MARSHALL. The CFTC, though, is also a market regulator. That is what we have charged them with the responsibility of doing, so you are sort of piling on, it seems to me, from the perspective of the market, if you have two regulators.

Mr. SIRRI. We have a unique charge, which is explicitly investor protection. That sits, I think, uniquely with us. It is a mandate we have had. Because these instruments are——

Mr. MARSHALL. If I can interrupt, the investors we are talking about here are these over-the-counter characters that we for a long time had decided that we were going to exempt from that kind of protection. We thought they were big boys and were able to take care of themselves.

So here we want to encourage them to clear because it is in our best interest societally that they clear, and we have never thought they needed your protection in trying to do their deals.

Mr. SIRRI. That is only a portion of the investment protection. You are right; those are the direct counterparties to the trade. But because these instruments are struck on other financial claims—debt, bonds, things like that—they drive the pricing of those bonds just as, as you know, futures contracts struck on equities can drive the pricing of equities.

So the point is that, in this space, we have an interest. I think something we bring that is unique is our ability—in this case, they would be an exchange trader or centrally cleared markets—to police with respect to insider trading, investor protection, anti-fraud. Those are things that we have a long history of.

Mr. MARSHALL. If we clean the statute up and simply make it clear that you continue to have that kind of authority, you would not feel the necessity to otherwise have to approve the use of a

clearing operation under the Fed or a clearing operation under the CFTC?

Mr. SIRRI. I could not answer that question for the Commission. I think such a thing would be helpful, but you are asking me, would that be enough to satisfy the interests of the Commission. I just could not answer that for the Commission.

Mr. MARSHALL. Actually, Mr. Radhakrishnan, I am not going to go to you because I am not going to have much time left.

Mr. Parkinson, in your testimony, or, in response to questions, you noted that the Fed will be regulating these banks, these institutions of investment banks that have now decided to become full-fledged banks, and that the lion's share of credit default swaps will involve one of these banks as a counterparty.

What do you anticipate will wind up being the relationship between the Fed's regulation of these institutions as counterparties and their decision to use either ICE or CME as the clearing agency? Don't you think that the Fed is going to want all of this business to go through the clearing agency that it is regulating?

Mr. PARKINSON. I think we are going to want the banks we supervise to take advantage of the central counterparty services that are offered. I do not believe we will be giving them advice as to which of a number of competing services they should be utilizing. That will be their decision.

Mr. MARSHALL. Mr. Radhakrishnan, what impact do you think it has on the decision of a bank to choose a clearing party in that, if it chooses CME, it is now subject to not only Federal Reserve regulation but also to CFTC regulation?

Mr. RADHAKRISHNAN. Well, as Mr. Parkinson has said, I hope that the banks will choose the clearinghouse that they believe best fits their needs and also that they believe has the best solution. If it chooses CME, then it would fall within, first of all, the jurisdiction of the CME itself and then within our jurisdiction.

As part of the MOU, I think, if the Fed should need any information to aid it in its supervision of its regulators, then we will be willing to provide that information as part of the MOU.

Mr. MARSHALL. My time is up, Mr. Chairman. There are, obviously, a lot of questions we could ask about this subject.

Mr. HOLDEN. The chair thanks the gentleman.

The gentleman from Kansas.

Mr. MORAN. Mr. Chairman, thank you very much.

As I understand the testimony, we have a general belief that these instruments need to be cleared. Is that true, that there is no disagreement in regard to that?

Mr. RADHAKRISHNAN. Yes, sir, there is no disagreement.

Mr. MORAN. Then the question becomes whose jurisdiction and whether or not there is a security aspect that the SEC involves itself in once there is clearing in place. I would like to hear an explanation for why the SEC believes that these are securities when they behave much more like a commodity.

Mr. SIRRI. I will be happy to answer that.

When these instruments are over-the-counter, they are securities-based swaps. Under the CFMA, they are explicitly excluded from the definition of "security." Our authority only runs to anti-fraud, as we have discussed.

An important part of that determination is that these contracts, their material terms, be subject to individual negotiation. The key phrase is “subject to individual negotiation.” When these instruments come on to a central counterparty and are novated to that central counterparty—in other words, I give up this bilateral contract that you and I struck, and I give it to the central counterparty—within that comes, if you will, a standard, plain vanilla credit default swap that is the form that that entity produces. That standardized credit default swap is no longer subject to individual negotiation.

More to the point, as some of these central counterparty proposals will be the case for them, they will have appended onto the exchanges; those exchanges, by definition, create standardized forms for trade. You do not negotiate the terms of a CDS on an exchange. You buy one or you do not. The question is the reference entity that you choose, the price and the quantity.

Because of those things, we believe they fall outside the exclusion in the CFMA, and they become securities, and our authority is triggered. But more importantly than our authority being triggered, we have interests in the issues that are being implicated.

Mr. MORAN. Let me first ask, are there those who disagree with that interpretation, which I assume is directed at the CFTC?

Mr. RADHAKRISHNAN. I will speak for myself, Congressman.

I think the statutory scheme is fairly clear, specifically section 409 of FDICIA. I believe what Congress decided in 2000 was that a clearinghouse for OTC derivatives can take various forms. The form that it takes dictates who the regulator is.

I defer to my friend on his interpretation of the securities laws, but I do not see how the very act of clearing changes the nature of the instrument. In fact, I think it is clear that a lot of these instruments are already standardized to begin with when they trade. So, if something is already standardized, I do not know how clearing makes it even more standardized.

Mr. MORAN. I certainly do not claim to be an expert, particularly of the law in this regard, and would love to have a greater level of expertise. But just my common sense tells me that the act of clearing does not change the nature of the instrument, so I am confused how the SEC reaches the conclusion that it reaches.

What you just answered may answer my next question, which is: What is the belief by CME and ICE for applying for an exemption from the SEC? Is this the same theory or are they just overly cautious? Do they believe that they need an exemption from the SEC, or do they just believe they want to avoid any question?

I do not know that you can answer what their motivation is. What is the basis for which the ICE and CME seek an exemption from the SEC?

Mr. SIRRI. The exemptions that we are contemplating are four, and it depends on the particular entity. But there is an exemption from registration as a clearing agency; there is an exemption from registration of being a broker-dealer if you deal in these instruments or they be securities; there is an exemption from registration as an exchange if part of the package of what you are offering is an exchange; there is an exemption from the requirement if they

are securities, that they are offered as securities. So there are four places where we believe we have to offer relief.

To the question of why they are coming to us, which is what you really asked, obviously, we believe that there are authority issues implicated. More to that, if you were to ask them, I think that others believe that there is a serious question, and were they not to come to us, then the status of those instruments would be sufficiently in question in that they would not be successful financial products.

So I think it is important. Regardless, I think, of where you come on the technical issue that is being discussed here, I think the provision of exemptions is important for success here.

Mr. MORAN. Will this be resolved absent a court determination? If so, what kind of time frame is the SEC and others on in resolving this legal dispute?

Mr. SIRRI. Well, I am not sure I would characterize it as a dispute. I think we are very much of one mind on what we need to get done here. I can only speak for my Chairman's instructions to me as a staff member, who said, "I want you to facilitate this happening." We decided that, process-wise, the way we can get this done most quickly, rather than registering as a clearing agency or registering as an exchange, is to exempt them from those requirements because we can do that quickly. That is a process that we have in place, and I think all of us are aiming to get this done sometime roughly in the middle of December. That is what I understand our time frame to be. I think that comports very well with what I understand the timetables of these counterparties to be.

Mr. MORAN. Thank you very much.

Thank you, Mr. Chairman, for allowing me to go beyond my time.

The CHAIRMAN [presiding.] I thank the gentleman.

The gentleman from North Carolina.

Mr. ETHERIDGE. Thank you, Mr. Chairman.

Mr. Sirri, I was not here earlier, but I want to follow up on what my friend from Kansas has touched on. He has touched on it, and I want to follow it a little further because I am sure you are familiar with section 409 of the Federal Deposit Insurance Corporation Improvement Act of 1991, which was added in the Commodity Futures Modernization Act.

This section authorizes multilateral clearing organizations, whether under the CFTC, the SEC or the Fed oversight, to clear over-the-counter derivatives. If over-the-counter derivatives magically become securities through clearing, why did Congress enact this provision into law? What is it for if that was not what it was about?

Mr. SIRRI. I am not sure I can answer why Congress did something, so I will not try to, but I can offer a comment on what I understand that to be. Again, I am not an authority on FDICIA, but I understand a DCO to be able, for example, under its terms, to clear securities and derivatives on securities. I understand that that is something that is permitted under it.

We clearly have authority to regulate clearance of securities. That is something that we have been doing for a long, long time—for decades and decades and decades.

So the entity, the provision of the DCO itself, because it allows that regime—the point is, that it can do it does not mean it requires that other agencies not be a part of the process. Were someone to elect to clear a security, an equity, it would be unusual for us to say we will not do it. I am not sure—and this would be something for Congress to answer. I could not answer it.

Did Congress intend for equities to be cleared under the DCO regime? From the understanding of my staff members, who understand this a lot better than I, their answer to me was “no.”

Mr. ETHERIDGE. That may be a place we need to revisit.

Given that explanation, it seems to me you would have to agree that other swaps can be standardized through the clearing process in the same manner. Therefore, if counterparty credit risk is removed through clearing, wouldn't the thousands of energy over-the-counter swaps that are being cleared by ICE and by NYMEX, as we spoke about before, in fact, be futures contracts?

By your reason, these energy swaps become standardized contracts for future delivery. Hence, they are now subject to the full regulatory authority of the CFTC. Doesn't this analysis regarding credit default swaps result in this conclusion? If not, why not?

Mr. SIRRI. I cannot answer as to the question of whether they would come under the CFTC authority. That would not be a question for us.

Mr. ETHERIDGE. But given your last conclusion to your last answer, that is why I asked the question of you.

Mr. SIRRI. I can come back to you after the fact and answer that, but that is too fine a question for me to parse right here.

Mr. ETHERIDGE. Would you be kind enough to give us a written explanation of that, please?

Mr. SIRRI. I would be happy to do that.

Mr. ETHERIDGE. Because I think that gets to the heart of the question we have been dealing with, would you not agree?

Mr. SIRRI. Well, I would think the one thing that I would observe here is that the instruments which we are discussing are securities base-wise. In other words, my point was only to them. The point I was making was not to other things that do not implicate the securities—energy, as you brought up.

Mr. ETHERIDGE. That gets to part of that issue. So, if you would be kind enough to give us a written explanation of that prior to the 15th, that would be great.

Mr. SIRRI. I would be happy to do that.

Mr. ETHERIDGE. Thank you.

I yield back, Mr. Chairman.

The CHAIRMAN. I thank the gentleman.

The gentleman from Wisconsin.

Mr. KAGEN. Thank you, Mr. Chairman.

I would like to say it is a pleasure being here. It just feels a bit outrageous that we have to be here because perhaps somebody at some institution, at some regulatory agency, had their eye off the ball or was asleep at the switch as this problem grew and grew.

What really matters to people now is that we prevent this from ever happening again. I think the best medicine for that is to provide the most transparency possible in that all derivatives, per-

haps, should be completely transparent and cleared on existing exchanges. So let me first direct a few questions to Mr. Sirri.

Which types of credit derivatives constitute security-based swap agreements under securities laws and which do not?

Mr. SIRRI. I would have to go back to the statute to be precise, but the main point is that they are referencing instruments that fundamentally are securities.

Mr. KAGEN. I would appreciate it if you would give me a written response at your earliest convenience.

Mr. SIRRI. Sure.

Mr. KAGEN. How frequently has the SEC used its authority over security-based swap agreements to pursue fraud cases?

Mr. SIRRI. Right now, as I said in my opening statement, we have an active effort in that area. We have issued subpoenas. We have required entities to respond to us under oath exactly on that issue, to look at fraud in the securities-based swap area.

Mr. KAGEN. So your activity in that area just started? Is this new activity for you?

Mr. SIRRI. I think it is probably fair to say we have become increasingly focused on it as the market has grown. The market early on was small. It did not apparently warrant that kind of oversight. We have now seen that the market is larger; its effect on underlying instruments is larger.

Mr. KAGEN. It is certainly difficult to monitor something that you cannot see and that you cannot measure.

To what extent, then, can and does the SEC force any disclosure of risk exposures for reporting companies or entities to derivative contracts?

Mr. SIRRI. So you are talking about disclosure requirements for listed companies. Those companies have basic reporting requirements about their exposures to various categories of risk—counterparty risk, credit risk, equity market risk, interest rate risk. There are basic requirements for disclosures of risk for publicly reported companies.

What we do not have with regard to CDS is the ability for record-keeping for financial intermediaries, for example, with respect to their positions there. So, if there were a hedge fund that had positions in CDS, we would not have the ability to force any kind of record-keeping for that adviser with respect to those CDSs or to promulgate the rules.

Mr. KAGEN. This morning's discussion has primarily focused on the credit default swaps.

Aren't there other products that you might be interested in overseeing—the interest rate swaps and the currency swaps? Are you reaching out there as well? Do you oversee those now?

Mr. SIRRI. I am not aware that the Commission has a particular interest there. I mean, they aren't securities-based instruments.

Mr. KAGEN. But then I am not sure; I thought you told me you did not know exactly which credit default, security swap instruments you were going to regulate.

Mr. SIRRI. We have an interest over things that are securities-based. So, for example, equity swaps where the underlying instruments are equities. But if you point to something like currency swaps where the underlying entity is a currency and is not a secu-

rity, we would not have the authority or the interest there for a currency swap or for a LIBOR swap, or for whatever it might be.

Mr. KAGEN. This question goes to the entire panel, if you would give me a brief response. If you need to extend it in writing later, I would appreciate it.

I am really interested in knowing to what level you believe your agency or your interest is in allowing for the complete revelation and transparency of all derivatives and of all swaps, whether they be public or private.

Mr. PARKINSON. I guess I would call your attention to a number of key provisions of the policy objectives for OTC derivatives markets at the President's Working Group at which all of our Chairmen are represented, released last Friday.

Those are, first, the details of all credit default swaps that are not cleared through a CCP should be retained in a central contract repository. Then going to your point about other types of OTC derivatives, it also stated that central contract repositories should be encouraged for other OTC derivatives' asset classes. Then finally, with respect to a regulator's ability to oversee these markets, it indicated that regulators should have access to trade and position information housed at those central trade repositories.

So I think the conclusion has been reached that we need greater transparency, and we have identified a mechanism for providing that level of transparency.

Mr. KAGEN. Is there a trigger point economically or a dollar amount that would trigger it? In other words, you are saying that every single swap and that every single CDS, no matter its nominal value, would be reportable and transparently available to the public?

Mr. PARKINSON. Yes. I think the goal is to get all of the CDS contracts into that trade repository. So, in a sense, it would go beyond the degree of transparency you have in the futures markets, and it would include not only the large positions, but indeed, all of the positions that were in the warehouse.

Mr. KAGEN. Thank you, Mr. Chairman. I yield back.

The CHAIRMAN. The gentlewoman from New York.

Mrs. GILLIBRAND. Thank you, Mr. Chairman. Since I was not here at the beginning of the hearing, I do want to welcome New York State Insurance Department Superintendent Eric Dinallo.

Thank you, Eric, for being here. You have obviously tried to take a leadership role on the issue of credit default swaps. I have read your testimony, and I have read letters you have submitted to this body on the issue. Having been the chief of the Investment Protection Bureau under the New York Attorney General, investigating conflicts of interest in financial services, you have had an interest in this area.

I read your letter with interest where you really made the difference between naked credit default swaps and covered credit default swaps. You made your views known that you thought the covered credit default swaps should indeed be regulated as insurance, but you did not have a view as to what to do with the naked version. You implied that they should be regulated under some gambling rules, which has not been discussed in this forum, but I do want to have you address that briefly.

I am concerned that, obviously, if we did regulate as insurance—and it did make sense in the way you framed it—you would have the problem of states being now the regulators of insurance, and you cannot have 50 different regulations for credit default swaps. So I would like you to address that issue. Then give me your views on the naked variety, where you think they would best be regulated.

Mr. DINALLO. Thank you for the warm introduction and for that question.

The first part that I would answer is that in 1907 we had a banking crisis in this country that was largely caused by securities and other speculation where there was—remarkably, like where we are now—a lack of capital behind the commitments and a lack of actual transactions in the underlying purchases. People were buying what you now would probably call “futures,” but they were not actually having any transactions other than the actual securities. These were called “bucket shops,” and they were all up and down the streets of New York. They were also prominent in Boston and in Chicago.

People would go in there and would essentially wager on the future of a security or of an exchange; and they had a huge impact on the crisis in 1907, which led to J.P.Morgan’s pulling everyone into a room, saying, we had better form a central bank today, which they successfully did. As of 1908, there were laws against these sorts of bucket shops, saying that you had to actually engage in the transaction if you were going to be buying on credit or margin.

As for the CFMA, which has been discussed today, one of its other features, besides taking away jurisdiction from the CFTC and from the SEC, is, it also took away jurisdiction under the bucket shop or gaming laws of the various states. That would have been the oversight for what I just described, to the extent that there are naked CDSs where there is actually no actual exposure in the referenced transaction.

So the testimony and the approach that we took was that there is about 10 to 20 percent of this market which looks remarkably like insurance. People call it insurance. They think they have insurance, arguably.

Mrs. GILLIBRAND. And they use it, in fact, as an insurance mechanism?

Mr. DINALLO. Yes. Thank you, Congresswoman.

They, in fact, kind of touted—I do not mean that in a bad way, but they said, we have this protection against our trading book. So we went forth in mid-September and said we would offer to regulate that.

I think it caused some distress to do that because it could have segmented the markets, and it also had the 50 states issue that you have discussed. Because Chairman Cox, the very next day, came out and said that the SEC was asking for jurisdiction again; and there has been this really protective activity since that time. On reflection, we think it is better to hold this in abeyance so we do not cause more dislocation in the market and so that we can see what comes out of it.

It looks like any of the solutions that we have discussed today would go a long way to both giving the ultimate transparency that the markets need, the counterparty repose that is very important, and the solvency and capital behind it. It may not be quite as much as you would have in an insurance contract, but it is far, far better than where we are today.

We concede that it is not good to have a segmented market, so I would rather have them all regulated than sort of have them half as insurance—or $\frac{1}{3}$ as insurance and $\frac{2}{3}$, or whatever it would be—as not.

Mrs. GILLIBRAND. Thank you.

With my remaining time, Mr. Sirri, you obviously would like to regulate credit default swaps. I think, early on in the early 2000s, the SEC said they did not want to regulate it, and they said it was not necessary. I am gravely concerned that you have just started now to regulate fraud and deception in the market when we have such a high volume of \$50 trillion worth out there.

How are you possibly going to now regulate this market with your current resources and with your current staffing levels? I do not think it could conceivably be possible. I would like your views on that.

Mr. SIRRI. Sure. It is a good question.

I think one of the things I would point to is the rapid growth of the CDS market. This market, as everyone has been saying, has grown astronomically over the last few years, the point being, when you go back in time to earlier in this decade, the market was much, much smaller. It did not have as much place, and it did not have as much effect on other financial instruments.

The numbers that are cited for the credit default swap market are large, but these are notional numbers; this is the amount of insurance covered, if you will, that is written. Our resources are the resources that we have with respect to our Enforcement Division.

To that point, I think one of the things that the Chairman has pointed out is, as a mechanism to use those resources more efficiently, the SEC would like legislation passed; and the Chairman has called for it to promote things like record-keeping and the making and the retention of certain records. The point of that is, it allows the fixed resources of the SEC to more efficiently be brought to bear on those entities that either write or purchase coverage in this market, and allows us to more efficiently police and surveil that market.

Mrs. GILLIBRAND. Do you think you can accomplish that with your current resources?

Mr. SIRRI. That is a difficult question.

What I do know is that it is a very difficult market to oversee today, given this current state of play. We have limited authority in the over-the-counter markets, but we cannot make any rules.

I think what we really need to do is to enhance what can be done. This is why the Chairman has asked for legislation in this area, to cause that to be more efficient.

I do believe in this case. I am probably the wrong person to ask because it is not the division I oversee for the precise level of staffing for that.

Mrs. GILLIBRAND. Thank you, panel.

The CHAIRMAN. I thank the gentlelady.

The gentleman from California.

Mr. COSTA. Yes. I will follow up on the gentlewoman's line of questioning as it relates to the enforcement of the SEC.

It just seems to me, as we are contemplating changing the authority and the supervision and the oversight, that part and parcel of that, you have to come with recommendations to us as to what level of enforcement you are going to need.

I found your answer to the gentlewoman's question unsatisfactory. Just because it is not in your division, I think that the Chairman, Mr. Cox, needs to make an evaluation; and they need to make a recommendation to the Committee as we look at legislation. Furthermore, I would say that we need to figure out not only what you need, but what it is going to cost and how we are going to pay for it.

Mr. SIRRI. I would be happy to come back to you and do that. All I meant by my answer was that, having not talked to the Chairman about that, I could not presume to offer an answer on behalf of the Commission.

Mr. COSTA. In your response to one of the earlier questions, I thought you commented on the fact that it was bringing into question the credibility of the financial instruments, *i.e.*, the derivatives.

Did you not say that?

Mr. SIRRI. I did not mean to imply anything about their credibility. I believe derivatives are incredibly important.

Mr. COSTA. No. I mean the viability of those instruments today.

Mr. SIRRI. I am not sure I recall the context of my remark.

Mr. COSTA. With the whole question currently surrounding the issue of these derivatives, how would you describe the current health, given the current financial meltdown we are experiencing at this point in time?

Mr. SIRRI. The financial health of the derivatives markets? Well, I think it is a good question, but a difficult one to answer because the derivatives markets are so varied. There are exchange-traded derivatives which have been, as far as I know, going on as they have been. The over-the-counter instruments have been growing rapidly.

I think we have learned through this experience that there is, perhaps, additional regulation that is needed. Pat went through some of the things that we and the President's Working Group recommended. The central counterparty is part of it.

I think my summary point would be that there is clearly an economic need that is served by the over-the-counter derivatives markets, and that is a good thing; but as they have grown. It is for Congress to determine whether additional oversight is needed for all or for parts of that market.

Mr. COSTA. I think there is a sense that we believe there is greater oversight that is necessary. We are trying to grasp, as we get more understanding of how it operates, what the appropriate level of oversight is and how we protect, through transparency, the financial foundations, on how they interplay with the current financial mess we are in.

In part, we are playing catch-up. We are looking for not just the SEC, but for the other regulatory agencies to make recommendations. In listening to the four of you opine to us on your level of oversight, it sounds to me at best confusing, and at worst as though there was a total lack of ability to provide the proper regulation for this industry.

Mr. SIRRI. Well, I think all I can say to that point is, our authority is very circumscribed at the moment. It goes to exchange-traded instruments. In the over-the-counter markets, there is only, as I have said, anti-fraud authority. After that, we have no authority.

So there are large portions of this market, of the over-the-counter derivatives markets, whether in the case of securities-based swaps for other issues that we have talked about beyond fraud or for other kinds of commodities such as energy or other things, for which we have no authority and do not have a remit.

Mr. COSTA. I think, on that point, that many of us feel that actually no one is in control. I mean, it is totally unregulated, it seems to me.

Mr. Dinallo, you give a state perspective on this. You talked historically about the bucket shops and about the early turn of the 20th century; and you talked about trying to create some uniformity here.

From a state perspective, which—from New York, obviously, major players—would you recommend in terms of a Congressional change the way this whole regulatory framework is considered? What is your bottom line in terms of the areas that we need to change?

Mr. DINALLO. Well, having been here today and having the honor to sit through this, I would observe that it sounds like there are a lot of round pegs in sort of square holes going on in the sense that one could step back and try to rewrite it holistically. The CFMA left a dangerous and tremendous regulatory gap, but still left enough jurisdiction that there are appropriate arguments going both ways.

My advice, I think, from the beginning, starting this morning, is to just make sure that the Committee and that Congress understands what you are dealing with to the extent you are dealing with guaranteeing outcomes, which is different than a mere investment or security product. Those generally have with them higher levels of solvency and capital requirements because they are much more like, if not identical to, insurance. They have a certain amount of confidence and promise behind them that insurance companies tend to be usually very good at.

There is an entirely different approach in those situations. From a state perspective, from a regulatory state perspective, I found it, as I said earlier, very difficult to very frustrating that we did not have any idea how much CDS was written on the companies that we were regulating, to the extent that some of them could have gone insolvent. We did not know if that was the right or wrong decision because we did not know what the systemic impact was going to be.

So to the extent people think about that, to the extent that they also go around saying, “I have insurance,” when, in fact, we are trying to be cooperative here by stepping back and not segmenting

the markets, I would make sure that there is adequate solvency, tremendous transparency and some kind of aggregation function so that you know how much risk you have at each entity.

Mr. COSTA. My time has expired, but I have one final question, if I might, Mr. Chairman.

Mr. Dinallo, I do not know that you are the appropriate person to answer this question, but I am not so sure the other gentlemen want to opine.

Part of the argument we get about suggesting we be cautious about how we make the changes in transparency, in regulatory oversight, and in the ability to bring some curbs or protections, some boundaries, is that we will lose this entire market and that we will go overseas, whether it be London or wherever.

What is your feeling on that?

Mr. DINALLO. I do not have a lot of faith, or I am not particularly impressed, with that argument after what we just went through. I think the markets will actually reward transparency on this point, and the capital will come to the most transparent, efficient markets. There will be some more capital intensity on these solutions, but people will actually believe there is capital behind their counterparty transactions, which is exactly why we are in a credit freeze right now, because they have no idea what the ultimate obligations and risks of cliff events are on the other side.

So I actually believe that we, to some extent, went through a time when we sort of fell in love with the European model—the CFMA reflects this modernization going toward solvency—and Basel II. When, in fact, a sort of less capital-intensive, sort of capital-looser models of the holding company level are not good when you are dealing with credit crises.

That is where we are now, and I would not be swayed by that very much.

Mr. COSTA. Mr. Parkinson, you look pained.

Mr. PARKINSON. No, I am not pained. I would add a different point.

We have to be conscious that this is a global market, and indeed, the majority of the activity is conducted not in the United States, but in London. But that is not an argument if we see a need for change to achieve specific policy objectives, as in the case of various series that have been outlined in the PWG statement that—we hesitate to do that for fear of the activity going offshore. Rather, it suggests we should be coordinating and cooperating with the foreign authorities. In fact, that is what we have done at least with respect to the infrastructure issues.

I think, going forward on the broad range of issues, we will work through something called the Financial Stability Forum, which includes representatives of all of the major jurisdictions, including London, which is the other important jurisdiction in terms of CDS activity.

Mr. COSTA. Well, the Chairman is taking the Committee over there in a week or so, so I guess we will get a better understanding as to the level of collaboration that they believe is taking place.

The CHAIRMAN. I thank the gentleman.

I have a number of questions that I want to get on the record. I do not know exactly how the other Members want to proceed, but

if it is all right, I would like to go through these and ask the other Members if they want to jump in at any point on any of these things that I am asking about and further expand on it.

We will proceed in that manner. Would that be okay?

Then, after that, if there are any more questions, have you gentlemen a few more minutes to be with us? Okay.

First of all, Representative Gillibrand just asked me a question. I recognize everybody is trying to create more credit and is trying to get people to buy more stuff, and to keep going into debt apparently, so the economy can be good, which I have a real problem with. I think we have to start paying our bills, not only as people but as a government.

So what would happen if we made credit default swaps illegal? Does anybody want to answer that? Could we make them illegal?

Mr. SIRRI. Well, one thing I might point to is something that was alluded to in the last set of questions, which is, where does the business get done? I think these are financial instruments that exist. Were they to be illegal here, somehow, given that they have some economic use, I would suspect they would be done outside the jurisdictional reach of the United States.

The CHAIRMAN. Does anybody disagree with that?

Mr. DINALLO. No. The point of my submitted testimony was some section of them used to be, arguably, illegal under the bucket shop laws. The naked versions were essentially illegal or at least they were prosecutable or pursuable as illegal prior to 2000. There is a real hedging need for the cover.

There is a perfectly appropriate reason to want to hedge your risk of true default of your counterparty. It is harder to articulate on a purely naked credit default swap what is the economic reason behind it. There are gray areas where you do not actually own the bump, but where you have some exposure; but in a pure naked situation, it is harder to defend.

The CHAIRMAN. Do each of you currently have jurisdiction over any clearinghouse that clears OTC swaps? I just want you to answer for the record.

Mr. RADHAKRISHNAN. Mr. Chairman, yes, we do.

The CFTC has jurisdiction over the CME clearinghouse, which has now taken over the clearing of energy swaps on NYMEX. The London clearinghouse, which has a swap clearing program, is actually registered with the CFTC as a DCO; although I will not claim that we exercise jurisdiction over it because the FSA does.

The CHAIRMAN. Mr. Parkinson?

Mr. PARKINSON. No.

The CHAIRMAN. Mr. Sirri?

Mr. SIRRI. If the CDS instruments are novated to a central counterparty, depending on the nature of how that is done, then it may be that we have authority. It would have to be specific. We would have to see what the actual specifics are to answer that question.

The CHAIRMAN. How important is it—and we talked a little bit about this—to find a CDS solution that works on both sides of the Atlantic? Is that an important thing?

Mr. DINALLO. I would like to just amend the answer, because I think that Mr. Parkinson made a really good point about overseas and London.

I did not mean to imply that we should disregard Europe and overseas. But I did speak at the Financial Stability Forum a month ago, and I can tell you that what I came away with was a real disappointment, a dejection bordering on anger, that our markets had produced these very opaque instruments. The CDOs and the CDO squares kind of came, from their point of view, from our markets; whether they are right or wrong, that is the perception.

I was simply arguing that enhanced transparency would bring capital from abroad, not the opposite.

I think it is very important. Increasingly, there was a belief, at least when I was there, that we need to work together on this. There is the possibility that it goes completely overseas, but there are basic policy decisions here that Congress and others have to make about whether that is appropriate or inappropriate depending upon if you think the activity should be done or not.

The CHAIRMAN. Well, that is part of why we are going over there.

Do you all agree that this is important that we have regulation on both sides, or not?

Mr. PARKINSON. Yes.

Mr. RADHAKRISHNAN. I agree with that, too.

Mr. SIRRI. So would I.

The CHAIRMAN. Okay. Are there any actions Congress could take to clarify the jurisdiction or authority of the various agencies with regard to the oversight of the OTC derivatives products?

Mr. PARKINSON. I don't think the Federal Reserve needs any additional authority to discharge the activities we are currently discharging. I think we did indicate support in our statement for clarifying the authority of the SEC to impose record-keeping and reporting requirements so they would be able to effectively police manipulation or fraud in these markets.

Mr. SIRRI. I think our Chairman has gone on record as saying that there is a regulatory hole associated with certain over-the-counter derivatives, and he feels that some Congressional authority could be granted in either some regulator or, in certain instances, right to the SEC for that market.

The CHAIRMAN. Ananda, do you think you need any additional authorities?

Mr. RADHAKRISHNAN. I think, Mr. Chairman, that it is clear that any DCO could do this, but to the extent that there is some uncertainty, perhaps it may not be a bad thing for Congress to clarify what it meant when it promulgated sections 408 and 409 of FDICIA.

I would add that there is also a provision in the Commodity Exchange Act, which is section 5(b). If you will indulge me, Mr. Chairman, it says, "A DCO that clears a grievance contract or transaction excluded from this chapter or other over-the-counter derivative instruments may register with the Commission as a DCO."

So, apart from the provisions of FDICIA, I believe it is clear from the provisions in the Commodity Exchange Act that Congress contemplated a DCO clearing OTC derivative instruments.

The CHAIRMAN. We might want to clarify that.

Now, if we have four people that end up doing this, is this going to work? Is there going to be enough business for four people; or is this going to, somehow or another, inhibit a good outcome? Is that a danger, that we are going to split this up so much that it may not work?

Mr. SIRRI. I think the point of the MOU that our agency signed was to ensure that that didn't happen. It highlighted our singleness of purpose, our common goals, that we intended to work together to cooperate, to consult, to achieve this common goal of getting these CCPs up and running. I think it indicates that the leadership of our agencies wants that to happen, and I think we expect that to work.

The CHAIRMAN. So you are not going to let this one group have an advantage over another. In other words, one can do it cheaper or one has less onerous regulations, and somehow or another we skew where the thing goes, and the other ones don't work, and we end up with something someplace where we don't have good regulation.

I am just concerned about this whole area because of things I have heard from different people that are involved in this. So you are going to have that under control, and you are going to make sure that this is really a level playing field, or not?

Mr. PARKINSON. I think, domestically, we have the MOU, and that is one of the principal purposes of entering into that MOU, is to make sure——

The CHAIRMAN. So we can be assured that it will be a level playing field?

Mr. PARKINSON.—that we are committed to establishing a level playing field within the U.S. And then, on the international front, again, I point to the existence of international standards for risk management under the CCP, which I believe certainly will be used in the U.K. as well as the U.S.

The CHAIRMAN. Anybody else?

Should there be a reporting requirement for OTC derivatives that market participants might elect not to clear? Should there be a reporting requirement if there are derivatives that the people in the market decide not to clear? Should there be a requirement that they report that?

Mr. PARKINSON. I think as I indicated earlier, the PWG has concluded that all CDSs that are not cleared by CCP should be reported to a trade repository and that regulators should have access to the information in that repository.

The CHAIRMAN. I just wanted to clarify.

What lessons has your organization learned from its oversight of firms that failed or have required government support this year?

Mr. PARKINSON. I think, with respect to CDSs, although one can read in the press that CDSs were the cause of the demise of Bear Stearns or of Lehman Brothers, and in fact that is not true. They failed not because of the activities in CDSs, but because of their holdings of various types of securities—residential mortgage securities, commercial mortgage-backed securities, *et cetera*. Indeed, to the extent they use CDSs, they use them to hedge some of those exposures. But, obviously, they didn't fully hedge them, or they wouldn't have run into the problems that they did.

Mr. SIRRI. I think another lesson that we learned, again, related to CDS, is that a central counterparty can have an important role to play here because of the information flow. As firms got into trouble, their counterparties sought to novate various over-the-counter derivatives away from the troubled firm. When that happened and they took those swaps to better-performing counterparties, some financially healthy firms, those firms would often reject those novations, creating a set of rumors in the market where people believed that a name was no good, whether it was Bear Stearns or Lehman at the time, whoever it was, that that name wasn't a name that people would take and trade.

Had those been novated to a central counterparty, that set of uncertainties, that rumor mill, if you will, would not have occurred because there would have been a better counterparty to all those swaps. They would have no longer been bilateral contracts. So I think a central counterparty could have helped in that situation.

The CHAIRMAN. Well, you are talking about here like when they use these credit default swaps to actually move against the company or move against the city and basically take them down, just like a short sale almost? Is that what you are talking about?

Mr. SIRRI. No, I was actually meaning that we might have a set of contracts, I might have a book of business, as just an intermediary. If I get in trouble, then my counterparties would no longer want to just have my exposure, my credit exposure, for the book of business. They might, in turn, look at Pat and say, "I would rather novate those contracts to Pat and have Pat step in in my place." Pat may or may not choose to do that. When he doesn't choose to do it, say, for his own business reasons, people say, "Oh, Parkinson won't trade with Sirri; he must be afraid of Sirri." And that set of rumors is not helpful.

The CHAIRMAN. And there were the instances where those kind of rumors actually—it was like some city I read about in California that got taken down, basically, because of rumors that were started by one of these deals.

Before the current crisis erupted, what steps did your organizations take to attempt to identify and forestall the sort of problems that we are seeing?

Mr. PARKINSON. I think all of our agencies have been involved since 2005 in these efforts to strengthen the infrastructure of the markets. I think we have made substantial progress along those lines. But, as we have indicated, I think, in the ambitious agenda we have going forward, there is more to do. But the infrastructure, clearly, was something that has been on our radar at least since 2005.

The CHAIRMAN. Anybody else?

At the risk of further raising a jurisdictional fight, Mr. Sirri, are you saying that the CDS transactions would be securities subject to SEC jurisdiction but for the fact that the CFMA provided the swaps exclusion?

Mr. SIRRI. What we are saying is that we think there is a very strong argument that our authority is triggered by the novation to a central counterparty. That is the key issue. Whether the clearing agency is a New York bank or any bank or a DCO, that is not the

key issue for us. The key issue is the nature of those instruments once they are novated to a central counterparty.

The CHAIRMAN. I still wonder about that.

But anyway, Mr. Parkinson, do you think a clearinghouse needs to be a banking entity to clear a CDS?

Mr. PARKINSON. No. The law allows, in the United States, either to be organized as a bank or as a CFTC-regulated DCO or as an SEC-regulated clearing agency. And, as Mr. Radhakrishnan and I and all of us have testified, one of the existing proposals is for the CME to do it through a DCO. That is allowed under the law, and it is a perfectly legitimate choice.

The CHAIRMAN. Lynn Turner, a former Chief Economist at the SEC, was quoted yesterday as saying, "The Federal Reserve was supposed to supervise the lending of many of the banks now in trouble, and yet seemingly they did nothing," I am quoting her now, "I wonder why, when they didn't do the job they were supposed to be doing, one would give them even more responsibility."

Could you comment on that?

Mr. PARKINSON. Well, obviously, some of the banks that we supervise have suffered losses and are in one degree or another of difficulty. I would note that that essentially can be said of anybody that is a prudential supervisor of a large global institution at this point, whether the SEC was supervising some of those entities—there are U.K. entities, there are European entities.

None of us has been completely successful in ensuring the safety and soundness of the institutions that we oversee. But I guess it is only people like Mr. Turner, who don't have the responsibility, that feel free to make those kinds of charges.

The CHAIRMAN. As I understand it, the CFTC has been operating a long time, and I don't think anybody has lost any money on any of your deals, have they?

Mr. RADHAKRISHNAN. No, Mr. Chairman. In this specific instance, if you look at the one insolvency, which is Lehman Brothers, the entity that filed the bankruptcy was a holding company, and then they also had a regulated entity, which was both registered as a broker dealer with the SEC and as an SCM with the CFTC. That entity went through what I would call a planned bankruptcy. There was an arrangement for another firm, Barclays, to buy over the accounts. All of the futures accounts and the funds associated with the futures accounts were successfully transferred with no loss to customer funds.

The CHAIRMAN. Do any other Members have questions?

Mr. Moran?

Mr. MORAN. Mr. Chairman, thank you.

This is for the SEC. One of the things I had read someplace was—you told me earlier that, by mid-December, the plan is to have an exemption from the securities laws for the clearing operations. Is that accurate?

Mr. SIRRI. Those are our goals, yes.

Mr. MORAN. That is the goal. But I read someplace in which your plan is only to have a temporary exemption from security laws, somewhere between 9 and 18 months. My question is, why; and what does that mean for the regulatory certainty?

One of the answers to my question about why they are seeking this exemption, I assume the answer to that is because we want to know that the process we are going through is legal, the underlying securities will not be suspect to legal challenge. And yet, if you have a very short-term exemption—let me take the pejorative word out—if you have an exemption of 9 to 18 months, does that not then defeat the certainty that they are seeking?

Mr. SIRRI. Well, our goal is not to have it not defeat that uncertainty. We do want to provide regulatory certainty here, because that is what will make the central counterparty successful. So I think we internalize that.

The reason for it being a temporary exemption is our goal was to get this work done as quickly as possible. So using that process was the quickest process that we had available to us to cause these entities to come to fruition. There may remain to be a few other issues that we have to think about—the registration question and such. But, in the intervening months, we hope to settle those points.

So this was the fastest way that we could get these entities up and running while discharging our responsibilities.

Mr. MORAN. The process that you used to grant the exemption is a shorter, more immediate process if you grant a temporary exemption than a permanent exemption?

Mr. SIRRI. No, the exemptive process is the same; we have to make a set of findings about our action being in the public interest. The reason for it being temporary is we are exempting these entities from registration as broker dealers, clearing agencies, exchanges, and such. What I am saying is that we are doing this rapidly enough that the Commission may want to consider, for example, in the spring, are they comfortable with all the choices that were made in November, December; do they want to modify them at all? So that is the reason for the temporary——

Mr. MORAN. Easier to reach a temporary decision than a permanent decision, just greater level of comfort with that decision. I think that is what you are saying. Thank you.

Mr. Chairman, one other thing, and this is somewhat unrelated to the topic of today's discussion, but I rarely get an opportunity to speak to someone from the Federal Reserve system.

Just for the record—and you are certainly not the person to which I can deliver the message very well, but you are the Fed, in my world this morning.

One of the things we experience in Kansas is that our banking system has generally been sound. We have few of the problems that are associated with what is going on elsewhere in the country. I find it ironic or self-defeating when the Federal Reserve announces a reduction in interest rates, I assume with the goal of stimulating the economy, stimulating borrowing and putting economic activity back into play. And yet, every time I turn around, my bankers tell me that the regulators are cracking down on any ability to make a loan. My farm lenders can't make loans to farmers because their portfolio is agriculture. My commercial developers can't make loans to commercial developers because their portfolio is already commercial developers.

So the things that our banks do, the bread and butter of our lending institutions, more and more is off-limits. It seems to me that there is a somewhat counterproductive effort at the Fed to lower interest rates to encourage people to borrow money, at the same time telling the people who lend money, "You can't loan money because of additional regulations and restrictions."

If you would deliver that message to someone at the Federal Reserve, I would be grateful. I would be happy to hear back from somebody about why this is not counterintuitive.

Mr. PARKINSON. Thank you.

Mr. MORAN. Thank you.

Thank you, Mr. Chairman.

The CHAIRMAN. I thank the gentleman.

The gentleman from North Carolina, Mr. Etheridge.

Mr. ETHERIDGE. Thank you, Mr. Chairman. I will be brief with mine, as well.

Mr. Radhakrishnan and Mr. Parkinson, from your testimony, it appears that you both agree that a banking entity could clear default swaps under Federal Reserve oversight and a designated clearing organization to do the same under CFTC oversight. Is that correct?

Mr. RADHAKRISHNAN. That is correct, sir.

Mr. PARKINSON. Yes.

Mr. ETHERIDGE. That being said then, what would your reaction be if a bank entity tried to form a DCO to clear CDS under CFTC oversight or a DCO tried to become a banking entity to clear CDS under Federal Reserve oversight?

Mr. RADHAKRISHNAN. I think we would not have an opinion on that; we would say that that would be fine. In fact, if you look at the ICE-TCC proposal, the TCC, before it decided to apply to become a New York State limited purpose trust company, is a designated clearing organization.

I think what is happening is a separate entity is going to become the New York State banking authority. But as long as the banking authorities do not mind accepting a DCO as one of their regulatees, I don't think the Commission has any objections to an entity that is already regulated by another regulator becoming regulated by us. In fact, we have two examples: One is the Options Clearing Corporation, which is regulated both by the SEC and us, and the other is the London Clearing House.

Mr. PARKINSON. I am not aware of anything that would prohibit a banking organization from forming a CCP and registering with the CFTC. Although it is not exactly the same situation, I would note that, under the Gramm-Leach-Bliley Act, we have many banks who have subsidiaries that are futures commission—or bank holding companies whose subsidiaries are futures commission merchants, and they are regulated by the CFTC. There are various provisions of Gramm-Leach-Bliley that direct us to rely primarily on the CFTC in the oversight of those entities. So, philosophically, I think I would be very comfortable with that approach.

Mr. ETHERIDGE. Okay, thank you.

Let me associate myself, if I could, Mr. Parkinson, with my good friend Mr. Moran's statement from Kansas, as it relates to the ability to loan and the regulatory schemes. I know we are going

through some tough times right now, but I am hearing from a number of folks, not only just my farm community, who are losing jobs, going out of business, small-business people, car dealers and others. We are saying we are going to help them, and they are seeing no relief at the local level. We are still having problems with the bigger banks still not letting those dollars flow. I hope you will take that message back.

As we approach the winter season now, if we don't get some of those funds flowing, we are going to have some real problems across America in small towns and rural communities.

Thank you, Mr. Chairman. I yield back.

The CHAIRMAN. I thank the gentleman.

Any further questions?

If not, I want to thank the panel for their patience and their hanging in there and putting up with us for this period of time. We appreciate you coming before the Committee, and we look forward to working with you as we go through this process. Hopefully you can get this thing resolved by the 15th of December, because, as you know, I think the sooner we can do this, the better.

Thank you.

The Committee on Agriculture is adjourned, subject to the call of the chair.

[Whereupon, at 12:58 p.m., the Committee was adjourned.]

HEARING TO REVIEW THE ROLE OF CREDIT DERIVATIVES IN THE U.S. ECONOMY

MONDAY, DECEMBER 8, 2008

HOUSE OF REPRESENTATIVES,
COMMITTEE ON AGRICULTURE,
WASHINGTON, D.C.

The Committee met, pursuant to call, at 1:07 p.m., in Room 1300, Longworth House Office Building, Hon. Collin C. Peterson [Chairman of the Committee] presiding.

Members present: Representatives Peterson, Holden, Etheridge, Marshall, Herseth Sandlin, Cuellar, Costa, Salazar, Ellsworth, Space, Gillibrand, Pomeroy, King, Neugebauer, Boustany, Conaway, and Smith.

Staff present: Adam Durand, John Konya, Scott Kuschmider, Rob Larew, Clark Ogilvie, John Riley, Rebekah Solem, Bryan Dierlam, Tamara Hinton, Kevin Kramp, and Jamie Mitchell.

OPENING STATEMENT OF HON. COLLIN C. PETERSON, A REPRESENTATIVE IN CONGRESS FROM MINNESOTA

The CHAIRMAN. The Committee will come to order. Good afternoon, everybody. I want to welcome you to today's hearing. Today marks the third hearing this Committee has held on credit derivatives in the recent months. We have had two good hearings to this point, and we will save everyone the time and not rehash what has been said about these complex—actually not that complex, largely unregulated financial products. This afternoon we have two panels of industry stakeholders before us to discuss recent movement in the industry and among regulators.

In the wake of the unwinding of billions of dollars of obligations in this extremely opaque, and at times hard-to-value credit default swaps market, several companies have stepped forward and are seeking approval to operate clearinghouses for credit derivatives. Such clearinghouses could reduce the bilateral risk of swaps transactions and increase transparency of these products not just for the public, but for all the players in the industry.

Given the possibility of central clearing, I would hope our panelists can shed some light on how this would work given the often complex, specialized nature of many of these products. Issues like margin requirements, the standardization of contracts, exchange operating standards, financial security of the clearinghouses in times of stress, and the creditworthiness of the participants would also need to be addressed if these products were brought out of the dark and onto regulated exchanges.

Our panelists also may have views on the recent Memorandum of Understanding signed by the Federal Reserve, the SEC, the CFTC on sharing of information and coordinating oversight of swaps and new clearinghouses. As was discussed before this Committee last November, proposals in that Memorandum of Understanding could lead to a clearinghouse regulated by the Fed and another by the CFTC, leaving open the possibility that clearinghouses could choose between a regulator with no experience in this area and a regulator with long experience in this area. Moving towards a dual or even tripartite structure, if you include the Fed, it looks like it would create a divided regulatory problem among the largest banks that allowed the biggest players to essentially choose their regulator based on experience or lack thereof.

Last week I lead a Congressional delegation to Europe to meet with regulators and clearing providers. We spent time in London, Brussels and Frankfurt discussing with our counterparts across the Atlantic the same issues this Committee has examined over the last several months.

One thing that is clear is that in today's world, any regulatory answer to the lack of transparency in the market for credit derivatives has to be a global one. We hear often of the threats that implementing certain kinds of regulation on certain tradable products will just drive those products overseas to less transparent markets. Domestic exchanges already have a long history as counterparts for derivative trades, taking on market participants' trading and settlement risk. In fact, no CFTC-regulated exchange has had a default. So I would be interested in hearing from some of other panelists on how such a track record here would encourage the movement of credit derivatives to other markets.

Our hearings to this point have been very informative, thorough and bipartisan, and with two full panels today, I expect we will get a wide range of views from industry stakeholders.

I again welcome today's witnesses and welcome the Members for their participation and look forward to members of the panel's testimony.

[The prepared statement of Mr. Peterson follows:]

PREPARED STATEMENT OF HON. COLLIN C. PETERSON, A REPRESENTATIVE IN
CONGRESS FROM MINNESOTA

Good afternoon. I want to welcome everyone to today's hearing.

Today marks the third hearing this Committee has held on credit derivatives in recent months. We have had two good hearings to this point and I will save everyone the time and not rehash what has been said about these complex and largely unregulated financial products. This afternoon we have two panels of industry stakeholders before us to discuss recent movement in the industry and among regulators.

In the wake of the unwinding of billions of dollars of obligations in this extremely opaque and, at times, hard to value credit default swaps market, several companies have stepped forward and are seeking approval to operate clearinghouses for credit derivatives. Such clearinghouses could reduce the bilateral risk of swaps transactions and increase transparency of these products, not just for the public, but for all the players in the industry.

Given the possibility of central clearing, I would hope our panelists can shed some light on how this could work given the often complex, specialized nature of many of these products. Issues like margin requirements, the standardization of contracts, exchange operating standards, the financial security of clearinghouses in times of stress, and the creditworthiness of participants would also need to be addressed if these products were brought out of the dark and onto regulated exchanges.

Our panelists also may have views on the recent Memorandum of Understanding signed by the Federal Reserve, the Securities and Exchange Commission and the Commodity Futures Trading Commission on sharing information and coordinating oversight of swaps and new clearinghouses.

As was discussed before this Committee last November, proposals in that Memorandum of Understanding could lead to a clearinghouse regulated by the Fed and another by the CFTC, leaving open the possibility that clearing houses could choose between a regulator with no experience in this area and a regulator with long experience in this area.

Moving towards a dual, or even tripartite structure, if you include the Fed, looks like it would recreate the same divided regulatory problem we have already seen on Wall Street and among the largest banks that allowed the biggest players to essentially choose their regulator based on experience, or lack thereof.

Last week, I led a Congressional delegation to Europe to meet with regulators and clearing providers. We spent time in London, Brussels, and Frankfurt, discussing with our counterparts across the Atlantic the same issues this Committee has examined over the past several months.

One thing that is clear is that in today's world, any regulatory answer to the lack of transparency in the market for credit derivatives has to be a global one. We hear often of the threats that implementing certain kinds of regulation on certain tradable products will just drive those products overseas to less transparent markets. Domestic exchanges already have a long history as counterparties for derivatives trades, taking on market participants' trading and settlement risks. In fact, no CFTC-regulated exchange has had a default. So I would be interested in hearing from some of our panelists on how such a track record here would encourage the movement of credit derivatives to other markets.

Our hearings to this point have been very informative, thorough, and bipartisan, and with two full panels today, I expect we will get a wide range of views from industry stakeholders. I welcome today's witnesses and I look forward to their testimony.

The CHAIRMAN. And with that I would yield to the Ranking Member, for today, of the Committee, my good friend, the distinguished Member from Iowa, Mr. King.

**OPENING STATEMENT OF HON. STEVE KING, A
REPRESENTATIVE IN CONGRESS FROM IOWA**

Mr. KING. Thank you, Mr. Chairman. I thank you for calling today's hearing, and also for continuing this Committee's efforts in gaining further insight into the role of credit default swaps in our economy and how they should be regulated.

I also would like to thank the participants on our two panels today. We appreciate your time and commitment to the public policy process as we learn more about credit default swaps and move forward with an appropriate regulatory approach for this financial instrument.

This is the third hearing in the Agricultural Committee that has been held on the role of credit default swaps in our economy. Since our first hearing in October, there have been a number of developments with respect to this financial instrument and our economy as a whole. Credit default swaps do serve a valid purpose in the marketplace. They are an important risk-management tool necessary for successful functioning of our financial markets. However, we have learned that these financial instruments need appropriate oversight.

Credit default swap products have grown exponentially over a relatively short amount of time without proper regulation and transparency. This has created systemic risk and uncertainty in our marketplace. Credit default swaps need a regulatory approach that will provide greater transparency and risk management, and that will create a method for price discovery.

Last month Federal regulatory bodies established a Memorandum of Understanding regarding credit default swaps. This measure will allow for information sharing, will encourage cooperation among regulatory authorities. It will create a method for clearing credit default swaps. This approach should ultimately provide transparency needed to understand the market as well as measure counterparty performance.

However, as we move forward with developing a clearing mechanism, what remains uncertain is how exactly this clearing mechanism will reduce counterparty credit risk. What standards in relation to reporting, pricing and assessing risk before a credit event are needed for clearing these financial instruments? How will various regulatory authorities work together to achieve the broad goals of the Memorandum of Understanding? How will those efforts promote regulatory consistency rather than a duplication of efforts or, worse, further mismanagement?

Today we hope to advance our knowledge in respect to these questions to create the appropriate regulation that respects the nature of the marketplace and considers the limits of government intervention.

Again I thank you for your participation in today's hearing. I thank the Chairman and look forward to your testimony.

Mr. Chairman, I yield back.

[The prepared statement of Mr. King follows:]

PREPARED STATEMENT OF HON. STEVE KING, A REPRESENTATIVE IN CONGRESS FROM IOWA

I would like to thank Chairman Peterson for calling today's hearing. And, for continuing this Committee's efforts in gaining further insight into the role of credit default swaps in our economy and how they should be regulated.

I would also like to thank the participants of our two panels today. We appreciate your time and commitment to the public policy process as we learn more about credit default swaps and move forward with an appropriate regulatory scheme for this financial instrument.

This is the third hearing the Agriculture Committee has held on the role of credit default swaps in our economy. Since our first hearing in October there have been a number of developments with respect to this financial instrument and our economy as a whole.

Credit default swaps do serve a valid purpose in the marketplace. They are an important risk management tool necessary for the successful functioning of our financial markets.

However, we have learned that these financial instruments need appropriate oversight. CDS products have grown exponentially over a relatively short amount of time without proper management. This has created systemic risk and uncertainty in our marketplace. CDS products need a regulatory scheme that will provide greater transparency and risk management, and will create a method for price discovery.

Last month, Federal regulatory bodies established a Memorandum of Understanding regarding credit default swaps. This measure will allow for information sharing, will encourage cooperation among regulatory authorities, and will create a method for clearing credit default swaps. This approach should ultimately provide transparency needed to understand the market, as well as measure counterparty performance.

However, as we move forward with developing a clearing mechanism, what remains uncertain is how exactly this clearing mechanism will reduce counterparty credit risk. What standards, in relation to reporting, pricing and assessing risk before a credit event, are needed for clearing these financial instruments? How will various regulatory authorities work together to achieve the broad goals of the Memorandum of Understanding? How will those efforts promote regulatory consistency rather than a duplication of efforts or worse further mismanagement?

Today, we hope to advance our knowledge in respect to these questions so that we can create the appropriate regulation that respects the nature of the marketplace and considers the limits of government intervention.

Again, I thank you for your participation in today's hearing, and I look forward to your testimony.

The CHAIRMAN. I thank the gentleman.

The other Members, if you have opening statements, they will be made part of the record, but we are going to move ahead to the witnesses to proceed with the hearing.

Our first panel we welcome today, we have Mr. Terrence Duffy, Executive Chairman of the CME Group from Chicago; Johnathan Short, Senior Vice President and General Counsel of the International Exchange of Atlanta, ICE; Mr. John O'Neill, Manager of Fixed Income Derivatives for Liffe, New York Stock Exchange Euronext, London; Mr. Thomas Book, a Member of the Executive Board of Eurex Clearing AG in Frankfurt, Germany.

Mr. Duffy, we will start with you. You have 5 minutes. Your statements will be made in full part of the record, so we would encourage you to stay within the time, although we will give you a little latitude. Welcome, and we look forward to your testimony.

**STATEMENT OF HON. TERRENCE A. DUFFY, EXECUTIVE
CHAIRMAN, CME GROUP, INC., CHICAGO, IL**

Mr. DUFFY. Thank you, Mr. Chairman. Again, I am Terry Duffy, the Executive Chairman of the CME Group, and I want to thank you, Mr. Chairman, and Mr. Goodlatte for inviting us to testify today.

You asked us to discuss the role of credit default swaps and the regulatory framework that governs. You also asked for our suggestions for modifications of the current regulatory framework to facilitate efficient clearing of credit default swaps.

At the outset I would like to applaud the efforts of New York Fed President Timothy Geithner, SEC Chairman Chris Cox and CFTC Chairman Walt Lukken. They worked with market participants to reduce gross open CDS exposures by more than 25 percent, from \$67 trillion to \$44 trillion. They also worked together to facilitate regulatory review and approval of industry efforts, including CME Group's effort.

Credit default swaps serve an important economic purpose, but unfortunately the way they do it is not perfect. Ideally credit default swaps are designed to permit investors to hedge specific risk that a particular enterprise will fail or the rate of failure of a defined group of firms will exceed expectations. Credit default swaps are also an excellent device to short corporate bonds, which otherwise could not be shorted.

In an uncontrolled environment, however, credit default swaps can pose serious problems to the efficient functioning of our capital markets, and as has been well documented, the incentives to sell credit default swaps has led to unfortunate outcomes. Firms have sold credit default swaps that bear risks akin to hurricane insurance, but no regulator required that a firm maintain sufficient capital to fund the disaster that was being covered.

Volatile pricing of credit default swaps has had a severe adverse impact on companies whose credit ratings, loan covenants and stock prices were impaired by reported changes in their credit

spreads. We understand that some pricing conduct is under investigation, but it is too late for the companies that were most impacted. Regulators have been unable to judge the market impact of allowing a firm to fail. This is because it is hard to determine what the consequences of the failure would be with the respect to their obligations to others and the credit default swaps that would mature. This is a short list of common problems.

While some characterized credit default swaps as gambling devices or instruments of mass destruction, we do not take that view. We believe that they can serve an important role in our economy without imposing undue systemic risks if such swaps are marked-to-market to prices that are independently and objectively determined; if the regulators responsible for controlling systemic risk can easily keep track of the obligations of the banks, brokers and other participants in the markets; and if the well capitalized and regulated clearinghouses act as a counterparty for such swaps.

The current regulatory regime does not make it easy to achieve these aims. If credit default swaps are traded between sophisticated parties, and the transaction is subject to negotiation, the transaction is excluded from regulation by the CFTC by section 2(g) of the Commodity Exchange Act and excluded from regulation by the SEC by section 206(a) of the Gramm-Leach-Bliley Act. In consequence, efforts to enhance this market with product standardization and central counterparty clearing services have necessitated collaboration among regulators with uncertain statutory authority.

Although the CDS market has historically had some notable shortcomings, it is important to also recognize recent market structure enhancements. These include significant reductions in the confirmation backlog, the increased rate at which counterparties are pursuing bilateral tear-up and compression agreements, and the DTCC's efforts to release information on the aggregated gross credit default swaps exposure held in the Trade Information Warehouse.

Also, with the leadership of the New York Fed, the industry has been moving toward the adoption of central counterparty claim facilities. These innovations improve the risk-management capabilities of market participants. CME Group has an immediate operational capacity to offer a compression facility and clearinghouse for standardized credit default swaps. We will also be able to migrate a high percentage of previously traded swaps into standardized, cleared environment. This in turn will provide regulators with the information they need and give customers a more efficient market with lower costs and lower risk.

CME Group has the ability to reduce risk now. We have presented our plan to the Federal Reserve, CFTC and the SEC. We also have addressed regulatory uncertainty in this area. We have urged the SEC to advance the ball by immediately retaining authority to prosecute for insider trading and manipulation that affects securities markets. This should include exempting the trading and clearing of credit default swaps that are cleared by the CFTC-regulated clearinghouse. We remain hopeful that the SEC will take the steps necessary to achieve these important regulatory and systemic risk-reduction goals. We are working with, and will continue

to work with, the SEC, the CFTC to secure a workable set of exemptions that will give the solution a chance to succeed.

I thank you for your time, and I look forward to answering your questions.

[The prepared statement of Mr. Duffy follows:]

PREPARED STATEMENT OF HON. TERRENCE A. DUFFY, EXECUTIVE CHAIRMAN, CME GROUP INC., CHICAGO, IL

I am Terrence A. Duffy, executive Chairman of CME Group Inc. Thank you Chairman Peterson and Ranking Member Goodlatte for inviting us to testify today. You asked us to discuss the role of credit default swaps and the regulatory framework that governs. You also asked for our suggestions for modifications of the current regulatory framework to facilitate efficient clearing of credit default swaps. At the outset, I would like to applaud the efforts of New York Fed President Timothy Geithner, SEC Chairman Chris Cox and CFTC Chairman Walt Lukken in working with market participants to reduce gross open CDS exposures by more than 25% from \$67 trillion to \$44 trillion and in working together to facilitate regulatory review and approval of industry efforts, including CME Group's efforts, to enhance the CDS market through central counterparty clearing services.

Introduction

Credit default swaps serve an important economic purpose in an unfortunately imperfect manner. At the ideal level, credit default swaps permit investors to hedge specific risk that a particular enterprise will fail or that the rate of failure of a defined group of firms will exceed expectations. However, because credit default swaps are not insurance, investors who are not subject to any specific risk can assume default risk to enhance yield or buy protection against a default to speculate on the fate of a company or the economy generally. Credit default swaps are also an excellent device to short corporate bonds, which otherwise could not be shorted.

In an uncontrolled environment, credit default swaps can pose serious problems to the efficient functioning of our capital markets. As has been well documented, the incentives to sell credit default swaps have led to unfortunate outcomes. Firms have sold credit default swaps that bear risks akin to hurricane insurance, but no regulator required that the firm maintained sufficient capital to fund the disaster that was being covered. Volatile pricing of credit default swaps has had direct and severe adverse impacts on companies whose credit ratings, loan covenants and stock prices were impaired by reported changes in their credit spreads. We understand that some pricing conduct is under investigation, but it is too late for the companies that were most impacted. Regulators have been unable to judge the market impact of allowing a firm to fail because the consequences of the failure with respect to their obligations to others and the credit default swaps that would mature have not been immediately discernable. This is the short list of common problems.

While some have characterized credit default swaps as gambling devices or instruments of mass destruction, we do not take that view. If such swaps are marked-to-market to independently and objectively determined prices, if the regulators responsible for controlling systemic risk can easily keep track of the obligations of the banks, brokers and other participants in the market and if a well-capitalized and regulated clearing house acts as the central counterparty for such swaps, we believe that they can serve an important role in our economy without imposing undue systemic risks.

The current regulatory regime does not make it easy to achieve these aims. If credit default swaps are traded between sophisticated parties and the transaction is subject to negotiation, the transaction is excluded from regulation by the CFTC by section 2(g) of the Commodity Exchange Act and excluded from regulation by the SEC by section 206A of the Gramm-Leach-Bliley Act. In consequence, efforts to enhance this market with product standardization and central counterparty clearing services have necessitated collaboration among regulators with uncertain statutory authority. Although the CDS market has historically had some notable shortcomings, it is important to also recognize recent market structure enhancements, including significant reductions in the confirmation backlog, the increased rate at which counterparties are pursuing bilateral tear up and compression arrangements, as well as DTCC's efforts to release information on the aggregate gross CDS exposures held in the Trade Information Warehouse. Also, with the leadership of the New York Fed, the industry has been moving toward the adoption of central counterparty clearing facilities. These innovations improve the risk management capabilities of market participants.

We have formed a joint venture with the Citadel Investment Group and have immediate operational capacity to offer a compression facility and clearing house for standardized credit default swaps and to migrate a high percentage of previously traded swaps into a standardized, cleared environment that will provide regulators with the information they need and customers with a lower cost, lower risk and more efficient market. CME Group has the ability to reduce risk now. We have presented our plan to the Federal Reserve, the CFTC and the SEC. We have addressed regulatory uncertainty in this area by urging the SEC to immediately advance the ball by retaining authority to prosecute for insider trading and manipulation that affects securities markets and otherwise exempting the trading and clearing of credit default swaps that are cleared by a CFTC regulated clearing house. We remain hopeful that the SEC will take this step necessary to achieve these important regulatory and systemic risk reduction goals. We are working with, and will continue to work with, the SEC and CFTC to secure a workable set of exemptions that will give this solution a chance to succeed.

Discussion

Trading of financial futures on regulated futures markets, subject to the oversight of the Commodity Futures Trading Commission, has been a net positive to the economy, has caused no stress to the financial system and has easily endured the collapse of one and near collapse of two firms that were very active in our markets. This is a record of which this Committee, the CFTC and our industry can be justifiably proud.

When Lehman Brothers filed for bankruptcy, no futures customer lost a penny or suffered any interruption to its ability to trade. The massive proprietary positions of Lehman were liquidated or sold, with no loss to the clearing house and no disruption of the market. This tells us that the margining, financial safeguards and customer protection mechanisms of the futures industry work in times of immense stress to the financial system.

Fourteen years ago, on June 14, 1994, we testified before the Subcommittee on Environment, Credit, and Rural Development of the Committee on Agriculture of the House of Representatives on the topic of regulatory issues for OTC derivatives.¹ At that time, OTC swaps were in their infancy—the market had grown from approximately \$2 trillion in 1989 to less than \$8 trillion in 1994. We sounded a number of very clear warnings respecting the steps that would be necessary to assure that this rapidly growing market did not result in systemic problems to our economy.

“There are common themes in the recent stories, beyond the obvious ones of massive financial losses and attempts to shift the blame to others . . . In almost all cases of unexpected losses, properly linked to derivative instruments, three elements are present, to varying degrees: (1) the accuracy of pricing the instruments involved; (2) the assessment of risk before the fact; (3) and the rapidity with which small losses became huge.”

Interestingly, what was true of the nascent OTC interest rate swaps market in 1994 is just as true with the nascent CDS market in 2008. By contrast to the elements that contribute to significant loss events in OTC derivatives markets, centrally cleared derivatives are subject to daily mark-to-market, risk management and stress testing via the margining process. Both of these critical risk management functions prevent small losses from accumulating unnoticed.

Since at least the early 1990s, CME has had a consistent philosophy respecting the regulation of OTC derivative trading and the superiority of regulated exchanges with central counterparty clearing. We have not sought to ban all OTC trading, we have urged that OTC trading be limited to truly sophisticated investors trading contracts that are too individualized or too thinly traded to be brought onto a trading platform for standardized products. We were right then and we are right now.

On September 26, 2007, I testified before the House Agriculture Subcommittee on General Farm Commodities and Risk Management and discussed our view of the success of the Commodity Futures Modernization Act and the amendments that we believed were necessary to extend the benefits of central counterparty clearing to OTC derivatives.

I do not intend to repeat that testimony, which was detailed and extensive. I will only note that we suggested that Congress look to “first principles,” which means the findings and purposes adopted by Congress to guide the Commission’s exercise of its jurisdiction. Section 5(b) of the Commodity Exchange Act charged the Commission with a duty to oversee “a system of effective self-regulation of trading facilities,

¹ Testimony of CME’s then Chairman John F. Sandner.

clearing systems, market participants and market professionals” and to “deter and prevent price manipulation or any other disruptions to market integrity; to ensure the financial integrity of all transactions subject to this chapter and the avoidance of systemic risk; to protect all market participants from fraudulent or other abusive sales practices.”

We suggested that there is a growing conflict between these “purposes” and the statutory exemptions for unregulated markets that had been inserted into the CEA by various special interests. It is clear to us that all of the key purposes mandated by Congress in Section 5(b) are jeopardized if trading facilities for contracts in exempt commodities are permitted to coexist with regulated futures exchanges that list those same commodities.

Rather than looking back and trying to assess blame, we want to move forward and explain what CME Group is offering and planning to offer to alleviate the risks to the economy currently represented by the almost \$600 trillion in outstanding notional value of OTC swaps. We are in the process of offering a means to convert a significant proportion of outstanding OTC interest rate swaps into centrally-cleared instruments subject to the high risk management standards and regulatory requirements of the CME Clearing House as a Derivatives Clearing Organization supervised by the CFTC. If customers accept this program, we expect that standardization of these outstanding contracts and submission to our clearing system will permit a multilateral netting process that will reduce the outstanding exposure on the current open exposures submitted to our clearing system by a factor of at least five.

I want to particularly focus on our plans to play a role in the CDS market. CME Group’s goal is to respect the value and importance these markets provide to managing risks in corporate debt portfolios and to work with the dealer community and buy-side participants to facilitate their current hedging, trading, and dealing activities while providing them with netting, risk management and other central counterparty clearing services that reduce their costs and risk and increase investor confidence in these markets. It is also our goal to provide counterparty credit risk intermediation, reduction in gross exposures, and transparency around aggregate open exposures in a manner that reduces the potential need for regulatory intervention in distressed credit situations going forward.

The CDS market has grown because credit derivatives permit dispersion and realignment of credit risks. These instruments are a tremendously valuable financial tool in the right hands and used properly. However, the individual and systemic risks created by the exponential growth of such contracts has not been properly managed—in some cases it appears not to have been well understood. The lack of transparent mark-to-market, standardized contract terms, multilateral netting and all of the other advantages that flow from a comprehensive and open central counterparty clearing system have compounded risk and uncertainty in this market. The gross notional exposure in that market is about \$44 trillion. It is estimated that portfolio compression by netting could reduce that exposure by a factor of five to ten.

There is a solution. The compression facility and multilateral clearing mechanisms that have been proposed by CME and Citadel Investment Group offer a systematic method to monitor and collateralize risk on a current basis reducing systemic risk and enhancing certainty and fairness for all participants. Our solution offers regulators the information and transparency they need to assess risks and prevent market abuse. Our systematic multilateral netting and well-conceived collateralization standards will eliminate the risk of a death spiral when a jump to default of a major reference entity might otherwise create a cascade of failures and defaults.

Let me provide a few examples of the problems, and the solutions that our proposal offers:

- First, best price information in CDS markets is not always readily available. Disagreements are common, leading to subjective and inconsistent marks and potentially incomplete disclosure to investors of unrealized losses on open positions. For example, earlier this year, Toronto Dominion Bank announced a \$94 million loss related to credit derivatives that had been incorrectly priced by a senior trader. In a centrally cleared model, with independently determined, broadly disseminated mark-to-market prices such errors are much less likely to occur.
- Second, risk assessment information is inadequate, and risk management procedures are inconsistent across the market. Precise information on gross and net exposures is not available. The true consequences of a default by one or more participants cannot be measured—exactly the sort of systemic risk brought to

light by the Bear Stearns and AIG crises, which caused major disruptions in the market. As Bear Stearns and AIG faltered, credit spreads for most dealers widened, volatility increased and liquidity declined. Intervention became necessary.

Transparent mark-to-market price information combined with risk management protocols enforced by a neutral clearing house could have mitigated this outcome. Risk managers would have had accurate and timely information on their firms' positions, exposures and collateral requirements. Collateral to cover future risks would have been in place or positions would have been reduced. The clearing house and regulators would have seen and been able to manage concentration risks within a particular portfolio, and stress-test the consequences of a major default.

Our long experience is a tremendous asset in efforts to reduce systemic risk in the CDS market. The CME Clearing House currently holds more than \$100 billion of collateral on deposit and routinely moves more than \$3 billion per day among market participants. We conduct real-time monitoring of market positions and aggregate risk exposures, twice-daily financial settlement cycles, advanced portfolio-based risk calculations, monitor large account positions and perform daily stress testing. Our clearing house has a proven ability to scale operations to meet the demands of new markets and unexpected volatility.

CME Clearing also brings significant scale with risk management expertise and default protections. You may have seen press questioning our decision to include CDS clearing in a consolidated guaranty fund with our existing futures and energy and commodity OTC business. To clarify the record, we want to say the following.

A CCP guaranty fund is similar to a mutualized insurance or loss sharing vehicle. As such, the risk profile to the pool is reduced whenever the risks covered by the pool are diversified. We have seen very real evidence of this diversification benefit whenever we have added large pools of business to our guaranty fund—whether the products are correlated or uncorrelated to the existing product set. The London Clearing House has also successfully pursued a consolidated guaranty fund approach across its futures and OTC business since the mid-1990s.

In evaluating this approach, we took great care to ensure that the risk profile faced by non-CDS participants who contribute to the guaranty fund—traditional futures participants—is not adversely affected. We effectively risk manage the CDS products—via participation restrictions, margining techniques and risk monitoring practices—such that the risk profile to the guaranty fund posed by a CDS product is comparable to that posed by a traditional futures product. The CDS market requires product structures, rules and regulatory oversight that are suited to the needs of all participants. That may not occur if centrally traded and cleared credit products must be fitted within regulatory frameworks that were developed for different markets or to meet different policy goals. We are working with the New York Fed, the CFTC and the SEC to find a way quickly to bring our solution to market.

We are in ongoing negotiations with the SEC and do not believe that it is appropriate to comment publicly on the pending proposals and our mutual efforts to reach a satisfactory accommodation that will permit our venture to provide a valuable service to the industry, the economy and the regulators.

I thank the Committee for the opportunity to share CME Group's views, and I look forward to your questions.

The CHAIRMAN. Thank you very much, Mr. Duffy. We appreciate that.

Mr. Short, welcome to the Committee.

**STATEMENT OF JOHNATHAN H. SHORT, SENIOR VICE
PRESIDENT AND GENERAL COUNSEL,
INTERCONTINENTALEXCHANGE, INC., ATLANTA, GA**

Mr. SHORT. Thank you. Chairman Peterson, Members of the Committee, I am Johnathan Short, Senior Vice President and General Counsel of IntercontinentalExchange, or ICE. We appreciate the opportunity to discuss the role of the credit derivatives in the financial markets and ICE's efforts, along with the efforts of other market participants, to introduce transparency and risk intermediation into the OTC credit markets. I will begin with a brief update regarding the status of our efforts in this regard.

As I previously testified before this Committee, ICE will form a limited-purpose bank, ICE U.S. Trust, to clear credit default swaps. ICE U.S. Trust will be a New York trust company and a member of the Federal Reserve System. It will therefore be subject to the regulatory and supervisory requirements of the Federal Reserve System and the New York Banking Department.

I am pleased to report that ICE's application and charter were approved by the New York Banking Department last Thursday, December 4th. The Federal Reserve Bank of New York is currently reviewing ICE Trust's application, and we believe we are in the final stages of that review. When approved, ICE Trust will immediately begin clearing current backlogs of CDS trades before moving on to accepting newly executed CDS transactions.

ICE Trust will be an open platform. Other suitable trading platforms will be able to use our clearing facilities. Because of existing agreements with the Depository Trust and Clearing Corporation Warehouse, our solution will support the cataloguing of existing and future CDS trades regardless of whether they are cleared or not. Ultimately the goal is to ensure that the greatest amount of trades are centrally cleared in order to decrease counterparty risk and increase transparency.

One of the things that we were asked to do was to respond to the President's Working Group's recommendations, and I will try to do so briefly. Effective regulation of credit derivatives is essential for the efficient operation of capital markets in the financial system. To address these issues, on November 14th the President's Working Group on Financial Markets outlined four important objectives for OTC derivatives markets. Those objectives were to improve market transparency and the integrity of credit default swaps, to enhance risk management of OTC derivatives, to strengthen OTC derivatives market infrastructure, and to continue cooperation among regulatory authorities.

I support PWG's policy objectives, and, as I will outline here, we believe that our credit default swaps clearing solution will help regulators achieve each of these important objectives.

The first policy objective of the PWG is improving market transparency and the integrity of the credit default swaps market. Specifically, the PWG calls for public reporting of prices, trading volumes and aggregated open interest. Further, the PWG states that regulators should have access to trade and position information housed at central counterparties and central trade repositories. ICE will satisfy these objectives by direct regulation by the Federal Reserve and through adoption of appropriate clearinghouse rules requiring the reporting of this information.

As the Federal Reserve reviews our membership application, we will work with it and other regulators to provide requested data including public reporting.

The second policy objective of the PWG is enhanced risk management of OTC derivatives. Among the specific objectives, the PWG calls for specific risk-management standards for regulated entities that transact OTC derivative instruments, best practices for market participants with respect to risk management. To meet the objectives, the Federal Reserve regulatory requirements include minimum capital requirements, governance requirements, membership

requirements, margin requirements, a satisfactory guaranty fund, and other operational safeguards all with a view to satisfying internationally recognized clearing standards. Importantly, we were very pleased to see in the Memorandum of Understanding between the Fed, the SEC and the CFTC that there has been a commitment between these three important regulators to meet the highest and best standards.

ICE Trust membership will be open to all market participants who meet the clearinghouse's financial criteria. And importantly, third parties who do not care to join the clearinghouse will be able to clear through members of the clearinghouse. Like other clearinghouses, ICE Trust will review each member's financial standing, operational capabilities, systems and controls, and the size, nature and sophistication of its business in order to meet comprehensive risk-management standards.

The third policy goal that PWG is to strengthen OTC derivatives markets infrastructure, including open access to key infrastructure components and standardization of CDS contracts.

Finally, the PWG states that regulators should encourage improvements to operational infrastructure, including improvements of post-trade automation, frequent portfolio compression and enhanced standardized documentation.

ICE's clearing solution squarely addresses this objective by addressing the OTC CDS market as it exists today. By bringing a CDS clearing solution to the existing market structure, ICE's solution can quickly address the existing systemic risk that is resident in the market. Of equal importance, ICE has critical domain knowledge and expertise to bring to its clearing solution as a result of its acquisition of Creditex Group in August of this year; its development of the ISDA cash settlement auctions in 2005 in which it was a participant; and in recent weeks its efforts in the orderly settlement of CDS contract referencing Fannie Mae, Freddie Mac, Lehman Brothers and many others.

The final policy objective of the President's Working Group is to continue cooperation amongst regulators. Specifically, the PWG states that regulators that have jurisdiction over OTC markets should cooperate and ensure they have adequate enforcement authority. I fully support this recommendation and believe that CDS clearing will achieve this goal.

Importantly, as the Chairman himself noted, I think this needs to be taken to the next step, and there needs to be a facilitation of international cooperation to bring transparency to these truly global markets.

Mr. Chairman, thank you for the opportunity to share our views with you, and I will be happy to answer any questions that you or the Committee have.

[The prepared statement of Mr. Short follows:]

PREPARED STATEMENT OF JOHNATHAN H. SHORT, SENIOR VICE PRESIDENT AND
GENERAL COUNSEL, INTERCONTINENTAL EXCHANGE, INC., ATLANTA, GA

Introduction

Chairman Peterson, Ranking Member Goodlatte, I am Johnathan Short, Senior Vice President and General Counsel of the Intercontinental Exchange, Inc., or "ICE." We very much appreciate the opportunity to appear before you today to discuss the role of credit derivatives in the financial markets and ICE's efforts, along with other

market participants, to introduce transparency and risk intermediation into the OTC credit markets.

ICE is proud to be working with the Federal Reserve System, the Commodity Futures Trading Commission (“CFTC”), and the Securities Exchange Commission (“SEC”) on these efforts that are vital to the health of our financial markets. Importantly, ICE has a history of working with over-the-counter (“OTC”) market participants to introduce transparency and risk intermediation into markets. We pioneered the introduction of transparent OTC energy markets nearly a decade ago, moving trading from telephones to screens. In 2002, we introduced clearing into the OTC energy markets in response to the credit and counterparty risk crisis that were then gripping the energy markets—much like the crisis confronting global financial markets today. With the formation and launch of ICE Trust (“ICE Trust”), which I will detail in a few minutes, ICE is leveraging its expertise in OTC clearing and making significant investments to transform the OTC credit derivatives market into a regulated, centrally cleared marketplace that will be open, independent, transparent and efficient.

Background and Progress Report

As outlined in previous testimony, to clear credit default swaps (“CDS”), ICE will form a limited purpose bank, ICE Trust. ICE Trust will be a New York trust company and a member of the Federal Reserve System. It will therefore be subject to regulatory and supervisory requirements of the Federal Reserve System and the New York Banking Department.

ICE has agreed to purchase The Clearing Corporation (“TCC”) and has garnered the support of nine banks: Bank of America, Citigroup, Credit Suisse, Deutsche Bank, Goldman Sachs, JPMorgan Chase Bank, Merrill Lynch, Morgan Stanley and UBS. Currently TCC provides clearing services for global futures exchanges and OTC markets and since early 2007 has been working with leading industry participants, regulators and industry associations on a global initiative to clear CDS indices, tranches and single name instruments.

The nine banks using the ICE CDS clearinghouse will novate and capitalize their positions with a new and completely separate bulk fund. The guaranty fund for index contracts alone has been estimated to be in excess of \$1 billion. The total level of funding and collateral could rise considerably as initial and variation margin levels are determined and as new types of credit transactions move into the clearinghouse.

It is important to note that one of the defining features of the ICE Trust CDS clearing solution—and one that we believe is import to its success over the long term—is the independence of ICE Trust management from its clearing membership. The management of ICE Trust will be vested in an independent Board of Directors. Initially, the Board of Directors of ICE Trust will consist of seven members, four of whom are independent in accordance with the requirements of the New York Stock Exchange listing standards, the Exchange Act, and ICE’s Board of Director Governance Principles. Within 6 months of its initial constitution, the Board of Directors will increase to nine with the addition of two new independent directors.

In this vein, ICE Trust has also been holding regular meetings with buy-side participants to insure their representation in the clearinghouse solution. Feedback from these meetings has allowed ICE Trust to tailor its governance to allow buy-side participants to have a voice in the management of the clearing house through an advisory board. ICE Trust believes it is very important that its clearing solution be open to all participants, and thus obtaining buy-side support is very important.

ICE Trust will also be an open platform: other suitable trading platforms will be able to use ICE Trust’s clearing facilities. Because TCC and Creditex are integrated with the Depository Trust and Clearing Corporation (DTCC) warehouse, our solution will have the ability to support all existing and future CDS trades, regardless of when or where the trades were executed. Ultimately, the goal is to insure that the greatest amount of trades are centrally cleared in order to decreased counterparty risk and increase transparency.

Regulation of Credit Derivatives Clearing

As stated in our earlier testimony, appropriate, effective regulation of credit derivatives is essential for the efficient operation of capital markets and the financial system. Presently, credit default swaps are largely exempt from regulation by the CFTC and the SEC. Since the beginning of the credit crisis in 2007, however, the Federal Reserve Bank of New York (“New York Fed”) has progressively taken steps to address the unique market structure and systemic risks inherent in the credit market. As recent events demonstrate, the credit markets are intricately tied to the

banking system, and many of the largest credit derivative market participants are banks subject to regulation by the Federal Reserve.

To address these issues, on November 14, the President's Working Group on Financial Markets ("PWG") announced its policy objectives for the OTC Derivatives Market. In the policy statement, the PWG outlined four objectives for OTC derivatives markets: (1) Improve Market Transparency and Integrity for Credit Default Swaps, (2) Enhance Risk Management of OTC Derivatives, (3) Strengthen OTC Derivatives Market Infrastructure, and (4) Continue Cooperation among Regulatory Authorities. ICE supports the PWG's policy objectives, and as outlined below, ICE believes its credit default swaps clearing solution, ICE Trust, will help regulators achieve these objectives.

Improving Market Transparency and Integrity for Credit Default Swaps

The first policy objective of the PWG is to improve market transparency and integrity for credit default swaps. Specifically, the PWG calls for public reporting of prices, trading volumes, and aggregated open interest. Further, the PWG states that regulators should have access to trade and position information housed at central counterparties and central trade repositories. ICE will satisfy these objectives through direct regulation by the Federal Reserve, and through adoption of appropriate clearing house rules.

The Federal Reserve Act authorizes the Federal Reserve System and the New York Federal Reserve to require reporting from ICE Trust, and to conduct examinations of ICE Trust as it sees fit. The Federal Reserve has this authority because it establishes the terms under which ICE Trust will become a member bank. The Federal Reserve also has statutory authority to require reports and conduct examinations of any affiliate of ICE Trust. We expect that the Federal Reserve will require detailed reports on a regular basis concerning all aspects of the operations of ICE Trust. As the Federal Reserve reviews our membership application, we will work with the agency, as well as other regulators, to ensure that we provide requested and required data, including public reporting.

In the case of the current market structure for credit default swaps, the *absence* of this kind of information has contributed to uncertainty in the credit derivatives marketplace. ICE fully supports reporting of consolidated CDS market information because we know transparency will improve public confidence and market effectiveness. Our experience has taught us that central clearing combined with timely and appropriate information disclosure will substantially improve market safety and soundness, while preserving OTC market participants' ability to innovate and create new risk management products.

Oversight by the Federal Reserve System will ensure that ICE's cleared credit derivatives model is transparent and fully regulated from the inception of its operation. The Federal Reserve System has played a central role in addressing both the current credit crisis and issues related to credit derivatives within the broader market. Indeed, since its founding in 1913, the U.S. central bank has had primary responsibility for maintaining the stability of the financial system and containing systemic risk in financial markets.

Enhanced Risk Management of OTC Derivatives

The second policy objective of the PWG is to enhanced risk management of OTC derivatives. Among the specific objectives, the PWG calls for consistent risk management standards for regulated entities that transact OTC derivatives instruments, including best practices for market participants with respect to risk management.

To meet these objectives, Federal Reserve regulatory requirements include minimum capital requirements, governance requirements, membership requirements, margin requirements, a satisfactory guaranty fund, and operational safeguards, all with a view to satisfying internationally recognized clearing standards. As a limited purpose bank, ICE Trust will be subject to regular examination by the Federal Reserve and the New York Banking Department, among other regulatory bodies as appropriate in the normal course of operations and will be required to satisfy reporting requirements.

ICE Trust will offer clearing services to its membership. Membership will be open to all market participants that meet the clearinghouse's financial criteria, and, importantly, third parties unable to meet membership criteria will be able to clear through members of the clearinghouse. Like other clearinghouses, ICE Trust will review each member's financial standing, operational capabilities (including technical competence), systems and controls, and the size, nature and sophistication of its business in order to meet comprehensive risk management standards with respect to the operation of the clearinghouse.

ICE Trust will require members to report various specific other matters to the clearinghouse including: where the member ceases to hold sufficient capital or breaches any applicable position limit; if the net worth of such member reduces by more than 20% from that shown on the latest financial statement filed by it with the clearinghouse for any reason; the failure to meet any obligation to deposit or pay any margin when and as required by any clearinghouse of which it is a member; failure to be in compliance with any applicable financial requirements of any regulatory authority, exchange, clearing organization or delivery facility; the insolvency of the member or any controller or affiliate of that member; any default affecting it.

ICE Trust will adhere to the “Recommendations for Central Counterparties” (“RCC”) developed jointly by the Committee on Payment and Settlement Systems (“CPSS”) and the Technical Committee of the International Organization of Securities Commissions (“IOSCO”) which set out standards for Risk Management of a central counterparty (“CCP”). These recommendations are broadly recognized and have been used by national regulators and other clearinghouses for self-assessment.

Following these guidelines, ICE Trust will establish a guaranty fund sufficient to meet costs associated with the cost of closing out an insolvent member’s liabilities that exceed the financial resources (cash and collateral) held in the account of the insolvent member. Each member will be required to contribute to the guaranty fund in an amount which is adjusted to reflect the volume of activity and risk they hold within the clearinghouse. The value of the guaranty fund will be sufficient in aggregate to meet the largest single modeled stress-test loss of the largest two members in excess of the margin requirement of that member. Portfolio stress-testing will use scenarios to cover market risks exceeding a confidence level of 99.9%.

The ICE Trust guaranty fund will be for CDS positions only and will not serve as a collateral deposit for any other commodity contracts. We believe the best solution for containing the financial risks associated with credit derivative markets is to completely separate them from other derivative markets.

Strengthened OTC Derivatives Market Infrastructure

The third policy goal of the PWG is to strengthen the OTC derivatives market infrastructure. This objective includes ensuring that all market participants have open and fair access to key infrastructure components and that exchange or similar platforms for standardized CDS contracts should be encouraged. Finally, the PWG states that regulators should encourage improvements to operational infrastructure, including improvements to post-trade automation, frequent portfolio compression and enhanced standardized documentation.

ICE’s clearing solution squarely addresses this objective by addressing the OTC CDS market as it exists today. By bringing a CDS clearing solution to the existing market structure, ICE’s solution can quickly address the existing systemic risk that is resident in the market. Of equal importance, ICE has critical domain knowledge and expertise to bring to its clearing solution as a result of its acquisition of Creditex Group, Inc. (“Creditex”). Creditex is the global market leader and innovator in providing infrastructure to the credit default swap markets. In the last few years, Creditex has worked collaboratively with market participants on three important initiatives to improve operational efficiency and scalability in the credit derivatives market.

In 2005, Creditex helped to develop the ISDA Cash Settlement Auctions, which are the market standard for credit derivative settlement and have been used in recent weeks to facilitate the orderly settlement of CDS contracts referencing Fannie Mae, Freddie Mac, Lehman Brothers, Landsbanki (Europe’s first credit event auction) and many others. In addition, Creditex and Markit, a credit derivative pricing service, designed a compression solution to reduce the overall notional size and the number of outstanding contracts in credit derivative portfolios. Since August, Creditex and Markit have completed the compression of \$1.036 trillion in notional value of CDS transactions, greatly reducing the risk to the financial system.

Finally, Creditex’s subsidiary, T-Zero, provides critical infrastructure for trade transmission and same-day trade matching. The platform addresses recommendations by the PWG earlier this year for flexible and open architecture, ambitious standards for accuracy and timeliness of trade matching errors and operationally reliable and scalable infrastructure.

Importantly, ICE U.S. Trust will be open to other appropriate market “front end” and “back end” solutions that fit the needs of market participants. As noted earlier, other suitable trading platforms will be able to use ICE Trust’s clearing facilities. Because TCC and Creditex are working with the Depository Trust and Clearing Corporation (“DTCC”) warehouse, our solution will have the ability to support all

existing and future CDS trades, regardless of when or where the trades were executed.

Cooperation Among Regulators

The final policy objective of the President's Working Group is continued cooperation among regulators. Specifically, the PWG states that regulators that have jurisdiction over OTC markets should cooperate and ensure that they have adequate enforcement authority. ICE fully supports this recommendation and believes that CDS clearing will help achieve its goal. ICE Trust's principal regulator will be the Federal Reserve, but it stands willing to work with any regulator to make sure that the CDS market is open, transparent and regulated.

Conclusion

ICE has always been and continues to be a strong proponent of open and competitive derivatives 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 its markets. To that end, we have continuously worked with regulatory bodies in the U.S. and abroad in order to ensure that they have access to all relevant information available to ICE regarding trading activity on our markets. We have also worked closely with Congress to address the regulatory challenges presented by derivatives markets and will continue to work cooperatively for solutions that promote the best marketplace possible.

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

The CHAIRMAN. Thank you, Mr. Short.

Mr. O'Neill, welcome to the Committee.

STATEMENT OF JOHN O'NEILL, MANAGER, FIXED INCOME DERIVATIVES, LIFFE, NYSE EURONEXT, LONDON, UNITED KINGDOM

Mr. O'NEILL. Good afternoon, Chairman Peterson, Ranking Member King and all Members of the Committee. My name is John O'Neill. I am the Manager of CDS at Liffe, which is part of NYSE Euronext. It was very good to meet many Members of the Committee in your recent visit to London. I thank you all for the opportunity to testify here today.

I would like to begin my testimony by saying a few brief words about the current CDS market, and then highlight to the Committee some important principles which we have used in developing the CDS clearing service which will be launching in London 2 weeks from today. I then would like to end by making brief observations concerning regulation of these markets.

First of all, as mentioned by the Committee already, despite recent difficulties, we believe that CDS contracts remain important tools for the management of risk. The Committee has also noted some of the historical difficulties of the CDS market particularly associated with rapid growth of these transactions.

We believe that there are three key points the market still needs to address. The first is same-day confirmation for virtually all trades, so-called "T+0" settlement. The second is accurate and timely marked-to-market pricing. And the third is introduction of strong and proven central counterparties for these products. The solution we are launching will address all these points. We strongly agree with policy leaders in the U.S., and elsewhere, that strong and experienced counterparties are required for the CDS market.

NYSE Euronext, through our Liffe derivatives business, already has a proven system for clearing OTC products. It is called Bclear. Bclear has processed OTC transactions with a value of over \$8 tril-

lion, and it is widely used by all sections of the industry, banks, brokers and the buy side. Bclear's products have so far been restricted to OTC equity derivatives. On the 22nd of December, we also will be making credit default swap contracts available on Bclear. This is a longstanding product for us and has been developed in cooperation with the market.

There are four guiding principals we have used in developing CDS for Bclear. I would like to briefly mention those to the Committee. The first is the CDS clearing solution must be global in nature to reflect the global nature of this market. All business in Bclear clears into LCH.Clearnet in London, which is perhaps the most respected and experienced OTC clearer in the world. U.S. dealers are among the largest users of LCH.Clearnet both for their U.S. domestic business and their wider global operations.

Particularly relevant for this market is LCH's experience at the sole interbank interest rate swap clearer. Again, U.S. firms are large users of this service.

The Committee will also be aware that LCH has recently entered into a proposed merger agreement with the U.S.-based DTCC, which, as noted, is an important player in this market. We are starting in London, but we are working with U.S. authorities to make sure U.S. parties have access to this solution.

Our second principle is that we believe the CDS market requires proven and safe solutions. We believe central counterparties of CDS should be absolutely proven, and this is no time for experimentation. In June this year, the notional value of interest rate swaps held within LCH was valued at approximately \$60 trillion. That is even larger than the total CDS market.

LCH has experience of handling major dealer defaults, most recently Lehman Brothers. In that period of extreme stress, LCH unwound a portfolio of equities, commodities, energy and interest rate swaps held by Lehman's worth \$9 trillion. Our written testimony contains more details.

CDS clearing requires well capitalized and experienced clearing-houses, specifically with experience in clearing OTC products, we believe.

Our third principle is that the solution should be open to the whole market. That includes buy-side, sell-side and interdealer brokers. We have designed our approach to accommodate this. Significantly for the Committee, our approach allows buy-side customers to hold segregated business with clearers. This means that counterparties who would have held business with Lehman's when Lehman Brothers collapsed would have been quickly assured of segregated business and quickly assured of safety. That is an important point for the Committee.

The fourth and final point is that we believe solutions should be non-disruptive. The market can get all the security of clearing and processing without asking parties to completely change their business models. Bclear provides this by allowing business to be pre-negotiated, entered to Liffe, accepted, and then confirmed. It will increase the efficient use of capital and will reduce stress on financial institutions. It will also allow regulators to gain transparency concerning the size of positions, which is particularly important in times of extreme stress.

Finally, I would like to end by saying a few quick words about regulation of this market. Both Bclear and LCH.Clearnet are regulated by the FSA in London. LCH.Clearnet is also regulated by the CFTC as part—given its status as the U.S. derivative clearing organization. Both SEC and CFTC have existing Memoranda of Understanding with the FSA. And the British Government has had an information-sharing agreement with U.S. authorities since 1991. We have been working with U.S. regulators as well as the FSA in order to make the solution available to U.S. customers.

Finally, from a policy perspective, if the U.S. chooses to regulate CDS clearing in a greatly more restrictive manner than other jurisdictions, there may be a risk that business will move elsewhere.

We ask for concerted efforts among all regulators to regulate this market. We support the policy and the principles of the President's Working Group on Financial Markets and hope for extensive cooperation between regulators. We stand ready to help Congress to achieve this goal.

Thank you very much for the opportunity to testify.

[The prepared statement of Mr. O'Neill follows:]

PREPARED STATEMENT OF JOHN O'NEILL, MANAGER, FIXED INCOME DERIVATIVES,
LIFFE, NYSE EURONEXT, LONDON, UNITED KINGDOM

Introduction

Good Afternoon Chairman Peterson, Ranking Member Goodlatte and Members of the Committee. My name is John O'Neill and I am the Manager of CDS at Liffe, NYSE Euronext. I have headed up our initiative on credit default swap clearing since the beginning of this year. I thank you and the Committee for the opportunity to testify today.

The evolution of NYSE Euronext as a global company, as well as the similar evolution of several other exchanges internationally, reflects the global nature of financial and commodity markets. As the latest financial crisis has shown, our markets and economies are more connected than ever. NYSE Euronext's geographic and product diversity has helped to inform our efforts in the area of credit derivatives, as we work to bring transparency to, and mitigate the risks associated with, products like credit default swaps.

I. Our CDS clearing solution

a. The CDS market

Credit default swaps are vitally important tools to facilitate the management of risk. They allow the owners of bonds or loans to protect themselves when they fear that borrowers will not honor their promises. They also allow corporations to protect themselves against the risk that partners or suppliers may go into bankruptcy. In difficult economic times, this diversification of risk, if used properly, will continue to add value to the marketplace.

During the past decade, the market for credit default swaps has grown exponentially—from a relatively small derivative product to a global industry of approximately \$57 trillion in notional value at the end of June 2008.¹ At this time, the CDS market represented as much as 8% of the total over-the-counter derivatives market of \$684 trillion.² The size of the CDS market may well diminish somewhat by the end of 2008, as activity has slowed and the industry has implemented programs to reduce the amount of contracts outstanding. However, credit default swaps will continue to be one of the most active global derivative products.

This rapid growth in CDS transactions initially led to serious processing inefficiencies. Most trades were confirmed manually, and large backlogs developed. Al-

¹The Bank for International Settlements estimated that the notional amount of outstanding CDSs in 1998 was approximately \$108 billion. By 2007, that number had grown to approximately \$58 trillion. Bank for International Settlements, Press Release, The Global Derivatives Market at End-June 2001, December 20, 2001, and Bank for International Settlements Monetary and Economic Department, *OTC Derivatives Market Activity in the Second Half of 2007*, May 2008.

²Bank for International Settlements semi-annual OTC derivatives statistics as of June 2008.

though regulatory pressure from global authorities has improved this situation significantly, inefficiencies remain. The market needs to continue to strive for same day confirmation (so called "T+0") to be the standard for virtually all trades.

The clearing solution that we will launch in 2 weeks will provide exactly that.

We strongly agree with by policy leaders in the U.S. and abroad that it is essential that these instruments be cleared through central counterparties.

b. Bclear: NYSE Euronext's CDS Clearing Solution

Since 2005, NYSE Euronext (through its subsidiary LIFFE Administration and Management ("LIFFE A&M")) has developed and currently makes available to its members an OTC derivatives processing service, called "Bclear."

Bclear is a simple, efficient and low cost way to register, process and clear OTC derivative trades. It brings the flexibility of over-the-counter trading to a centrally cleared exchange environment. Bclear has processed OTC transactions with a notional value of over \$8 trillion since launch, and has been widely adopted by dealers, brokers and buy-side firms. Previously, Bclear's products have been limited to equity derivatives, but this will shortly be extended to other asset classes.

Importantly, on December 22, NYSE Euronext plans to add credit default swaps to Bclear's portfolio of cleared OTC derivatives. This will provide a mechanism for the processing and centralized clearing of CDSs based on credit default swap indices. This is a longstanding project developed in cooperation with the current market. This is an extremely viable solution for several reasons:

- (1) **Bclear is part of a global solution.** Clearing solutions for credit default swaps must address the global market. In that regard, Bclear's partnership with our clearing firm, LCH.Clearnet Ltd. ("LCH.Clearnet") is recognized as global in nature. Today, U.S. dealers are among the largest users of LCH.Clearnet, for both their U.S.-based and global operations.

LCH.Clearnet Group recently signed a non-binding heads of terms regarding a proposed merger with the U.S.-based Depository Trust & Clearing Corporation (DTCC).

From a regulatory perspective, if the U.S. chooses to regulate CDS clearing in a greatly different or more restrictive manner than regulators abroad, a situation may be created that will cause products to move elsewhere. A concerted effort among regulators and market participants is necessary in order to coordinate policies governing the CDS market and strengthen the integrity of that market. While NYSE Euronext is starting in London, we are also working with U.S. regulators to enable us to make this or a similar service available to market participants in the United States.

- (2) **Bclear is a proven solution.** As noted above, since 2005, Bclear has processed OTC equity derivatives transactions with a notional value in excess of \$8 trillion.³ All Bclear business is cleared by LCH.Clearnet, a highly experienced clearer of global OTC derivative products, including repos, freight and energy products. LCH.Clearnet is also the world's only interbank interest rate swaps clearer. LCH.Clearnet is the leading independent central counterparty group (CCP), serving major international exchanges and platforms, as well as a range of OTC markets. LCH.Clearnet a subsidiary of LCH.Clearnet Group Ltd., which is owned 73.3% by users, 10.9% by exchanges and 15.8% by Euroclear (the leading European settlement operator); LCH.Clearnet Ltd has a total of 109 members internationally across all our services. The notional value of interest rate swaps held within LCH.Clearnet stood at \$60 trillion, accounting for approximately 46% of the inter-dealer interest rate swap market as of June 2008, larger even than the total value of the CDS market.

As the counterparty to every clearing member, LCH.Clearnet reduces the scope for counterparty risk between market participants. LCH.Clearnet is legally responsible for the financial performance of the contracts that it has registered and any resulting delivery contracts. All clearing members deposit margin with LCH.Clearnet to cover the risk on their net positions.

LCH.Clearnet has unrivalled experience handling dealer and market participant defaults, including the recent collapse of Lehman Brothers. In this period of extreme financial stress, LCH.Clearnet successfully unwound the Lehman Brothers portfolio of equities, commodities (softs and metals), energy (oil, power and gas), repos and interest rate swaps in five major currencies of \$9 trillion notional value. This major unwind was completed well within the margin Leh-

³ As of December 1, 2008.

man Brothers held at LCH.Clearnet, and without any recourse to LCH.Clearnet's default fund or other protections. The total value of margin held by LCH.Clearnet is typically in the vicinity of \$60 billion, and the total size of LCH.Clearnet's Default Fund is approximately \$890 million.⁴

Working closely with its members, LCH.Clearnet has successfully managed not only the Lehman default but also the defaults of:

- Drexel Burnham Lambert Ltd (1990).
- Woodhouse Drake and Carey (1991).
- Baring Brothers & Co. Ltd (1995).
- Griffin Trading Company (1998).

In addition, LCH.Clearnet was heavily involved in managing down of the positions of:

- Yamaichi International (Europe) Ltd (1997).
- Enron Metals Ltd (2001).
- Refco Securities and Overseas Ltd (2005)

The default fund contributions of Members have never been drawn upon in any default managed by LCH.Clearnet.

This is a well capitalized and highly experienced clearinghouse, with unique experience in clearing OTC products. These are exactly the criteria that regulators should consider when assessing the credibility of CDS clearing solutions.

(3) **Bclear is an open solution.** Unlike other proposed solutions, Bclear does not limit the participants who can benefit from its clearing service. It facilitates sell-side, buy-side, and interdealer broker interaction. Significantly, it allows buy-side participants to use an account structure that will isolate their positions from their clearing member. In the Lehman Brothers default, this allowed those customers holding these segregated positions with Lehman to be quickly assured of safety.

(4) **Bclear is a transparent, non-disruptive solution.** Bclear allows the flexible style of negotiation of the OTC market, but with many of the benefits of exchange processing and central counterparty clearing. With Bclear, deals are still pre-negotiated, typically via phone, just as they are in today's OTC market. There is electronic confirmation between the clearing member and LCH.Clearnet, which stands as the central counterparty to all transactions processed through Bclear.⁵ Mark to market valuations are provided via NYSE Euronext systems on the same day.

This fully cleared approach will reduce the total size of the outstanding market even further, while increasing the confidence that will allow participants to trade. This more efficient use of capital will reduce stress on financial institutions. It will also allow regulators to see clearly the size of outstanding CDS positions, particularly important in situations of extreme stress. U.S. regulators will be able to access this information from the U.K. Financial Services Authority (the "FSA") under existing Memoranda of Understanding (MOU).

II. Regulation of the CDS market

The importance of international regulatory cooperation is underscored by the regulatory arrangements under which we operate. Bclear is a service operated by LIFFE A&M, which is a Recognized Investment Exchange, regulated by the FSA. As part of the market operated by LIFFE A&M, the Bclear service is subject to FSA oversight.

LCH.Clearnet is also subject to FSA oversight, and is also subject to the regulatory oversight of the U.S. Commodity Futures Trading Commission pursuant to that agency's recognition of LCH.Clearnet as a Derivatives Clearing Organization.

⁴ As of December 4, 2008.

⁵ On October 31, 2008 LIFFE announced changes to its clearing arrangements which, subject to regulatory approval, will be implemented in the first quarter of 2009. These will involve LIFFE A&M becoming the central counterparty to all transactions entered into on the LIFFE market and all transactions which are accepted by LIFFE A&M through Bclear, including CDS transactions. Under these arrangements, LIFFE A&M will outsource certain functions to LCH.Clearnet, including those concerning the management of clearing member defaults. At this time, we are not seeking exemptive relief for LIFFE A&M to act as the central counterparty to CDS transactions.

In addition, we believe that as of today, LCH.Clearnet meets all 15 of the CPSS-IOSCO Recommendations.⁶ The CPSS-IOSCO Recommendations for Securities Settlement Systems and for Central Counterparties establish the types and level of risk mitigation that should be exhibited by safe and efficient infrastructure providers. They provide a benchmark against which to consider the major types of risk that such organizations are likely to face. These recommendations represent an internationally developed and agreed minimum standard of good practice that systemically important CCPs should seek to achieve.

The U.K. Government has had information-sharing and cooperation arrangements with the U.S. Securities and Exchange Commission and the CFTC in place since 1991. These arrangements were updated most recently in 2006, when the FSA entered into Memoranda of Understanding pursuant to which the FSA and the respective Commission have agreed to cooperate and share information in connection with the oversight of financial services firms.⁷ These agreements provide the means by which the relevant Commission may access information regarding Liffe business, including transactions processed by the Bclear service and cleared by LCH.Clearnet, to address any potential issues, such as insider trading, manipulation and similar matters.

We strongly support the policy objectives announced by the President's Working Group on Financial Markets (PWG) on November 14, 2008, particularly the PWG's support for the use of central counterparty arrangements for OTC derivatives including credit default swaps and other OTC derivatives asset classes. We believe this policy can significantly strengthen the OTC derivatives market and reduce systemic risks.

We have been working with U.S. regulators, as well as the FSA, in connection with our efforts to make our CDS clearing solution available to U.S. market participants. The extensive cooperation we have seen among these regulators is essential to developing a strong global structure for the OTC derivatives market, and we stand ready to help regulators and Congress to achieve that goal.

⁶LCH.Clearnet Ltd was assessed in June 2006 by the FSA and Bank of England against the CPSS-IOSCO recommendations for CCPs. The findings of the FSA/BoE review are publicly available; LCH.Clearnet Ltd was deemed to observe fully 14 of the 15 recommendations and to broadly observe the remaining one. Today we believe that LCH.Clearnet fully meets all 15 of the recommendations.

⁷In 2006, the FSA entered into two *Memoranda of Understanding Concerning Consultation, Cooperation and the Exchange of Information related to Market Oversight and the Supervision of Financial Services Firms*, one with the Securities and Exchange Commission (signed on 14th March 2006) and one with the Commodity Futures Trading Authority (signed on 17th November 2006).



High Tech. High Touch.

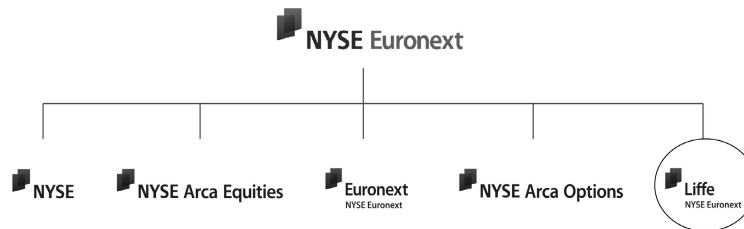
Liffe CDS on Bclear

Employing a proven OTC processing solution for the CDS market

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NYSE Euronext - Group Overview



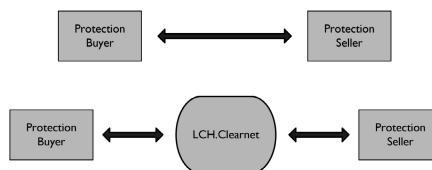
Bclear is one of the services offered by **Liffe**,
the global derivatives business of NYSE Euronext

Introducing Bclear

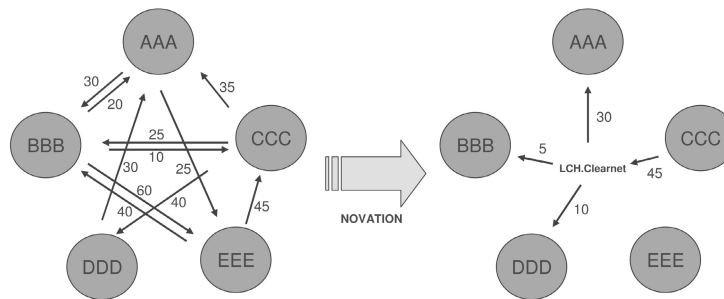
- A secure and proven service for the registration, processing and clearing of OTC derivative trades
- Launched in October 2005, over \$8 trillion of business processed
- Outstanding year on year growth, used by every major bank
- Brings a low risk exchange and clearing house environment to the OTC market
- Trades are cleared through LCH.Clearnet
- Liffe is launching true credit default swaps, not surrogate futures or options

Liffe CDS – Centrally Cleared

- All Liffe's business is cleared by LCH.Clearnet
- A well established, capitalised and CFTC registered Designated Clearing Organisation (DCO)
- Originally founded in 1888, LCH.Clearnet acts as "seller to every buyer and buyer to every seller"
- LCH.Clearnet handles over €1.5 trillion of risks every day



Full Central Clearing - Multilateral netting



- Full multilateral clearing, rather than a simple guarantee of bilateral positions
- The outstanding size of the market and systemic risk is reduced

Liffe CDS – Key Benefits

- Liffe CDS will help meet commitments made to the Federal Reserve Bank of NY throughout 2008:
 - A proven and well capitalised central counterparty
 - Reduced levels of outstanding notional (via true multilateral netting)
 - Enhanced transparency for regulators
 - Key operational enhancements (almost all trades confirmed the same day)
- It will also serve the President's Working Group policy objectives for OTC derivatives:
 - Improving the transparency and integrity of the credit default swaps market
 - Enhancing risk management
 - Further strengthening market infrastructure
 - Strengthening cooperation among regulatory authorities

Euronext refers to Euronext N.V. and any company which is at least a 50% owned subsidiary of Euronext N.V. and references to Euronext below includes each and any such company as the context dictates. Euronext is part of the NYSE Euronext group. Liffe is the brand name of the derivatives business of Euronext, comprising the Amsterdam, Brussels, London, Lisbon and Paris derivatives markets.

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Those wishing either to trade in any products available at Liffe or to offer and sell them to others should consider both their legal and regulatory position in the relevant jurisdiction and the risks associated with such products before doing so. Potential users of Liffe contracts should familiarise themselves with the full contract specification of the product concerned and any associated information.

Bclear is operated as a clearing service by LIFFE Administration and Management, which is regulated by the Financial Services Authority as a Recognised Investment Exchange. Affirm and Cscreen are operated by LIFFE Services Limited, which is authorised and regulated by the Financial Services Authority as a service company. Those wishing to use the wholesale services should consider their regulatory position in the relevant jurisdiction before doing so.

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The CHAIRMAN. Thank you, Mr. O'Neill.
And last, Mr. Book. Welcome.

**STATEMENT OF THOMAS BOOK, MEMBER OF THE EXECUTIVE
BOARDS, EUREX AND EUREX CLEARING AG, FRANKFURT AM
MAIN, GERMANY**

Mr. BOOK. Chairman Peterson, Ranking Member King and Members of the Committee, I appreciate this opportunity to testify before you today. And I thank the Committee for calling this hearing on measures to improve the market structure for credit default swap transactions. I am Thomas Book a Member of the Executive Boards of Eurex and Eurex Clearing, and I have responsibility for the management of the clearing business.

Eurex Clearing is the largest central counterparty in Europe and is the guarantor of all Eurex transactions. It is licensed and supervised by the German Federal Supervisory Authority. It is also recognized by the U.K.'s Financial Services Authority. It is critically important to provide the CCP with respect to over-the-counter CDS contracts in order to improve transparency and for effective risk controls and increased operational efficiency, thereby reducing systemic risks for financial markets.

The benefits of central counterparty clearing to the OTC market and CDS contracts include, one, reduction of gross credit exposures and mitigation of counterparty risk through the effect of multilateral netting and collateralization of remaining net credit exposures; two, valuation of risk exposure by an independent, market-neutral entity; three, transparency in collateralization, including the discipline of daily marking-to-market of exposures; and four, automated back-office processes resolving current operational weaknesses.

An almost equivalent amount of CDS transactions are traded in Europe during European business hours and denominated in Euros as is traded in the U.S. denominated in dollars. Accordingly, Eurex Clearing strongly believes that there are unmistakable benefits for U.S. market participants for having a European clearing organization serving the global market. These are greater efficiencies by using existing European clearing infrastructures for these European transactions, greater efficiencies with respect to settlement of CDS contracts, enhanced financial surveillance as well as market surveillance, and greater innovation resulting from increased competition.

Our new CDS clearing service will begin with iTraxx® and CDX® indices, followed by single name CDS. Its key features are a link with DTCC's Deriv/SERV Trade Information Warehouse, ensuring full comparability with existing CDS back-office infrastructure, and enabling automated backloading of existing transactions. The guarantee fund for CDS transactions will be segregated to avoid commingling of risks, and the margining system is specifically designed to address the asymmetric nature of the CDS buyer and seller risk profile. Clearing will be operated by Eurex Clearing with open access to all eligible credit institutions. And Eurex Clearing will establish a separate entity to share governance and control with market participants.

With respect to our recommendations for an appropriate regulatory framework, we notice that several witnesses to this Committee have identified areas of the current U.S. legal framework that are subject to differing interpretation. Clarification with respect to these issues would provide greater legal certainty and would facilitate both domestic and non-U.S. CCPs with understanding and compliance with these legal requirements.

We further note that the current regulatory framework which applies to following multilateral clearing organizations offering clearing services in the United States provides a successful template for addressing this global market. This regulatory framework exists under the provisions of current law, which this Committee was instrumental in enacting in 2000. This existing requirement ensures that there is regulatory comparability between U.S. and non-U.S. clearing organizations and removes the possibility of regulatory arbitrage.

Finally, it should be noted that although the benefits of clearing are significant for the integrity of financial markets, it cannot be assumed that centralized clearing will be automatically and broadly accepted by current OTC market participants. As a consequence, Congress should take into account whether the regulatory enhancements that it is considering will reinforce and be supportive of the migration of CDS transactions from the current bilateral structure to regulated and transparent CCPs.

Eurex Clearing understands the importance of public confidence in the regulatory oversight of listed and OTC derivatives, and we appreciate the opportunity to work with the U.S. regulatory authorities with respect to our plans to offer clearing services for CDS transactions.

Eurex Clearing is honored to have been invited to present its views to this Committee and appreciates the opportunity to discuss these critically important issues. I am happy to answer any questions.

[The prepared statement of Mr. Book follows:]

PREPARED STATEMENT OF THOMAS BOOK, MEMBER OF THE EXECUTIVE BOARDS,
EUREX AND EUREX CLEARING AG, FRANKFURT AM MAIN, GERMANY

I am Thomas Book, a Member of the Executive Boards of Eurex and Eurex Clearing. Chairman Peterson, Ranking Member Goodlatte and Members of the Committee, I appreciate this opportunity to testify before you today and I thank the Committee for calling this hearing on the important subject of over-the-counter ("OTC") derivatives, particularly credit default swap ("CDS") contracts, the role that they play in the United States and international economies, and the appropriate regulatory framework going forward, particularly as it relates to clearing of CDS contracts. As a Member of the Executive Boards of Eurex as well as Eurex Clearing, I have overall responsibility for the management of the clearing business.

1. Eurex and Eurex Clearing

Eurex is one of the largest derivatives exchanges in the world today and is, in fact, the largest exchange for Euro-denominated futures and options contracts. While it is headquartered in Frankfurt, Germany, Eurex has 398 members located in 22 countries around the world, including 76 in the United States. Eurex, and its subsidiary the International Securities Exchange, a stock options exchange located in New York City, is part of the Deutsche Börse Group which also includes the Frankfurt Stock Exchange and Clearstream.

Eurex Clearing was formed in 1997 to function as the clearinghouse for the Eurex exchanges.¹ Eurex Clearing acts as the central counterparty (“CCP”) for all Eurex transactions and guarantees the fulfillment of all transactions in futures and options traded on Eurex. Eurex Clearing does not currently operate directly in the United States.² Eurex Clearing is directly connected with various national and international central securities depositories, thereby simplifying the settlement processes for its clearing members. As Europe’s largest and one of the world’s leading clearing houses, Eurex Clearing clears more than two billion transactions each year.

Members of Eurex Clearing are categorized as either Direct Clearing Members or General Clearing Members. General Clearing Members, which number 58 firms, are the only clearing members who may clear transactions on behalf of nonaffiliated non-clearing members and most Eurex members in the U.S. clear their trades through them. General Clearing Members must have at least €125 million (approximately \$156 million) in equity capital. Credit institutions, banks, and other financial institutions that are regulated by a country in the European Union or Switzerland may become clearing members. Accordingly, Eurex Clearing has no clearing members located in the United States.

Eurex Clearing provides fully automated and straight-through post trade services for derivatives, equities, repo, and fixed income transactions with a track record of 99.99% availability of its electronic clearing platform. It also has strong financial safeguards and industry leading risk management, including in particular its unique risk functionalities and processes for derivatives such as intra-day risk margining in real-time based on actual positions and prices throughout the trading day and its integrated pre-trade risk validation functionality. It has a deep and experienced risk management team with in-depth knowledge of the latest risk models and techniques, including Value-at Risk Valuation models. Eurex Clearing has very strong lines of defense, including an overall collateral pool as of November 2008 of more than €70 billion and the highest collateral standards. It requires that overnight margin payments be made through central bank money.

Eurex Clearing has already established clearing and risk management procedures for credit futures based on iTraxx indices. These contracts were launched on Eurex in March 2007, making Eurex the first regulated market globally to offer credit derivatives. Eurex Clearing is currently working to expand its clearing services to include OTC CDS contracts that are registered in the DTCC Trade Information Warehouse. As explained more fully below, Eurex Clearing believes that providing for a CCP with respect to such transactions will increase transparency in these markets, enforce strict risk controls and increase efficiency, thereby greatly reducing systemic risk for financial markets as a whole.

2. Regulation of Eurex Clearing

As required, Eurex Clearing is licensed as a CCP by the German Federal Financial Supervisory Authority (“BaFin”). In addition, on January 16, 2007, Eurex Clearing was recognized by the United Kingdom’s Financial Services Authority (“FSA”) as a Recognized Overseas Clearing House (“ROCH”), on the basis that the regulatory framework and oversight of Eurex Clearing in its home jurisdiction is comparable to that of the FSA.

The German Banking Act (“Banking Act”) provides the legal basis for the supervision of banking business, financial services and the services of a CCP. The activity of credit and financial services institutions is restricted by the Banking Act’s qualitative and quantitative general provisions. These broad, general obligations are similar to the Core Principles of the Commodity Exchange Act which apply to U.S. Derivatives Clearing Organizations (“DCOs”). A fundamental principle of the Bank-

¹ Eurex Clearing AG is a stock corporation formed and incorporated under the laws of Germany and is a wholly owned subsidiary of Eurex Frankfurt AG, a German stock corporation which is itself wholly owned by Eurex Zürich AG, a Swiss stock corporation. Eurex Zürich has two 50% parents, Deutsche Börse AG, a German stock corporation listed on the Frankfurt Stock Exchange, and the SIX Swiss Exchange.

Eurex Clearing exists as a separate corporate legal entity from its affiliates for which it functions as CCP and has its own Board of Directors. As provided under German corporate law, Eurex Clearing has an Executive Board which is responsible for the day-to-day management and operations of Eurex Clearing, and a Supervisory Board.

Eurex Clearing also acts as the central counterparty for and guarantees transactions on Eurex Bonds (a cash market for bonds), Eurex Repo (repurchase agreements), for equities on the Frankfurt Stock Exchange and the Irish Stock Exchange and for certain contracts executed on the European Energy Exchange. Transactions on the ISE, a wholly owned U.S. subsidiary of Eurex (through its U.S. subsidiary, U.S. Exchange Holdings, Inc.) are cleared by the Options Clearing Corporation.

² Eurex Clearing does, however, have an agreement with The Clearing Corporation relating to the operation of a clearing link between Germany and the United States.

ing Act is that supervised entities must maintain complete books and records of their activities and keep them open to supervisory authorities. BaFin approaches its supervisory role using a risk-based philosophy, adjusting the intensity of supervision depending on the nature of the institution and the type and scale of the financial services provided.

BaFin may grant a clearing license subject to conditions consistent with the Banking Act's general provisions and may limit the scope of the license to certain types of business. When licensing an institution, BaFin issues guidelines to the institution with respect to capital adequacy and risk management and subsequently, it monitors compliance with the conditions for granting the license.

The Banking Act requires that a CCP must have in place suitable arrangements for managing, monitoring and controlling risks and appropriate arrangements by means of which its financial situation can be accurately gauged at all times. In addition a CCP must have a proper business organization, an appropriate internal control system and adequate security precautions for the deployment of electronic data processing. Furthermore, the institution must ensure that the records of executed business transactions permit full and unbroken supervision by BaFin for its area of responsibility.

BaFin has the authority to take various sovereign measures in carrying out its supervisory responsibilities. Among other things, BaFin may issue orders to a CCP and its Executive Board to stop or prevent breaches of regulatory provisions or to prevent or overcome undesirable developments that could endanger the safety of the assets entrusted to the institution or that could impair the proper conduct of the Cap's banking or financial services business. BaFin may also impose sanctions to enforce compliance. BaFin has the authority to remove members of the Executive Board of an institution or, ultimately, to withdraw the institution's authorization to do business.

In addition, the German Federal Bank ("Deutsche Bundesbank") coordinates and cooperates, with BaFin, the primary regulator, in the supervision of Eurex Clearing. Deutsche Bundesbank plays an important role in virtually all areas of financial services and banking supervision, including the supervision of Eurex Clearing. Under the Banking Act, Deutsche Bundesbank exercises continuing supervision over such institutions, including evaluating auditors' reports, annual financial statements and other documents and auditing banking operations. Deutsche Bundesbank also assesses the adequacy of capital and risk management procedures and examines market risk models and systems. Deutsche Bundesbank adheres to the guidelines issued by BaFin. As appropriate, Deutsche Bundesbank also plays an important role in crisis management.

Both supervisory authorities use a risk-based approach to oversight. Under this risk-based approach, the supervisory authority must review the supervised institutions' risk management at least once a year, to evaluate current and potential risks and, in so doing, to take account of the scale and importance of the risks for the institution and of the importance of the institution for the financial system. Institutions classified as of systemic importance, including Eurex Clearing, are subject to intensified supervision by both supervisory authorities.

3. Benefits of CCP Clearing for CDS Transactions

In previous hearings³ this Committee heard witnesses express concerns about the role that credit derivatives have played in the recent market turmoil. In this regard, witnesses cited the difficulties experienced by CDS contract writers that did not have adequate collateral to support their positions,⁴ the lack of transparency with respect to such transactions,⁵ the operational weaknesses in the current market structure,⁶ and the systemic risk arising from these transactions and from interconnections between the market for CDS transactions and other markets.⁷

Eurex Clearing, like many of the witnesses before this Committee, believes that CCP services for CDS contracts will address the concerns identified before this Com-

³*Hearing To Review the Role of Credit Derivatives in the U.S. Economy*: Hearing before the House Committee on Agriculture, 110th Cong., 2d Sess. (October 15, 2008) and *Hearing To Review the Role of Credit Derivatives in the U.S. Economy*: Hearing before the House Committee on Agriculture, 110th Cong., 2d Sess. (November 20, 2008).

⁴*Hearing To Review the Role of Credit Derivatives in the U.S. Economy*: Hearing before the House Committee on Agriculture, 110th Cong., 2d Sess. (October 15, 2008) (statement of Robert Pickel, CEO, International Swaps and Derivatives Association, at p. 3).

⁵*Id.* (statement of Erik Sirri, Director of Trading and Markets, U.S. Securities and Exchange Commission, at p. 6).

⁶*Id.* (statement of Walter Lukken, Acting Chairman, U.S. Commodity Futures Trading Commission, at p. 3).

⁷*Id.* (statement of Erik Sirri, at p. 2).

mittee with respect to counterparty risk, lack of transparency regarding exposures and the sufficiency of risk coverage and operational weaknesses, thereby ameliorating systemic risk for the financial market. Given the huge exposure in CDS contracts and the systemic relevance of CDS clearing services in mitigating these concerns, a robust, proven clearing house is required to act as the central counterparty to these trades.

First, clearing of OTC CDS contracts by a CCP will reduce risk. The specific risks of CDS contracts with contingent liabilities that arise only upon the default of the contract's reference entity and the dual risks of a default of the reference entity and the subsequent default of the protection writer before settlement, require an independent, neutral and strongly collateralized CCP with a proven risk management capability.

Specifically, multilateral netting by the CCP would reduce the huge bilateral credit exposures arising from the current market structure. A central clearing house replaces multiple bilateral credit risks with the standard and transparent credit risk of the CCP. Moreover, and perhaps most critically, a CCP provides post-default backing, and by mutualising potential counterparty default risk, central counterparty clearing will ameliorate one of the most glaring systemic risks raised by the current market turmoil. Mutualising counterparty risk results in enhanced certainty with respect to legal enforceability and lines of defense in case of a default by a clearing member.

Second, clearing of OTC CDS contracts by a CCP will increase the transparency of position risk. Valuation of the risk of the netted positions is made by the CCP, an independent and market neutral party. The CCP requires that this risk be collateralized under a fully transparent and robust framework. Moreover, the collateralization framework, which includes daily mark-to-market of risk, provides an early warning mechanism with respect to the overall ability of parties to carry the risk of their positions.

Finally, central counterparty clearing addresses current operational weaknesses through standardized, straight-through processing. In this regard, multilateral netting of transactions reduces the complexity of back office processes and the number of fails and the CCP will simplify trade assignments.

Novation and netting procedures are already an integral and proven service of Eurex Clearing. Eurex Clearing believes that offering these services, which have a proven track record with respect to listed derivatives, will bring significant benefits to the OTC market in CDS transactions and, for the reasons discussed above, reduce systemic risk to the financial market and increase market integrity.

4. Description of Eurex Clearing's Initiative for CDS Clearing

Eurex Clearing's new clearing service for OTC CDS contracts will address a significant part of global trades that exist bilaterally today and are registered in the DTCC Trade Information Warehouse, with the first priority on CDS index contracts. Highlights of this clearing service are:

- Product scope includes iTraxx® and CDX® indices, to be followed by iTraxx/CDX tranches and single name CDS;
- Link with DTCC's Deriv/SERV Trade Information Warehouse, ensuring full compatibility with existing CDS back-office infrastructure and allowing automated backloading of existing transactions;
- Credit event handling and settlement based on ISDA dispute resolution language and auction results;
- Segregated guarantee fund for CDS to avoid commingling of risks and a separate clearing license;
- Product specific, asymmetric margining concept designed especially to address CDS risk profile; and
- CDS risk management operated by Eurex Clearing with open access to eligible credit institutions; a separate entity to share governance and control with respect to product scope will be established.

For the clearing of CDS, a new clearing license from Eurex Clearing will be required. Only CDS clearing members will be permitted to submit CDS trades for their own account as well as their clients' accounts for clearing. Eurex Clearing will provide, among other things, the following services—corresponding to its clearing of non-CDS contracts—to its clearing members:

- Position keeping, separated for clearing members and their customers;
- Daily position valuation;
- Performance guarantees; and

- “Margin” requirements to cover members’ potential losses.

Finally, in the case of a credit event, Eurex Clearing will execute cash settlements in accordance with ISDA-approved protocols subject to ISDA providing access to the results of credit event auctions, which is critical for effective risk management in CDS products and ensure market integrity.

5. Suggestions for Future Regulatory Proposals

The Commodity Futures Modernization Act of 2000 (“CFMA”) provides a successful template for any future regulatory enhancements to address the concerns raised during the hearings before this Committee. For example, Section 112 of the CFMA added a new provision establishing the regulatory oversight that would apply to a clearing house operating as a Multilateral Clearing Organization (“MCO”) with respect to OTC derivatives transactions. It authorizes: (1) banks; (2) clearing agencies registered under the Securities Exchange Act of 1934; (3) DCOs registered under the Commodity Exchange Act; and (4) clearing organizations supervised by a foreign financial regulator that a U.S. financial regulator has determined satisfies appropriate standards, to operate as an MCO.

The market in OTC CDS transactions is global in scope, with roughly half of all traded volumes deriving from Europe. Eurex Clearing believes that any regulatory proposal must be measured against the effect that it might have on the global nature of the market and should take into account the following factors:

- Does the regulatory proposal recognize, and is it premised on, cross border regulatory cooperation to avoid “regulatory arbitrage”?
- Does it take into account global regulatory standards and business practices?
- Does it provide an appropriate level of flexibility in implementation?
- Does it erect artificial legal barriers or does it encourage competition?

Section 112 of the CFMA is quite forward thinking in that it recognizes that in a global market, clearing organizations regulated by a foreign regulator satisfying appropriate standards should be able to be authorized to clear OTC derivative transactions for U.S. persons and in the U.S. In fact, using that authority and measuring the foreign regulatory framework against the Core Principles for DCOs of the Commodity Exchange Act, the CFTC has recognized several foreign regulatory authorities as meeting appropriate standards in connection with the foreign regulator’s oversight of particular CCPs.⁸

The Core Principles for U.S. DCOs found in section 5(b) of the Commodity Exchange Act lend themselves to comparison to the regulatory regimes that apply in other national jurisdictions in a way that prescriptive regulatory provisions can not. By way of example, the Core Principles for DCOs are broadly consistent with the recommendations for CCPs of the International Organization of Securities Commissions and the Bank for International Settlements.⁹ Moreover, many of the broad requirements in the Banking Act parallel Core Principles which apply to U.S. DCOs.

Of course, coupled with broad international acceptance of appropriate regulatory standards must be robust arrangements for cooperation by international regulatory authorities and a ready framework for information sharing.¹⁰ The current framework, incorporated in Section 112 of the CFMA is based upon broadly accepted regulatory standards and permits reliance by U.S. regulatory authorities on those standards being enforced by the regulatory authority of the CCP’s home jurisdiction. It provides a sound regulatory foundation for clearing of OTC CDS transactions in a global market.

Eurex Clearing strongly believes that there are unmistakable benefits, even for U.S. market participants, to having a European clearing solution serving the global market, as currently being implemented by Eurex Clearing for the CDS market. A large percentage of international trading is priced in Euro and access to a European CCP facilitates these transactions. In this respect, many U.S. market participants seek to diversify their portfolios through exposure to European-based securities and

⁸Most recently, the CFTC recognized the U.K. FSA in connection with its oversight of ICE Clear Europe. See <http://services.cftc.gov/SIRT/SIRT.aspx?Topic=ClearingOrganizations&implicit=true&type=MCO&CustomColumnDisplay=TTTTTTT>.

⁹Compare section 5(b) of the Commodity Exchange Act, 7 U.S.C. § 7b and “Recommendations for Central Counterparties,” Report of the Committee on Payment and Settlement Systems, Technical Committee of the International Organization of Securities Commissions, (“CCP Report”) <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD176.pdf>.

¹⁰In addition to the broad acceptance by international regulators of the IOSCO recommendations in the CCP Report, many regulatory authorities, including the U.S. CFTC, U.S. SEC and BaFin are signatories to the IOSCO Multilateral Memorandum of Understanding Concerning Consultation and Cooperation and the Exchange Of Information.

trade CDS related to them. Moreover, a large percentage—perhaps a third—of the global trading in CDS focuses on the credit of sovereign European governments and European businesses the economics of which are driven primarily by local, contemporaneous European market developments. For example, corporate actions which may directly affect the values of such CDS occur, by and large, during the European business day. Furthermore, because the determination of credit events underlying CDS, particularly those referring to the restructuring, is subject to practices specific to the jurisdiction of the reference entity, ISDA's European offices would likely make determinations about what constitutes a credit event for a CDS with a European reference entity.

Moreover, Eurex Clearing believes that financial surveillance as well as market surveillance is crucial to the clearinghouse's proper supervision and that these functions are enhanced by knowledgeable experts who have access to up-to-date information and are operating in real time along with the reference markets, thereby providing enhanced protection for all market participants. For these reasons, global participants in the European CDS market, which includes a sizable number of U.S. participants, will benefit from access to a European OTC CCP.

In addition, CCPs that serve global markets, if permitted under this framework to operate in the U.S. as MCOs, stand to offer U.S. markets the benefits of increased competition. This has the potential to offer U.S. market participants with alternative methods of doing business and access to clearing services for innovative products that may not otherwise be available. In this regard, as noted above, Eurex was the first exchange to list credit futures contracts when it listed futures on Euro-denominated iTraxx CDS indexes.

Accordingly, if Congress determines to enact regulatory enhancements, it should consider clarifying any perceived legal uncertainty with respect to the operation of the legal framework and whether other legal requirements apply to certain CDS transactions and not others. Such clarity would facilitate both domestic and non-U.S. CCPs with understanding and complying with the legal requirements.

6. Conclusion

Eurex Clearing supports fully appropriate regulatory oversight of listed and OTC derivatives. Eurex Clearing understands the importance of public confidence in these markets and is committed to the utmost level of cooperation with the regulatory authorities of those nations that have an interest in our clearing operations. In this regard, we appreciate the opportunity to work with the U.S. regulatory authorities with respect to our plans to offer central clearing services for CDS transactions. Eurex Clearing would note that the U.S. financial market regulators have been inclusive, cooperative and open.

Eurex Clearing also believes that the existing treatment of CCPs that are subject to oversight by a non-U.S. regulatory authority that satisfies appropriate regulatory standards is the right framework and we urge Congress to maintain and extend that approach in any future regulatory proposal, particularly proposals to address any perceived legal uncertainty with respect to the law which may apply to clearing of CDS transactions.

Finally, Eurex Clearing is honored to have been invited to present its views to this Committee and appreciates the opportunity to discuss these critically important issues. I am happy to answer your questions.

The CHAIRMAN. Thank you very much, Mr. Book.

I thank all of you on the panel. We appreciate again your willingness to be with us today.

There have been proposals to mandate the clearing of the CDS instruments. Do you, each of you, believe such a mandate is necessary? Starting with you, Mr. Duffy.

Mr. DUFFY. Mr. Chairman, are you referring to mandating the clearing of these—

The CHAIRMAN. Credit default swaps.

Mr. DUFFY. Yes, we do believe that there should be a mandate to the clearing of credit default swaps. We understand that all OTC products cannot be traded on a central limit order book like we have at the CME Group today, although we will offer a central limit order book for credit default swaps and clearing of the ones that don't trade on the central limit order book. But, yes, we do believe they should be regulated by a clearing entity.

The CHAIRMAN. Mr. Short.

Mr. SHORT. We likewise believe that clearing should be mandated for most CDS instruments. My understanding is that there are certain CDS instruments that are more difficult to clear than others and are particularly liquid. So we are not of the view that every CDS instrument should be cleared, but certainly any instrument that is widely traded that has systemic risk implications should be subject to clearing.

The CHAIRMAN. Mr. O'Neill.

Mr. O'NEILL. Certainly we support a policy of encouraging clearing of CDS contracts; I would note that the most standardized contracts, initially those most suitable for clearing, particularly index contracts, then standardized single name and charge contracts, for instance. I also agree with other speakers that certain contracts may be difficult to clear even in the medium term, particularly if they are nonstandardized. So I would encourage policymakers to consider that to make——

The CHAIRMAN. Mr. Book.

Mr. BOOK. Currently there is a lot of focus on creating clearing solutions for this market. I think it is very important that the migration path after those solutions have come to launch is clear. That there is a clear user commitment in transporting, in the phased approach, the different CDS products to such central clearing mechanisms. And obviously the standardized index segment is the one to start with and most suitable to discuss the benefits of central clearing.

The CHAIRMAN. Thank you.

Assuming that such a mandate was imposed, how much time would the industry and you need to meet such a mandate? And should certain kinds of CDSs be cleared earlier than others? In other words, if we are going to set that up, should we have some kind of structure to phase it in, if you will, from the easiest to the hardest? How much time would it take; what time frames should we be looking at if we did have a mandate?

Mr. Duffy.

Mr. DUFFY. Mr. Chairman, the CME Group is prepared now at this time to go forward with its solution to meet any mandates for cleared credit default swaps contracts. And just to make myself clear, I agree with my colleagues that index products and standardized products are the most easily mandated to clear, and those would be the first that you would see going forward. Some of the ones that pose the most risk are the illiquid ones that I referred to as toxic.

The CHAIRMAN. Say that we were going to mandate even those to be cleared, how much time should we give to get that process set up; 6 months, 9 months, a year? Do you have any view on that?

Mr. DUFFY. Well, I think some of these illiquid CDS contracts are—some of the clearinghouses, and I will speak for myself, probably wouldn't want to clear any of them at any time because of the illiquidity associated with them, and just the nature in which they trade. So there are some of these that just are not clearable.

The CHAIRMAN. Well, what if we mandated that they be cleared?

Mr. DUFFY. Then we would probably need a little bit more time, obviously, on some of these products to make sure we have the risk management tools in place for these illiquid securities.

The CHAIRMAN. You don't have an estimate of that? If you could talk to your folks and give us some kind of an estimate.

Mr. DUFFY. Sure.

The CHAIRMAN. Mr. Short.

Mr. SHORT. Likewise, ICE is operationally ready to begin clearing, and like some of my colleagues have suggested, we similarly believe that the order should probably be indexes, then single names, then tranches.

We would begin by addressing the current backlog of trades that exists by inputting those into the clearinghouse, and, hopefully, addressing some of the systemic risk concerns that exist in the marketplace, and then transition to clearing new trades after that. But we could be ready to begin that process by year's end. We don't need a significant lead time.

The CHAIRMAN. Mr. O'Neill.

Mr. O'NEILL. Yes. For our part, as I mentioned in my testimony, we will be clearing index contracts on the 22nd of December. We will be moving on to single names shortly afterwards in the new year. And as per the comments of other members of the panel, I think there are certain contracts, particularly nonstandardized or potentially toxic contracts, which may not be suitable for clearing. I think if that is mandated, then possibly that market will no longer be viable.

The CHAIRMAN. Mr. Book.

Mr. BOOK. I think the process has to start, as the other witnesses have also said, with the standardized index segment. And I believe it is crucial to have a phased approach in avoiding stress to market participants by avoiding that there is a single launch for all mandated clearing. And that that process will actually take some time and should go—start with index contracts first and probably tranches and single name for those liquid ones that are suitable for clearing. There might be other products that are very illiquid. Also for central clearing organizations, there will be issues in pricing and determining settlement prices for those.

The CHAIRMAN. Thank you. My time is expired. I now recognize the gentleman from Iowa for 5 minutes of questions.

Mr. KING. Thank you, Mr. Chairman.

I thank all the witnesses for your testimony and for your willingness to be here and help share with us your experience and your viewpoints on this.

I think it is a fact that counterparty risk has contributed to the credit freeze to some degree; however, we might disagree on the level of that. Let us submit if there is not a mandate—and I would ask first Mr. Duffy and then go on down the line—will there be enough business migration to clearing to mitigate those concerns about counterparty risk that would go voluntarily, short of a mandate?

Mr. DUFFY. On the credit default swaps, sir, yes. We do believe there will be enough business that will come on in the clearing to still keep it a very viable and sustainable market. And the counterparty risks, we have already estimated that we can net

down those exposures probably by a factor of five to seven. So if you are looking at a \$50 trillion notional market, we feel we can net that down by a factor of five to six. So we do think it is sustainable.

Mr. KING. Mr. Short, do you agree?

Mr. SHORT. I do agree with that. Part of ICE's solution, we have reached out to the major dealers in the industry, many of whom are now bank holding companies that are directly regulated by the Fed, which would be our primary regulator. I think there will be a strong incentive on the part of the market participants to use clearing, and I think the buy-side and other parts of the market are definitely interested in clearing.

Mr. KING. Mr. O'Neill.

Mr. O'NEILL. Yes, absolutely we think this market is liquid enough to filtrate central clearing. Further, we think the reduction in notional outstanding which central clearing will bring, and the assurance it will give counterparties, will actually possibly increase the volume traded within the market, allowing people to hedge their risk better, also in a more efficient manner. So we definitely think it is viable.

Mr. KING. Mr. Book, do you agree?

Mr. BOOK. I think the financial turmoil that we have seen over the past month and year has highlighted the benefits of central clearing and the necessity to urgently address many of the issues in market integrity in the OTC derivatives base. I still think there needs to be a clear migration path and time line to address those issues and bring them onto centralized clearing organizations. I would not believe that this is an automatic process since we have not seen that business come to central clearing organizations even though there were offerings over the past years.

Mr. KING. If there were offerings, though, would you think there would be enough voluntary migration that we wouldn't need to mandate?

Mr. BOOK. I think a mandate would certainly help to facilitate that migration process.

Mr. KING. Thank you.

Should there be a mandate for exchange trading of any type or all types of credit default swaps, Mr. Duffy?

Mr. DUFFY. Well, trading in credit default swaps, mandating and clearing them would be two different things. We will offer both, sir. We believe that by putting them in a central order book, you get more transparency, which makes the product—when you clear it, you have better risk management associated it. We will not make it mandatory to trade on our central limit order book in order to clear at the CME Group, but I think that is an important distinction.

Mr. KING. Thank you.

Mr. Short.

Mr. SHORT. I don't believe that CDS needs to be traded on an exchange, although that is certainly something that we will offer as part of our solution eventually. The current market trades OTC will bring our solution to that current market, but we will have an open clearinghouse infrastructure that electronic platforms can connect to and facilitate electronic trading of these instruments.

Mr. KING. Thank you.

Mr. O'Neill.

Mr. O'NEILL. Yes. As I said in my testimony, we believe that all the processing and clearing efficiencies the markets require can be delivered without necessarily mandating a central limit order book, and that is why our approach reflects that.

The CHAIRMAN. Mr. Book.

Mr. BOOK. I think the focus should be on addressing the systemic risks and the risk exposures in that market. First of all, this is currently a bilateral, unregulated market, and establishing central clearinghouses should be the focus to address the issues in that market.

Mr. KING. Thank you, Mr. Book.

Now I will re-ask this question a little bit differently and try to move down the panel again. Let us just assume that there is no clearing mandate in place for credit default swaps, and you testified that you believe for most of you there would be sufficient voluntary participation. But how much of that market do you think would come in? You gave me a little bit of a measure. Can you restate that a little bit, please, Mr. Duffy?

Mr. DUFFY. Well, if there is no mandate, sir, obviously this—as we said before, this has not been a cleared solution. This product has been around roughly 10, 11 years, and it has grown exponentially throughout that time period and is a bilateral transaction with a counterparty risk to both parties. So to put a percentage if it is not mandated, in current circumstances you have already seen the market shrink or compress from \$60-some-odd trillion to \$40-some-odd trillion since this crisis began, so I would assume a percentage of that, sir, so maybe 20 to 30 percent of that if there is no mandate.

Mr. KING. Thank you.

Mr. Short, I will phrase it a little differently. If we don't mandate, and if that judgment is incorrect, and the participation is so low that there isn't confidence in the marketplace, then what is our next alternative?

Mr. SHORT. To be clear, I was not suggesting that a mandate wasn't needed. I do think you will see significant uptake. If you deem a mandate appropriate, that would certainly be welcome.

I think one of the hooks, if you will, in the ICE clearinghouse is it is part of the Fed system, and a lot of its members will be a part of the Fed system. So to the extent that there is concern about major dealers participating in the solution, I think there is a natural regulatory nexus to encourage them to put their business into the clearinghouse. And I think we found that if you get a major segment of the market into the clearinghouse, the rest of the market will follow.

Mr. KING. Thank you, Mr. Short.

Mr. Chairman, I see my time has expired, and I yield back.

Mr. HOLDEN [presiding.] The chair thanks the gentleman from Iowa.

Following the line of the questions of the gentleman from Iowa, first, if there is no mandatory clearing in place, should there be mandatory reporting requirements for parties in CDS who decide not to clear those agreements? And second, should there be a man-

datory reporting requirement for parties in any over-the-counter transaction?

Mr. DUFFY. Well, sir, we are a highly regulated business which believes in transparency. We believe that is what best serves the product. So it would be disingenuous for me to say anything other than yes. I do believe there should be some kind of mandatory reporting to pricing because it brings more transparency to the market, which in return brings better benefits to the users of those products. They can actually see it. We are big believers in the transparency, especially when it comes to reporting of pricing of products.

Mr. HOLDEN. Mr. Short.

Mr. SHORT. ICE advocates transparency in reporting. The answer is maybe a little more nuanced. These instruments really reside along a spectrum from being highly standardized to being non-standardized. The farther you move along that spectrum, and the more liquidity and the more standardized they are, they should certainly be reported, even if they are not cleared. You could posit a case where something was so tailored and specialized that it didn't really have—wasn't a liquid instrument, didn't have any systemic implications. You might suggest that those need not be reported.

Mr. HOLDEN. Mr. O'Neill.

Mr. O'NEILL. Yes. We believe the most important form of transparency is reporting of cleared positions and prices to regulators. And as I said in my testimony, U.S. authorities will have access to that solution. As to the wide-range market outside clearing, I don't think we have a policy beyond that at this time.

Mr. BOOK. I think it was one of the main lessons learned out of the financial trauma that transparency is required, also in the opaque OTC markets, and therefore the mandatory reporting requirement would certainly help us. They are standard for regulated futures exchanges or clearinghouses already.

Mr. HOLDEN. Mr. Short, why is ICE engaging in this clearinghouse proposal? And did your company approach the banks; did the banks approach you? Did the Fed ask you to work with the banks or become involved?

Mr. SHORT. ICE first began a dialogue with the Fed in the summer of this year in connection with their acquisition of Creditex, which is an interdealer broker in the CDS space. Our plan had been to introduce clearing on a more leisurely timetable, probably in the spring of this coming year. But market events have quickly overtaken us.

We did not work with the dealers initially. In fact, we hired independent transactional counsel rather than our normal counsel who had relationships with the dealers, so that we could maintain the independence of our proposal and work with the Fed in the background on this issue.

The first dialogue, I believe, was voluntary where we reached out to the dealers, asking them to back our solution, because they are a significant part of the market. As I said earlier, once you get a certain part of the market to move, you can typically move the rest of the market.

Mr. HOLDEN. Again, Mr. Short, why did you decide to form a limited purpose trust company as opposed to using the existing infrastructure under ICE Futures U.S., which is regulated by the CFTC, or ICE Futures Europe, which is regulated by the FSA? Why did you seek an avenue of regulation by the Federal Reserve?

Mr. SHORT. We chose that avenue for two reasons. The first was the Fed had been the thought leader in the CDS space. It has been working with market participants for quite some time to address the lack of transparency in the CDS space. Under existing law the Fed is an appropriate regulator for a clearinghouse under existing law.

In addition, the current framework under which the CFTC and SEC operate, CDS, for whatever reason, right, wrong or indifferent, is exempted largely from CFTC and SEC oversight. The reason we decided to do it pursuant to a limited purpose trust company was to segregate that risk and make sure that Wall Street's risk remained Wall Street's risk and not Main Street's risk in terms of mixing those risks with other risks that are in our other clearinghouses.

Mr. HOLDEN. Thank you.

The CHAIRMAN [presiding.] The gentleman from Texas Mr. Neugebauer.

Mr. NEUGEBAUER. Thank you, Mr. Chairman.

Mr. Short and Mr. Duffy, do you believe the Securities and Exchange Commission will still have ongoing oversight of your clearinghouse, even if it should get an exemption from them?

Mr. SHORT. My belief is that they will maintain a regulatory touch. We have been working with the SEC on appropriate exemptive relief. My understanding is that they will maintain a position these are securities and maintain their enforcement authority, and mandate certain concerns that the clearinghouse has to meet.

Mr. DUFFY. Yes, I agree with that. Right now, obviously, the CFTC has oversight of the clearinghouse of our futures business, but we believe that the SEC's oversight would be appropriate on clearing if we were to do these products.

Mr. NEUGEBAUER. CME's proposal would be overseen by the CFTC?

Mr. DUFFY. Right.

Mr. NEUGEBAUER. And under the principles established by the Commodity Exchange Act, a Euronext Liffe proposal would be overseen by FSA under the principles established by the Financial Services Markets Act of 2000. Eurex would be overseen by BaFin under the German Banking Act. But all three of these regulators have their own regulatory schemes authorized by their appropriate legislatures.

As I understood it, the Federal Code proposes overseeing ICE using standards developed by the International Organization of Security Commissions, IOSCO, which, to my understanding, has never been adopted by any national legislature. Is it appropriate that we would start using standards that have actually never been adopted by any governmental institution?

Mr. SHORT. I believe the IOSCO standards are widely respected and recognized as appropriate international standards for clearinghouses. I think that importantly when you step back and look at

this question and look at the Fed's appropriateness or ability to properly run a clearinghouse here, I think you have to step back and look at our current regulatory system. The Fed, of all the three regulators that we named domestically here, the CFTC, the SEC and the Federal Reserve, is the only regulator that is responsible for addressing systemic risk issues. I think that puts it uniquely in a position to oversee this space.

I was also very encouraged by the Memorandum of Understanding, because I do think this is a situation where each Branch of the government should learn from fellow regulators, and my reading of that proposal was that those three regulators would work to impose the highest level of standards between the three of them no matter which was the primary regulator.

Mr. NEUGEBAUER. For the panel, I am having a hard time understanding if we are going to bring consistency and transparency where we would have—I understand the concept of multiple clearinghouses. I believe that is appropriate. The question I have is how do we reconcile multiple regulatory authorities where you have different regulators for different entities, and how that would bring consistency to the market. How that could, in fact, push business to one clearinghouse or the other depending on what standards that that particular regulator had established for that clearinghouse.

Mr. Duffy.

Mr. DUFFY. Well, first we have the ability from the 2000 Act that we have dual regulation on certain products. And we think with a couple small tweaks, we could make that work again. It was never really enacted. That was in the single stock futures that we introduced back then.

So as far as the oversight, we do believe that the CFTC is the right authority to have oversight of these products. And as I said in my testimony, we believe that the SEC should still have the ability to deal with market manipulations or infractions such as that. So we do believe that there can be a place for both regulators in the credit default swaps area.

Mr. NEUGEBAUER. And the Federal Reserve, I notice you named two, but——

Mr. DUFFY. I think the Federal Reserve has said that they are not an oversight agency to these products. So whether or not they want to get into that right now, the two prime regulators are CFTC and the SEC. We have worked with the Fed as close as IntercontinentalExchange has. They have taken a lead on these products. So we have worked with them, but I don't believe they are looking to become a regulator of them.

Mr. NEUGEBAUER. Who would be the regulator for ICE?

Mr. SHORT. It would be the Fed. Clearly we would be a member of the Federal Reserve System, and the Fed would have direct regulatory oversight of our clearinghouse, as well as the New York State Banking Department as well.

Mr. DUFFY. I believe that is due to the bank holdings that they are going to have, and that is not what the CME has, as a bank trust.

Mr. SHORT. That is correct.

Mr. NEUGEBAUER. I think my time is over.

The CHAIRMAN. Go ahead.

Mr. O'NEILL. May I make a statement on behalf of NYSE Euronext? As noted by the Committee, our product is FSA regulated. We have engaged with the CFTC, the SEC and the Fed regarding U.S. access for our product. I believe the situation is that we have CFTC and Fed approval, and we should have SEC approval, I think, in the coming days.

As a general position I would agree that any form of regulatory arbitrage of these products is something to be avoided. We think solutions should stand or fail on their merits rather than on their regulatory regimes. That is just a general statement.

Mr. BOOK. I would add to that, for these products are global in nature, and the market participants operating on a global basis, it is very important that the international authorities operate. Also, if you see a mandated clearing requirement, for instance, that should be in a coordinated way, both in the United States and in Europe.

We at Eurex Clearing are very open with working with all the regulators involved. As being regulated in Germany, we are also working with U.K. FSA, and we are in discussion with the CFTC on operating on an MCO status in the United States for the OTC clearing that we would offer.

The CHAIRMAN. All right. The gentleman's time has expired.

With the Committee's indulgence, I would like to make one final inquiry in this area.

Mr. Short, it troubles me that you are going to be regulated by someone who doesn't have an underlying authority from us. They have a lot of authority, that is one thing, but what I am wondering about is because you are regulated by the Fed, if something goes wrong, and one of the counterparty fails, and it is beyond the ability to deal with it, does your scheme mean the Fed would then step in and take over that loss, given the authority that they have? Is that part of what is going on here? And maybe they can even use this bailout money to cover this? Is that part of what is going on here?

Mr. SHORT. The Fed has not offered us that——

The CHAIRMAN. Well, they haven't offered it, but isn't it true that they would be able to do this?

Mr. SHORT. Whether they would be able to, I wouldn't want to speculate on the Fed's intention. That certainly hasn't been any element of our discussions with the Fed at all.

The CHAIRMAN. Well, for people's information, I wrote a letter to the Fed asking them this very question. I have not gotten an answer back, so—somehow or another we will get to the bottom of this, but it does make me wonder. So, anyway——

The gentleman from North Carolina, the Chairman of the Subcommittee that has jurisdiction over this, and someone who has spent a lot of time on this issue, Mr. Etheridge, for 5 minutes.

Mr. ETHERIDGE. Mr. Chairman, thank you. Let me follow that line of questioning for just a moment.

My question, I guess for each of you, and following that, is it possible, given what we have heard so far and what we see, that the Fed could design a regime that remains completely consistent and

in compliance with IOSCO standards, but more favorable than it would be under the CFTC or FSA oversight?

Mr. SHORT. I don't believe—well, first of all, I would say—I would agree with my colleague that there should be no room for creating a system where there is regulatory arbitrage full stop. And I read the Memorandum of Understanding that was recently executed between the CFTC, the SEC, and the Fed addressing that very issue, basically saying that those three regulators would work together to make sure that standards were consistent so that you didn't have that type of regulatory arbitrage.

Mr. ETHERIDGE. Anyone else want to comment on that one?

Okay, let me move to the next question, because I think the public is asking the same question that this Committee's trying to get to, and that is, as we talk about the operation of proposed clearinghouses, would anyone be allowed to become a clearing member, assuming that they met the financial requirements? Or is it within your plans to have a limited membership?

Mr. O'NEILL. I can speak on behalf of NYSE Euronext, sir.

The requirements are clear on this product—are as per existing products. There are stringent requirements. We can certainly provide the Committee with exactly the standards required to be a clearer member of LCH.Clearnet, but we do not propose any additional standards for clear and CDS transaction, certainly not CDS index transactions.

Mr. ETHERIDGE. Mr. Book.

Mr. BOOK. Eurex Clearing will look at requiring the clearers for this business to fulfill additional requirements in terms of their financial strength, so, for instance, required equity capital because we believe that the exposure is very significant in this business. So it will not be automatically available for all our current clearing participants, but there will be a separate registration with Eurex Clearing required, and we will have the detailed requirements for that business.

Mr. ETHERIDGE. Mr. Short.

Mr. SHORT. The ICE system would likewise be open, subject to meeting the appropriate standards for joining the clearinghouse. There are certainly financial requirements imposed because these are the ultimate underwriters of the risk, and it would be imprudent to allow anybody that didn't meet the financial standards to join.

Mr. ETHERIDGE. Okay. Let me move through one more question.

I guess all of us are concerned about safeguards. So what safeguards are in place to ensure that there can be no price manipulation as we are setting up all these pieces? And I will start with Mr. Book again, and we will go from right to left.

Mr. BOOK. I think what is really important for a clearinghouse is to come with a settlement price mechanism to do the mark-to-market for these products which will be based on several sources. So this is very important to have here, free of manipulation settlement prices. At Eurex Clearing, we can rely on our existing market surveillance that we have, also for the existing business in Europe, and therefore oversee that business.

Mr. ETHERIDGE. Mr. O'Neill.

Mr. O'NEILL. Yes, absolutely. Mark-to-market settlement prices are vital for this market. But with relation to market surveillance, we already have a very active program of market surveillance for our market, as I outlined in my testimony, shared entirely with the U.S. authorities. So we will be using the same approaches that we apply for all our existing products, which have proved very successful today.

Mr. ETHERIDGE. Thank you.

Mr. Short.

Mr. SHORT. I agree with my colleagues. Mark-to-market is vitally important. It is one of the clearinghouse's most important functions. We would look to a variety of market sources to establish comprehensive and trustworthy settlement prices.

Mr. ETHERIDGE. Mr. Duffy.

Mr. DUFFY. And I would agree. But the only thing I would just add is that the CME Group is a neutral institution, and so we don't benefit by the market going up or down; we are completely neutral in that position. And that would also apply to credit default swaps, as it does all our products.

Mr. ETHERIDGE. Thank you. One final question with the Chairman's indulgence:

Will each of you commit to making prices for cleared items available publicly? Starting with you, Mr. Duffy and down the line. Whoever wants to go first.

Mr. DUFFY. I am sorry, Mr. Chairman. I didn't hear the question.

Mr. ETHERIDGE. Will you commit to making prices for cleared items available publicly?

Mr. DUFFY. Yes, sir.

Mr. SHORT. Yes.

Mr. O'NEILL. Our current approach to the European market reports prices to regulators rather than publicly. But we can consider additional requirements for the U.S. market.

Mr. BOOK. Yes, we will publish prices.

Mr. ETHERIDGE. Thank you very much, gentlemen.

Thank you, Mr. Chairman. I yield back.

The CHAIRMAN. I thank the gentleman.

The gentleman from Louisiana, Mr. Boustany, for 5 minutes.

Mr. BOUSTANY. Thank you, Mr. Chairman.

I believe each of you addressed this issue in your testimony to some degree about the timeline for when you expect to be operational. Could you each kind of go through that again for clarification? Let me start with you, Mr. Duffy.

Mr. DUFFY. We are prepared today, Congressman Boustany, to move forward. So our timeline is strictly in the hands of the regulators and the approving regulators to move forward. So we are operationally prepared to move forward today.

Mr. BOUSTANY. Okay.

Mr. Short.

Mr. SHORT. We are in the same position, operationally ready. We have received our bank charter. We are still waiting for the Fed's final approval.

Mr. O'NEILL. As I said in my testimony, we will be planning on being live on the 22nd of December for index contracts. You may be aware that currently within Europe, the European Commission

level, there are discussions concerning CDS clearing, so that is subject to no final requirements emerging from that process.

In terms of single names and other contracts we will be live next year. We don't yet have a date to announce for that.

Mr. BOUSTANY. Mr. Book.

Mr. BOOK. We will be operational the end of Q1 2009. And one of the core pieces in creating that offering is to create the automated link into the DTCC Deriv/SERV Warehouse. There is obviously the dependency on bringing that offering out. And the scope will be initially iTraxx[®] indices from the start and then we will expand it from there.

Mr. BOUSTANY. Thank you. There are those who have wondered why we don't have clearinghouses as of this time for credit default swaps. Why do you think a clearing solution for CDS hasn't been implemented in the past?

Mr. Duffy.

Mr. DUFFY. We have announced as of 2 years ago a new clearing initiative for over-the-counter called Clearing 360. So the CME Group has already made announcements that they are going to clear over-the-counter products. It has been a reluctance among the dealers, sir, to put these into a clearinghouse. They have been transacted as bilateral agreements *versus* central counterparty cleared agreements. That really has been the reluctance of the dealers, and the buy-siders just had to go along with that. I think you are seeing a move afoot from the larger buy-side community, what you actually heard there through the testimony that they are looking for the central cleared solution. They are getting more and more concerned with bilateral risk from not only the buy side, but the sell side.

Mr. BOUSTANY. Mr. Short, do you want to add to that?

Mr. SHORT. I agree pretty much with what Mr. Duffy said. I think these markets historically start out as nonstandardized OTC instruments, and they become standardized over time. There has been a reluctance, I think, to date, by maybe some of the dealers to embrace clearing. But I think that is firmly changed now.

Mr. BOUSTANY. Mr. O'Neill.

Mr. O'NEILL. Yes. Absolutely, I think there is a maturity lifecycle to products, which starts with innovation, then moves on to standardization, and then gives the possibility of clearing.

We have been working on the CDS initiative since 2007, so it is quite a long-standing project for us. And we have also had Bclear in place since 2005 for more standardized asset classes such as equity derivatives. So we think the moment has come for CDS clearing.

Mr. BOOK. Let me add to this that Eurex already launched in March 2007 iTraxx[®] futures contract that will also open for clearing only as standardized futures because we believe there is a lot of value for those, for that huge marketplace. However, they did not get any liquidity so far. It is also believed that now focusing on the clearing to address the existing exposure incentives an immigration path is required.

Mr. BOUSTANY. One last question: What significant hurdles have you encountered in trying to develop a CDS solution? In other words, licensing agreements, have you had problems with that?

What other hurdles have you encountered, Mr. Duffy?

Mr. DUFFY. You know, it is kind of all of the above. The licensing agreements are one thing that are necessary to get, especially for the index products which everyone talks about, the index products and credit default swaps, and just getting people to change their habits. I mean, it is a product that has been around 10, 11 years now. It has been trading one way the whole time. So these are some of the hurdles that you need to get to get people to buy into the central counterparty clearing which we offer.

I think there is some concern that on a central limited order book, with some of these products being illiquid and not trading very frequently, that that is what the exchange model has always presented. But as counter to that, we are not—we are willing to clear these products without trading them also.

So those are some of the hurdles that we have had.

Mr. BOUSTANY. Thank you.

Mr. Short.

Mr. SHORT. It is quite a large undertaking. It involves outreach to a number of market participants, and we have developed a comprehensive rule set and a set of standards that will govern the clearinghouse. And there have been challenges, but we think we have gotten through most of the big issues.

Mr. BOUSTANY. Mr. O'Neill.

Mr. O'NEILL. I wouldn't say actually we have faced any difficult hurdles. We typically have quite a cooperative attitude towards product development. We work with existing markets, within existing standards.

For instance, on this project, we have a good relationship with ISDA, good relationships with the index provider market for valuations. So I think the key point is, we are not asking people to change their business models. We are providing services to them. And we find that if we take that approach, typically the existing market is actually very cooperative.

Mr. BOUSTANY. Mr. Book.

Mr. BOOK. There are obviously several dependencies in rolling out such a service. The core to it is to create a robust and sophisticated risk mechanism together with the users. In terms of dependencies, as obviously, licensing requirements, Eurex has a licensing arrangement for the iTraxx[®] in place. And we are reaching out to expand that for CDX[®]. And there are, of course, also efforts on creating the link into the Deriv/SERV Warehouse that I mentioned earlier.

Mr. BOUSTANY. Thank you.

Thank you, Mr. Chairman.

The CHAIRMAN. I thank the gentleman.

The gentleman from Georgia, Mr. Marshall.

Mr. MARSHALL. Thank you, Mr. Chairman.

Gentlemen, do all of you, representing your individual organizations, feel that you have been treated fairly and evenly by U.S. regulators? Does anybody have a complaint about regulators and how you have been treated? I take it from all the shaking heads here and the lack of response, the answer is no?

Mr. SHORT. No.

Mr. DUFFY. No.

Mr. MARSHALL. Are there actions that Congress should take to clarify the current regulatory structure? We have a number of different agencies, and we are wondering whether or not it would be helpful if we introduced legislation that would clarify jurisdiction or authority for these different agencies with regard to CDSs, and the over-the-counter market generally.

Mr. Duffy, I guess we will start with you, as we always have.

Mr. DUFFY. Well, I think with the Modernization Act of 2000 for the CFTC, it has obviously been a model for the regulatory framework here in the United States. We have not had the problems under this agency that we have maybe seen in other product lines that are not under its jurisdiction. So we commend the CFTC for all they have done.

In order to facilitate to get these products up and moving, it may be unfortunate, but we may have to bifurcate some of the regulation, which may not be a bad thing for starters. This is a highly contentious product around, and I don't think people understand it quite well. So it is not surprising that some are looking at these as securities, some are looking at these as futures, and then the Fed is looking at it in a different way also.

So to have bifurcation of regulation in this particular product, I don't think is going to inhibit the growth of it. But it does need regulation, sir.

Mr. MARSHALL. Are you saying—is your comment that it would be helpful not to have bifurcation?

Mr. DUFFY. My comment would be that I would love to see this under the jurisdiction of the Commodity Futures Trading Commission, but I don't believe that to be realistic.

I think that the SEC has got a part in this because they consider these bonds to be securitized contracts which fall under their jurisdiction. So I don't think that is realistic.

I would love to see modernization of the Securities and Exchange Commission like we had with the CFTC in 2000, and streamline the whole process.

Mr. MARSHALL. Your view, I suspect, is that the statute is not clear concerning whether or not the SEC has authority. And if in legislation Congress clarified that the SEC does not have authority, in essence saying that once a swap has cleared, that does not necessarily mean that it is a security.

Are you troubled by the fact that the SEC would then be on the sidelines and not have regulatory oversight?

Mr. DUFFY. No, I am not troubled by it, sir.

Mr. MARSHALL. Mr. Short.

Mr. SHORT. I think one of the challenges for Congress in the coming session is to take a look at the overall financial regulatory scheme that we have, and consider what improvements need to be made.

It is a little bit troubling to me that we have a system that has essentially silos where, if you view a product one way or another way, it could be subject to different ultimate regulatory regimes. I think there needs to be a harmonization.

I would echo what Mr. Duffy said, that the CFTC has done a fantastic job with the CFMA and the Modernization Act being a principles-based regulatory regime, and having some of those principles

exported to other regulators and a harmonization of regulation, I think, would be appropriate.

Mr. MARSHALL. Mr. O'Neill.

Mr. O'NEILL. Generally speaking, we absolutely would welcome clarity. We have engaged with the CFTC, the SEC and the Fed for this product, all with good results, we believe. We think, yes, the CFTC has done an excellent job of regulating the U.S. futures market.

I would also note that the SEC has had responsibility for monitoring for insider trading and market manipulation which is important for CDS. I would also say that the NY Fed has a considerable range of knowledge in this area. So we hope, however the U.S. regulatory situation is clarified, all that knowledge and all that skill can be brought to bear for the highest possible standards.

Mr. MARSHALL. Mr. Book.

Mr. BOOK. I would agree with that, for the clarification would certainly help. Also, from the perspective of a foreign entity, we believe that the MCO is a good template. We have, with all the regulators involved here, very good constructive dialogue. But certainly certainty and clarification here would help.

Mr. MARSHALL. We have been concerned about regulatory arbitrage here, in essence, that we live in a "lowest common denominator" world with different jurisdictions offering less regulation in order to entice business. And it would be very helpful if across the Atlantic at least and hopefully globally we can come up with some fundamental principles that everybody can abide by so that we do not continue to have this phenomenon that leads ultimately to lax regulation and problems like the ones that we have today that are affecting so many ordinary folks all over the United States.

I yield back. Thank you, Mr. Chairman.

The CHAIRMAN. I thank the gentleman.

The gentleman from Texas, Mr. Conaway.

Mr. CONAWAY. Thank you, Mr. Chairman. And following up with that great lead-in from my colleague from Georgia, European regulators are considering schemes that might have such requirements that if both parties are European, they would have to clear through a European clearinghouse. If one party is European and the other is not, but it is denominated in Euros, you could clear through that entity. Or if the representative itself is a European entity that all of that activity would have to go through a European clearinghouse.

Can I get some sense from all of you as to the pros and cons on that group getting ahead of the U.S. regulatory scheme and what impacts it might have?

Mr. SHORT. My own sense is that that is not particularly helpful. It would seem that there needs to be regulatory information sharing between international regulators, but I am not sure why somebody should have to clear, for example, through a European clearinghouse if it was a European entity or a contract was denominated in Euros. It seems to be going in the wrong direction of having regulatory cooperation and openness in markets.

Mr. BOOK. If I might add to that, I think, first of all, it was earlier asked, the question, of whether there is a benefit in mandating clearing. I think it is urgently required that if there is such re-

quirement considered, that that takes place on an international cooperative level. Therefore, I think it is good that both from a European Central Bank perspective, also from an EU perspective, the issue of market integrity for CDS transactions taking place in Europe have also been recognized.

I think there are benefits of using existing European market infrastructures that are well sustained to address business in Europe, and there are certain benefits and efficiencies coming out of that. But in the end, it is essential that there is international cooperation on all the measures that are undertaken to improve market integrity in the OTC derivatives markets since these markets are global in nature and the open positions can just move where the least regulatory requirements are.

Mr. O'NEILL. I would certainly echo some of those sentiments. We don't support regulatory arbitrage for these products.

I think we have seen an unusually high level of cooperation for CDS clearing between U.S., European and other authorities; and in general, as a principle, we support competition in clearing. I said earlier, we believe solutions should stand or fail on their integrity, on their merits, rather than regulatory advantage.

Mr. DUFFY. I would agree completely with that.

Roughly 15 to 25 percent of our core business today comes from outside the United States, and I think that is important because we believe it is a global market in nature. And that is what the CME understands, and that is the way we operate our business. So we don't see that any different in credit default swaps. So we would not like to see a regulatory arbitrage or an advantage because of the denomination of currency.

Mr. CONAWAY. There has been this idea of conflicts of interest between clearinghouses owned and run by the dealer banks who have the largest position in credit swaps.

Can you speak to us briefly about your stance on these conflicts of interest and how we ought to view them, and what may be some of the solutions for that problem?

Mr. SHORT. In terms of ICE Trust solution I think it is a matter of having the appropriate governance. We will have an independent Board of Directors. And I certainly believe that as long as you have the appropriate governance structure in place, having the dealer segment as part of the solution is a benefit, not a hindrance. I think it is just a matter of getting the governance right.

Mr. CONAWAY. Terry.

Mr. DUFFY. Yes. I don't disagree on conflicts of interest. You know, you need to have a neutral party and that is what the CME Group is. We are truly a neutral party. So I think—I just would agree with my colleague, Mr. Short. I wouldn't add to that.

Mr. CONAWAY. Europeans sometimes have a different opinion of conflicts of interest. Any comments, Mr. O'Neill?

Mr. O'NEILL. I just echo Terry's statements really. We think an independent organization, particularly independence of mark-to-market pricing is vital, and clearly we meet those requirements.

Mr. BOOK. I would agree with that. I think the call to the challenge here is to create a robust risk mechanism, and this risk management task should be run on a neutral, independent basis because it just should serve first and foremost market integrity.

Mr. CONAWAY. Thank you, Mr. Chairman. I yield back.

The CHAIRMAN. If I could have the Committee's indulgence, if I could just refine that a little bit.

This independent board, who is going to pick them? I mean, aren't they going to, in reality, be picked by the folks that set this up?

Mr. SHORT. No. Our Board presently under our application consists of our internal management as well as a majority of our independent directors from our main Board of Directors at IntercontinentalExchange, Inc.

The CHAIRMAN. But, we have heard this with a lot of our big corporations, and they are all interconnected and they all know each other, and they are all buddies. So when you say they are independent, at least for me, I am a little skeptical because I think——

Mr. SHORT. I think above all, ICE, if you look at IntercontinentalExchange's governance model, we have had the most independence perhaps of any exchange to the point where we don't really even have major market participants sitting on our Board of Directors. We believe in independence that much.

The CHAIRMAN. Thank you.

The gentlelady from South Dakota, Ms. Herseth Sandlin.

Ms. HERSETH SANDLIN. Thank you, Mr. Chairman. I would just like to follow up for Mr. Duffy and Mr. Short on a couple of questions that Mr. Neugebauer and Mr. Marshall were trying to get at in terms of our concern about the number of different regulators.

And, Mr. Duffy, I hear you loud and clear, that you would prefer that these clearinghouses be regulated by the CFTC. But we have had the SEC in here testifying previously. We have had the Federal Reserve—members of the Federal Reserve Board in here. We can't even get them to agree when they come in and testify that we should mandate regulation of credit default swaps.

So can you clarify your earlier comments—and both of you, this is for both Mr. Short and Mr. Duffy—because it is still unclear to me why, Mr. Short, you have—ICE has pursued sort of a separate infrastructure, whereby you are seemingly seeking an avenue of regulation by the Federal Reserve.

And, Mr. Duffy, what are your concerns based on what—I think you are probably familiar with testimony from the SEC that we have taken before this Committee before—where you see having multiple regulators isn't going to be a problem with the growth of an instrument that can be useful to the economy.

Mr. DUFFY. Congresswoman, first of all, I think that there could be potential growth inhibitors when you have multiple regulators. But I am just trying to be realistic on a product line that we have debated now, especially in this body of Congress, for several months just to get it up and cleared. I believe that you have even had the largest sell-side participants.

The banks say they need a cleared solution to credit default swaps. So we really have been kind of stuck trying to get it up and listed. So from my realistic standpoint, we know that there could be multiple jurisdictions on credit default swaps. Our concern with that, would it ever bleed over into other core product businesses, and that—we think that would be a real detriment to our business.

So, we are willing to participate in multi-regulation to get this product up and listed. We believe we have a good solution that makes sense for the marketplace. So we would like to bring that as quick as possible.

I think we are just trying to be more realistic when it goes to being with our regulator. As far as setting up a bank trust similar to what the IntercontinentalExchange did, we certainly could have gone down that path. We entertained that a couple years back, but we saw best not to do it. So we have not gone down that path, but—we are not prohibited from doing that, though.

Ms. HERSETH SANDLIN. Can you explain why you thought it was best not to?

Mr. DUFFY. Well, we just didn't see any benefits or reasons to go doing that. We already have regulation under the CFTC and the SEC as a publicly traded company, so we didn't think we needed to add additional layers.

Ms. HERSETH SANDLIN. Mr. Short.

Mr. SHORT. ICE's view in terms of why it pursued the path with the Fed again was because we viewed the Fed as a thought leader in this area. Certainly, the New York Fed and Tim Geithner have been pushing in this area for quite some time.

In terms of forming a limited purpose trust company and becoming a state member of the Fed, we wanted to create a separate clearinghouse to isolate this risk, keep it as Wall Street's risk. And separate and apart from that, we viewed this as, perhaps, the best way to get to market quickly. We wanted to propose a solution that would address the existing market problems; because we think that the most important thing to do is to address systemic risk in the system, bring transparency to the marketplace. And then Congress, in a thoughtful manner, can decide ultimately who needs to regulate what products.

Ms. HERSETH SANDLIN. Okay. So it wasn't necessarily any sense on ICE's part that the existing infrastructure of the CFTC or FSA would be inadequate?

Mr. SHORT. Not at all. Both are fine regulators and have the appropriate infrastructure to oversee clearinghouses in this market space.

Ms. HERSETH SANDLIN. But isn't it also possible that, as you say, then Congress can determine who the appropriate regulators should be, that Congress may very well determine that the Federal Reserve shouldn't exercise regulatory authority in this area, that it should be existing entities such as the CFTC? And then where does that leave you in terms of how you have set up your clearinghouse?

Mr. SHORT. We would obviously avail ourselves of whatever regulatory regime Congress thought best to impose in terms of rationalizing the overall market structure. We could operate under any of those regimes.

Ms. HERSETH SANDLIN. Okay.

Thank you, Mr. Chairman. I yield back.

The CHAIRMAN. I thank the gentlelady.

The gentleman from California Mr. Costa.

Mr. COSTA. Mr. Duffy, I am concerned about the issue that was raised earlier with potential conflicts of interest. If, in fact, you are providing clearinghouse functions and at the same time the dealer

banks in fact have the largest positions on some of these default swaps, what can you tell me that is going to convince me otherwise?

Mr. DUFFY. Well, the same thing that we have in our core business today, sir. Some of the largest dealers in the world have some of the largest positions on the CME Group. And we have obviously everything put in place today internally and operationally to make certain that there are no conflicts of interest, because if we had conflicts of interest, we would not have a core business today. We wouldn't be able to become a public company or any of that.

So I think the same assurances that we have on our core business today, sir, are the same assurances that you can have on our credit default swaps offering for the future.

Mr. COSTA. I assume, Mr. Short, you have a similar answer?

Mr. SHORT. Yes. It is a matter of having the right governance. The only additional point I would make is that many of the larger dealers are now bank holding companies or have foreign office—or even if they are foreign, have domestic offices that are subject to Fed regulation. Having that direct Fed insight into their operations, into their balance sheets, I think is particularly helpful in terms of managing risk.

Mr. COSTA. Aren't you concerned that there is not only a lack of credibility among the general public as it relates to everything that has taken place over the last several months, as it relates to the whole CDS issue and the lack of knowledge that the general public really has about what has taken place and what level of exposure is out there?

And it just seems to me that the—and then Members of Congress, we have to figure out a better way to do things. I wouldn't suggest at this point in time that you have a high level of credibility, would you?

Mr. DUFFY. I think the CME Group has a very high level of credibility, sir. We have been in the business for 160 years. We have had zero default. We have never had a customer lose a penny of funds due to a default of one of our clearing member firms. I don't think there are too many businesses in the United States or abroad that can say that they have had that type of credibility in its history as a company.

So, I think that when you look at the credibility of credit default swaps themselves, I think they are widely misunderstood because they are very complicated products. But I would not say that the company of CME Group is not credible because of the things that I outlined, sir.

Mr. COSTA. So you are on record as supporting a regulatory scheme, and you are in the process of pursuing the efforts you have explained to us. But if the Congress agrees in the next year to put together such a scheme, you will follow that lead?

Mr. DUFFY. We have been a regulated exchange since our existence, sir. And we have no interest in being anything other than a highly regulated entity to protect the interests of the participants of our marketplace.

Mr. COSTA. With all that history that you just stated, do you believe it is possible that we can come together with our friends in Europe and elsewhere and set up a standardization and a trans-

parency? I hope a call that will allow the marketplace to work and at the same time provide a level playing field.

Mr. DUFFY. As I said earlier, I think it is imperative that we work hard with our European friends to come up with a standard that we can all abide by. The world has gotten smaller, and it is a global marketplace, so I think it is essential.

At the same time, sir, I think it is essential for the United States to give approval for exchanges such as ours that are neutral parties to go ahead and start to execute and facilitate this business to eliminate some of the systemic risks that have already been in the system.

Mr. COSTA. My time is getting short, but Mr. O'Neill and Mr. Book, my sense is that there is a different view from the folks in a European exchange or clearinghouse and what currently is taking place in London.

Do you see eventually multiple clearinghouses?

Mr. O'NEILL. Sir, I think the statement of the European Commission is to support one or more European CCPs so they would like to see those brought into existence. However, I think actually our policy, as I said, is that there is no regulatory arbitrage, that European or U.S. solutions compete according to their merits. So I think in that respect, we are very much in line with the sentiments expressed here today.

Mr. COSTA. Mr. Book.

Mr. BOOK. I think in general we very much would support, have competition in this field rather than a monopoly, so competing providers that would provide for innovation—also for high standards in the services that are offered. I think that is key. And the requirement for having those multiple providers is to have a level playing field for those in offering their services on a global basis.

Mr. COSTA. With your indulgence, Mr. Chairman; my time has expired. But I have one other question I wanted to raise.

Mr. Duffy, I have a concern as I look across, and we haven't raised the subject here today, but the potential exposure and risk involved in the area of the monolining efforts that have participated in this. We have municipalities throughout the country. Some have filed, sadly, bankruptcy, and are at significant risk.

I don't know if this is an area that you have expertise in. But would you care to comment?

Mr. DUFFY. I think, Congressman, this is not actually an area I have expertise in as far as municipalities and the viability of those municipalities.

Mr. COSTA. I am talking about as it relates to the monoline underwriting on their bonds.

Mr. DUFFY. Well, I mean, their bonds have gone down in value, as have everyone's. So, in all honesty, sir, I am not an expert on the municipality of bonds. So I would not comment.

Mr. COSTA. Would any of the other three gentlemen care to comment?

Mr. SHORT. I am afraid I am not an expert either, sir.

Mr. COSTA. We will find someone who is.

Thank you very much, Mr. Chairman.

The CHAIRMAN. I thank the gentleman.

The gentleman from Indiana, Mr. Ellsworth.

Mr. ELLSWORTH. Thank you, Mr. Chairman. Thank you, gentlemen. My question is for Mr. Duffy and Mr. Short.

Based on what you know, do you think that any exemption granted by the SEC for organizations seeking to establish credit default swaps central counterparties will be temporary? And what is your reaction to the SEC exemption requirements for these central counterparties?

And the second part of the question would be, do you think that these temporary exemptions have created an uncertainty in the market?

Mr. SHORT. I think the SEC, as part of its exemptive relief, has suggested that it might grant temporary exemptive status. I think that part of that might be driven by the speed with which they have had to react to the situation. They have really been working along with the CFTC and the Fed to make sure that a solution comes to market to address some of the systemic risk. It does create a little bit of uncertainty out there that the SEC would be very cautious in withdrawing that exemptive relief in a precarious fashion once a situation was up and running. It may just be waiting and biding its time to see what Congress does with broader market reform.

Mr. ELLSWORTH. Should they define "temporary" or leave it open-ended? Would it be more beneficial to define what the "temporary" is? Or——

Mr. SHORT. It might help.

Mr. DUFFY. I agree with Mr. Short. Uncertainty is never good for any marketplace.

At the same time, I think that the community would look at this and try to bypass the temporary part of the exemption, especially if the solution is successful, sir. If the solution is not successful, I am assuming it is going to be temporary and eliminated or modified. If the solution is successful, I am assuming that the industry, the Street and the participants will bypass the word "temporary," and I am assuming the SEC eventually will make it part of their makeup.

Mr. ELLSWORTH. Thank you. Mr. Chairman, I don't have anything further.

The CHAIRMAN. I thank the gentleman.

The gentleman from Ohio, Mr. Space.

Mr. SPACE. Thank you, Mr. Chairman. This question will be directed to Mr. Duffy and Mr. Short.

Clearinghouses for any financial instrument concentrate risk away from the holders of the instruments into the clearinghouse itself, and there is obviously a great deal of risk associated with these credit default swaps. How would the financial security of the clearinghouse itself be tested to ensure that it can meet the stress of defaulting members, even if such a potentially catastrophic event would be unlikely?

Mr. SHORT. It is all part of the risk management system within the clearinghouse. Positions are margined appropriately. There is a guaranty fund behind those positions, and there is a comprehensive set of stress tests that the clearinghouse undertakes to demonstrate, based upon historical data and projections, what would happen in the event of a significant move in the market.

The comprehensive risk management systems—having comprehensive risk management systems is really what the clearing business is about. And the Fed has been very inquisitive about the amount of stress testing that we are doing, and they are very much on the ball in that regard.

Mr. DUFFY. I would agree.

And I would just add on a stress test, which is critically important, sir, we stress-tested both after the fact Lehman and Bear and the way our risk management capabilities are put into place; the CME Group and its participants all would have been made whole.

There is no question it is a stress on the system. But at the same time our tests all show we would have withstood such an event such as those two large institutions going down.

So I think it is a testament to the risk management capabilities that the CME Group has, and also to the people and experience, which are critically important to making certain that these debts are paid.

Mr. SPACE. Thank you.

I yield back, Mr. Chairman. Thank you.

The CHAIRMAN. I thank the gentleman.

The gentleman from North Dakota, Mr. Pomeroy.

Mr. POMEROY. I didn't quite hear the thrust of what you said when you indicated that—who had been on the ball? I am sorry. Mr. Short, who had been on the ball?

Mr. SHORT. As part of our Fed application process, we have had teams from the Fed, along with the New York City Banking Department, along with representatives of the CFTC and SEC, looking at various aspects of our proposed clearing operations. And part of that review is to walk through the risk management systems and to assure the Fed as part of its approval process that we have the appropriate risk management systems in place. And part of that is running stress tests.

I should have clarified my response.

Mr. POMEROY. Well, I am highly frustrated as a Member of this Committee—participated in the earlier referenced law, the Commodity Futures Modernization Act, and during all the time since, seeing the financial interests represented, exchanges, market participants, regulators. And it was all, what a great piece of work we had done while the biggest financial calamity in 50 years hits Wall Street, largely because of flaws relative to what was regulated, what wasn't regulated.

I mean, I just think—I feel that there was so much that we didn't know that we needed to know, and it is a very regrettable situation. I don't think anyone has been on the ball.

One of the things that worries me about this Memorandum of Understanding in several different sources, potentially hosts for regulatory oversight of exchanges, is that, do we have a capacity in this scheme to keep track of, on the aggregate, the amount of liabilities being assumed by market participants on these credit default swaps?

And, Mr. Short, we will start there and go up and down, if my question is clear.

Mr. SHORT. I believe we do. I think the Memorandum of Understanding provides a framework for inter-regulator dialogue. And

there should be dialogue, because what you have seen ultimately is the convergence of financial instruments over time that are subject to different regulatory regimes. But I think the capacity exists in place to look at that.

Mr. POMEROY. Well, regulators can talk to one another. That, to me, seems a little short of what I would like, which is an ongoing tally kept somewhere in terms of what some of us are exposed to on credit default swaps of various characters.

Could we achieve that within a regulatory regime? And can we achieve it within one where you have various exchanges regulated by various parties?

Mr. SHORT. I think some of that would be handled through the transactional reporting that would occur from the clearinghouse both under our solution and CME's solution. And certainly to the extent that you were dealing with any of the entities that were directly regulated by the Fed, which many of the dealers currently are, I think the Fed would be looking at those tallies very closely going forward.

Mr. POMEROY. We must make sure—it seemed to me, for the same interests you just spoke to, that we are capturing on a comprehensive basis every participant in every credit default swap, and we are keeping a tally in terms of their accumulating exposure. I don't know how else we are going to get our hands around this thing.

Mr. BOOK. do you have an opinion on that?

Mr. BOOK. I think probably it is not so much the focus on the regulation of exchanges and clearinghouses.

I think, first of all, one has to acknowledge the fact that based on these numbers of 2007, 84 percent of derivatives were traded outside of regulated markets in the over-the-counter segment and only 16 percent were traded on regulated markets or clearinghouses, which highlights how big the task is to get all those transactions done on regulated markets or clearinghouses. And I think the first step is to have reporting requirements to, first of all, clarify what is the outstanding exposure that which market participants hold and which instruments. And that it is also a prerequisite. For instance, like the confirmation that has been established with the DTCC Warehouse to have that clarity to establish centralized clearing organization for those businesses and for those highly opaque OTC markets.

Mr. POMEROY. Mr. Duffy.

Mr. DUFFY. Well, I think the reporting part is critically important. You look at the size of the overall market, sir. And I think when we were here a couple of months ago, everybody was trying to determine how big this market really is, because none of us really knew. And that was because of a lack of information associated with it.

I think that you have seen, as I said in my testimony earlier, the Fed, the CFTC and the SEC come together to hopefully net some of these CDSs down. Now we have seen the concentration of this market down to roughly around \$46 trillion, down from around \$60-some-odd trillion.

I think it goes to show you that we need to have a regulator involved to constantly keep on an eye on this, because that was half

the problem: Nobody knew where these credit defaults were, who had them, how much they were worth.

Mr. POMEROY. My concern is, can several regulators concurrently, doing essentially the same thing, achieve that end?

Mr. DUFFY. Our hope is, yes, sir.

As I said earlier, we are very large proponents of the Commodity Futures Trading Commission. We think they have done a remarkable job, especially over the last several years with the growth of our industry. But we do believe multiple regulators can work on the credit default swaps to bring harmonization and bring some compression to this market so we know exactly what it is worth.

Mr. POMEROY. Would one regulator be better?

Mr. DUFFY. Again, I think that that is going to be a little bit unrealistic. But obviously a streamline of any regulation is always a benefit to the product, in my opinion.

Mr. POMEROY. Thanks. I yield back.

The CHAIRMAN. I thank the gentleman.

Anybody else have any further questions? I don't think so.

So we again want to thank this panel for being so generous with your time in answering our questions. We appreciate your being before the Committee. And I am sure we will have more discussion before this is all over with.

So the panel is excused.

Mr. DUFFY. Thank you.

The CHAIRMAN. We will call up the next panel once we get the logistics cleared out here so we can make it happen.

All right. Welcome to the Committee.

This is a distinguished panel: Mr. John Damgard, President of the Futures Industry Association of Washington; Mr. Robert Pickel, CEO of International Swaps and Derivatives Association—he has been with us before; Mr. Don Thompson, the of J.P.Morgan on behalf of the J.P.Morgan and the Securities Industry and Financial Markets Association; Mr. Gerald Corrigan, the Managing Director of Goldman Sachs in New York; and Mr. Brian Murtagh, the Managing Director of Fixed Income Transaction Risk Management, UBS Securities LLC of Stamford Connecticut.

Gentlemen, welcome to the Committee. And you will each be given 5 minutes to summarize your testimony. Your full testimony will be made a part of the record.

So Mr. Damgard, if you will proceed. Again, welcome to the Committee.

**STATEMENT OF JOHN M. DAMGARD, PRESIDENT, FUTURES
INDUSTRY ASSOCIATION, WASHINGTON, D.C.**

Mr. DAMGARD. Thank you much, Mr. Chairman, Members of the Committee. I am John Damgard, President of the Futures Industry Association. And I thank you for inviting the FIA to this hearing on the current plans to clear credit default swaps.

We know this Committee has been actively involved in this issue for many months. FIA greatly appreciates the leadership that you have shown, Mr. Chairman, along with Ranking Member Goodlatte and the other Members of the Committee.

FIA believes credit default swaps add real value to our economy. We also believe that a system for clearing credit default swaps

would enhance that value. As this Committee appreciates, clearing would remove counterparty performance risk, increase transparency and, most importantly, reduce systemic risk. FIA therefore supports plans to clear these instruments.

Today, the FIA would like to make three basic points. First, the vital interest of clearing firms must be recognized in the structure of any clearing system for credit default swaps. Second, government agencies should not make clearing of credit default swaps a jurisdictional football. And third, merging the CFTC and the SEC will not answer the financial market regulatory concerns raised in recent months.

As this Committee is aware, the futures clearing firms are FIA's predominant members. Some may overlook the role these firms play, but the simple truth is the clearing firms are the lifeblood of any clearing system. The clearing firm is financially responsible to the clearinghouse for every trade it clears. Each clearing firm puts its capital at risk at the clearing organization to guarantee performance on the firm's trades and its customers' trades. In effect, the clearing firm is financially underwriting its customers' performance.

Each clearing firm knows that its capital is standing behind other clearing firms in the system and may be called upon if another clearing firm fails. That is why clearing systems are known as mutualized risk systems. In any system for credit default swaps, FIA would expect the clearing firms to play a similar role.

No clearing firm should be asked to commit its capital to a clearing system unless the firm is comfortable that its capital will be well protected. The U.S. futures industry is proud of its unparalleled record in this regard. We assure this Committee will want to make sure that any of the CDS clearing systems now being considered will meet that high standard of excellence including appropriate capital standards for any new clearing members.

FIA strongly believes that the clearing of credit default swaps would serve the public interest. FIA appreciates that existing law is not crystal clear on what is the right regulatory home for credit default swaps that are cleared. No one doubts that the SEC has fraud and manipulation enforcement powers over individually negotiated credit default swaps, and no one doubts that Congress gave the operators of clearing systems for OTC derivatives a choice of regulators—CFTC, SEC or the Fed. The question is, did the CFTC and SEC retain some residual jurisdiction over credit default swaps even when they are being cleared by an entity subject to another regulator's oversight?

FIA believes either the CFTC or SEC or both could state a legal claim to jurisdiction over these instruments. We would ask these agencies to resist the urge to assert their authority to regulate through exemption orders. Instead, all members of the PWG should work cooperatively as a team to put in place a strong and effective, coordinated oversight system for cleared credit default swaps. That is the best approach to serve the public interest as the PWG's recent MOU demonstrates.

Last, throughout the current credit crisis the U.S. futures markets have continued to provide liquid, fair and financially secure trading venues for managing or assuming price risk. The CFTC has

achieved an exemplary regulatory record that is cited throughout the world as the gold standard. That record illustrates the wisdom of this Committee's decision almost 45 years ago to give birth to the CFTC with exclusive jurisdiction over all facets of futures trading. That judgment is as sound today as it was then.

We understand that reforming financial market regulation is on the agenda of the new Administration and the new Congress. Many different suggestions have been offered for changing the regulatory *status quo*. FIA welcomes a healthy debate on how best to strengthen both our regulatory systems and our markets nationally and internationally. All options should be on the table and fully explored.

Through this process, we are confident Congress will agree simply folding the CFTC into the SEC is not the answer. And we look forward to answering any questions the Committee may have.

[The prepared statement of Mr. Damgard follows:]

PREPARED STATEMENT OF JOHN M., DAMGARD, PRESIDENT, FUTURES INDUSTRY ASSOCIATION, WASHINGTON, D.C.

Mr. Chairman and Members of the Committee, I am John Damgard, President of the Futures Industry Association. FIA is pleased to be asked to discuss some of the issues raised by plans to clear credit default swaps. We know this Committee has been actively involved in these issues for many months. FIA greatly appreciates the leadership you have shown, Mr. Chairman, along with Ranking Member Goodlatte and the other Members of this Committee.

Just to establish some common vocabulary, credit default swaps are derivatives designed to manage the risk that a credit event will occur in the future. Those credit events are defined by contract and range from a corporation's failure to make an interest payment to its corporate restructuring. Credit default swaps may involve indexes of credit events for many companies or credit events for a single corporation. That is why you hear discussion of indexed CDS instruments and single name CDS instruments.

FIA is not here today to debate the value of credit default swaps or to champion one clearing proposal over another. We believe credit default swaps add value to our economy. We also believe that an appropriately-structured and regulated CDS clearing system would enhance that value. As this Committee appreciates, clearing would remove counterparty performance risk, reduce systemic risk and increase price transparency for eligible CDS transactions.

FIA has three basic points. First, the vital interests of clearing firms must be recognized in the proper structure of any successful CDS clearing operation. Second, government agencies should not make CDS clearing a jurisdictional football. Third, merging the CFTC and the SEC will not answer the financial market regulatory concerns Congress has raised in recent months.

As this Committee is aware, FIA's regular members are the clearing firms. Many may overlook the role these firms play in any clearing system. But the simple truth is the clearing firms are the lifeblood of clearing. The clearing firm is financially responsible to the clearing house for every trade it clears. Each clearing firm puts its capital at risk at the clearing organization to guarantee performance on the firm's trades and its customers' trades. In effect, the clearing firm is financially underwriting its customers' performance. Each clearing firm knows that its capital is standing behind the other clearing firms in the system and may be called upon if another clearing firm fails. That is why clearing systems are known as mutualized-risk systems.

In any clearing system for CDS instruments, FIA would expect the clearing firms to play a similar role. No clearing firm should be asked to commit its capital to a clearing system unless the firm is comfortable that its capital will be well-protected. The U.S. futures industry is proud of its unparalleled record in this regard. We are sure this Committee will want to make certain that any of the CDS clearing systems now being considered will meet that high standard of excellence, including the capital standards for any new clearing members.

One structural issue that has been raised concerns whether to commingle the risk pool that already exists for futures clearing with the CDS risk pool. An alternative clearing approach would treat the CDS clearing pool as a separate, self-contained

structure. FIA does not have a view now on which approach would be preferable from the perspective of the clearing firms. We do believe the Committee and the relevant agencies should pay particular attention to developments in this area to make certain that the strongest possible CDS clearing solution will be allowed to develop.

Another structural issue is often referred to as interoperability. As CDS clearing evolves, it is unclear whether one clearing system will predominate or whether multiple systems will thrive. In the event more than one system is successfully launched, the regulators should consider a plan to allow an appropriate linkage for the clearing systems that would meet the related challenges of protecting against systemic risk through the most efficient use of a clearing firm's capital.

We suspect the Committee has heard about the interoperability issue, and others, in its recent fact-finding trip overseas and that you will monitor carefully any developments in the U.S. on this issue. Your trip underscores that we can not develop CDS clearing policy in a vacuum. The CDS market is international in scope and our policies must work both domestically and internationally. The CDS clearing issue highlights that today national borders are becoming less meaningful for financial markets. We have one global financial market with global issues that require global cooperation and solutions.

These international issues also serve to remind us that domestic regulatory jurisdictional politics should not become a barrier to forging an appropriate CDS clearing policy. As the CDS market has evolved, it has become clear that it would serve the public interest to make a clearing system available for many of these credit derivatives. Given the current tightening of the credit markets, no agency's jurisdictional claims should be considered to be more important than the national economic interest. Current law provides a choice to those who want to try to clear OTC derivatives in the U.S.—the clearing entity could choose to be regulated by the SEC, the CFTC or the Federal Reserve Board. Each regulatory body has had experience with the kind of prudential, safety and soundness regulatory judgments that clearing operations necessarily involve. And each regulator has pledged to follow the established guidelines, whether adopted by IOSCO or the Commodity Exchange Act, for the operation of an effective CDS clearing system.

Once a clearing system operator has chosen its regulator, that regulatory body should communicate and coordinate with its regulatory colleagues. The recent MOU adopted by President's Working Group rightly adopts this strategy. By emphasizing a process of interagency consultation, the MOU should lead to sharing information and regulatory suggestions among the PWG members with a view toward adopting a streamlined and unified set of oversight principles for CDS clearing in the U.S.

FIA understands the need for legal certainty and that the two U.S. clearing platforms have applied to the SEC for exemptions to provide that clarity. We would hope that those exemptions will not turn into an excuse to regulate CDS transactions or to prescribe additional requirements for clearing. If so, that would undermine the cooperative process the MOU structure has put in place. Congress has found the CFTC and the Fed to be qualified to oversee CDS clearing operations. They should be allowed to perform their statutory functions without interference from the SEC or other regulatory bodies.

In past hearings, the Committee has expressed concern about the basis for the SEC's apparent claim that once a CDS is cleared it becomes a security. In FIA's view, many CDS instruments are just as likely to be considered commodity options subject to CFTC jurisdiction under current law. Jurisdictional flag-planting seems short-sighted given the crisis facing our financial markets. The PWG's MOU process tries to keep that counter-productive activity to a minimum. We would urge the Committee to make certain that neither the SEC nor the CFTC attempts to use its exemption powers and the interest in legal certainty as an excuse to impose regulatory restrictions on CDS transactions that serve the agency's jurisdictional interests, but not the public interest.

Last, as I have testified for decades, no compelling case has been made to merge the CFTC and the SEC. Throughout the current credit crisis, the U.S. futures markets have continued to provide liquid, fair and financially secure trading venues for managing or assuming price risks. The CFTC's vigorous, expert and efficient oversight of our nation's futures markets has achieved an exemplary regulatory record that is cited throughout the world as the gold standard. That record illustrates the wisdom of this Committee's decision almost 45 years ago to give birth to the CFTC with exclusive jurisdiction over all facets of futures trading. That judgment is as sound today as it was then.

We understand that reforming financial market regulation is on the agenda of the new Administration and the new Congress. Many different suggestions have been offered for changing the regulatory *status quo*. FIA welcomes a healthy debate on how best to strengthen both our regulatory systems and our markets, nationally and

internationally. All options should be on the table and explored fully. Through that process, we are confident Congress will agree that simply folding the CFTC into the SEC is not the answer.

We look forward to answering any questions this Committee may have.

The CHAIRMAN. Thank you very much, Mr. Damgard.
Mr. Pickel, welcome to the Committee.

**STATEMENT OF ROBERT G. PICKEL, EXECUTIVE DIRECTOR
AND CEO, INTERNATIONAL SWAPS AND DERIVATIVES
ASSOCIATION, WASHINGTON, D.C.**

Mr. PICKEL. Thank you, Mr. Chairman and Members of the Committee. Thank you for inviting ISDA to testify today at this follow-up hearing regarding credit derivatives.

As you know from our previous meeting, ISDA and the OTC derivatives industry are proud of the strength of the OTC derivatives infrastructure and what it has demonstrated during the recent turmoil, while at the same time being committed to working with Congress, regulators and within the industry to strengthen these markets still further.

Credit default swaps benefit the broader economy by facilitating lending and corporate finance activity, which is especially crucial in today's tight credit environment. They perform a valuable signaling function and allow investors to express a view on the market. CDSs have remained the only credit product consistently available to allow companies and investors to transfer credit risk and express a view on credit performance. While cash securities and money markets have seized up, CDSs have continued to function. Illiquidity in the financial markets would likely be worse if companies and investors did not have a healthy CDS business available to them.

Furthermore, the causes of the financial crisis are rooted in poor lending decisions, particularly in the residential real estate market. For more than 2 decades, ISDA has maintained an active and collaborative dialogue with public policymakers and supervisors, including financial regulators, legislators and governments around the globe to establish a sound policy framework for swaps activity. Since 2005, market participants have been working towards implementing a central clearinghouse for credit derivative transactions. Building on these efforts, ISDA and its members have worked together with the President's Working Group and other regulators towards achieving this objective.

A well-regulated and prudently managed central counterparty can provide benefits to the market by reducing the systemic risk associated with counterparty credit exposures and providing enhanced liquidity and price discovery by means of standardization and centralized trading.

In addition to the ongoing efforts on the central counterparty front, market participants, along with The Depository Trust & Clearing Corporation, have taken a significant step towards addressing market concerns about transparency by publishing on a weekly basis aggregate market data through DTCC's Trade Information Warehouse.

On November 14 the PWG announced a series of policy objectives for the OTC industry, and that has been referenced in the prior

panel. ISDA agrees that the four objectives laid out in the PWG statement and believes that continuing to pursue the improvements industry and regulators have worked on over the last several years is key to ensuring the OTC derivatives industry in the U.S. remains healthy and competitive.

Within these four broader objectives, the PWG lists a number of specific recommendations for the industry, for policymakers, and recommendations of an operational nature. Of particular importance from ISDA's perspective is the PWG statement acknowledging the continued need for bilateral, custom-tailored risk management contracts. While some have posited that all OTC derivatives contracts should be made to trade on-exchange, as the PWG notes, there will continue to be the need for customized OTC derivatives transactions.

As Members of the Committee well know from their recent fact-finding mission to Europe, the European Commission is very interested in these very same issues. In both public and private conversations, they have stated their belief in the need for a European clearing solution regardless of what is done here in the United States. Given that Europe is currently the largest global center for OTC derivative activities, actions taken by regulatory officials there will likewise have a tremendous impact on market participants here in the United States.

As policymakers on both sides of the Atlantic debate how to address clearing and OTC operational issues, it is important to bear in mind the global nature of these products. Policymakers should consider various approaches to addressing and facilitating clearing. It would be beneficial to maintain maximum flexibility in terms of where and how firms choose to clear.

The current stress which the global economy is facing has placed severe burdens on market participants in the operational infrastructure of the entire financial services industry as well as spreading harm to businesses, workers and consumers. While the roots of the market turmoil lie in imprudent lending decisions, there are lessons to be learned across markets and products.

With respect to CDS in general, the market has held up extremely well under the strains of multiple failures of large market participants and issuers of debt. Thus far, the auction and settlement process that we have run together with market and Creditex have performed effectively and the collateral and netting arrangements among market participants has likewise operated as intended. Nevertheless the turmoil has exposed the need for market participants to increase the speed with which they implement operational improvements to which they have already committed; as well as to commit to examining what further improvements might be necessary. ICE looks forward to continuing to work with the Committee, the Congress and regulators to help ensure that the strength and liquidity of the CDS market that it has shown to date in this environment continues in the future. Thank you and I look forward to your questions.

[The prepared statement of Mr. Pickel follows:]

PREPARED STATEMENT OF ROBERT G. PICKEL, EXECUTIVE DIRECTOR AND CEO,
INTERNATIONAL SWAPS AND DERIVATIVES ASSOCIATION, WASHINGTON, D.C.

Mr. Chairman and Members of the Committee:

Thank you very much for inviting ISDA to testify at this follow-up hearing regarding credit derivatives. As you know from our previous meeting ISDA and the OTC derivatives industry are proud of the strength the OTC infrastructure has demonstrated during the recent turmoil, while at the same time being committed to working with Congress, regulators and within the industry to strengthen these markets still further.

About ISDA

ISDA, which represents participants in the privately negotiated derivatives industry, is the largest global financial trade association, by number of member firms. ISDA was chartered in 1985, and today has over 850 member institutions from 56 countries on six continents. These members include most of the world's major institutions that deal in privately negotiated derivatives, as well as many of the businesses, governmental entities and other end-users that rely on over-the-counter derivatives to manage efficiently the financial market risks inherent in their core economic activities.

Since its inception, ISDA has pioneered efforts to identify and reduce the sources of risk in the derivatives and risk management business. Among its most notable accomplishments are: developing the ISDA Master Agreement; publishing a wide range of related documentation materials and instruments covering a variety of transaction types; producing legal opinions on the enforceability of netting and collateral arrangements; securing recognition of the risk-reducing effects of netting in determining capital requirements; promoting sound risk management practices; and advancing the understanding and treatment of derivatives and risk management from public policy and regulatory capital perspectives. Among other types of documentation ISDA produces definitions related to credit default swaps.

The Role CDS Play in the Credit Markets

Credit default swaps (CDS) benefit the broader economy by facilitating lending and corporate finance activity, which is especially crucial in today's tight credit environment. They perform a valuable signaling function and allowing investors to express a view on the market.

CDS provide a simple device for banks and other lenders to hedge the risks associated with lending to a particular company, group of companies or industry. Generally speaking, CDS hedge the risk that a borrower will default. Fundamentally, if a lender can be sure it will be made whole regardless of whether a borrower defaults, it is more likely to lend. CDS also free capital for further lending activity by, among other things, enabling lenders to effectively manage its regulatory capital requirements or by increasing a lender's credit limit with respect to a specific borrower or industry. Ultimately, CDS increase liquidity in the banking industry because they enable banks to manage the credit risk inherent in lending. Because CDS limit the bank's downside risk by passing it on to parties that seek such exposure, banks are able to lend more money to many more businesses. CDS thus significantly expand companies' access to capital from bank lending; indeed, without this risk management option credit markets might be even more tightly constricted than they presently are.

CDS also serve a valuable signaling function. CDS prices produce better and more timely information about the companies for whom a CDS market develops because CDS prices, unlike the credit ratings published by rating agencies, rely on market-based information about a company's financial health. CDS prices reveal changes in credit conditions, giving insight to bankers, policymakers, investors and others about credit in real-time, making it easier to manage and supervise traditional banking activities. The recent trend of basing term loan pricing on CDS spreads as opposed to credit ratings illustrates the increasing value lenders place on CDS pricing information.

CDS has remained the only credit products consistently available to allow companies and investors to transfer credit risk and express a view on credit performance; while cash, securities and money markets have seized up, CDS have continued to function. Illiquidity in the financial markets would likely be worse if companies and investors did not have a healthy CDS business available.

CDS are an efficient means of hedging risk or adjusting positions; they remain an accurate indicator of credit quality, are highly liquid, and have been the best way to express a view on credit in troubled times when cash and securities markets have seized up.

Central Counterparty Clearing and DTCC Trade Information Warehouse

For more than 2 decades, ISDA has maintained an active and collaborative dialogue with public policymakers and supervisors including financial regulators, legislators, and governments around the globe to establish a sound policy framework for swaps activity. Since 2005, market participants have been working towards implementing a central clearing house for credit derivative transactions. Building on these efforts, ISDA and its members have worked together with the President's Working Group and other regulators towards achieving this objective. As a result of these efforts, central counterparty clearing of CDS (CDS CCP) is near, with the goal of commencing operations before the end of 2008.

A well-regulated and prudently managed CDS CCP can provide benefits to the market by reducing the systemic risk associated with counterparty credit exposures and providing enhanced liquidity and price discovery by means of standardization and centralized trading. Additionally, there is the probable reduction of economic and regulatory capital and likely increased transparency.

In addition to the ongoing efforts on the CDS CCP front, market participants along with the Depository Trust & Clearing Corporation (DTCC) have taken a significant step towards addressing market concerns about transparency by publishing, on a weekly basis, aggregate market data from DTCC's Trade Information Warehouse (Warehouse). The market data consists of outstanding gross and net notional values of CDS contracts registered in the Warehouse for the top 1,000 underlying single-name reference entities and all indices, as well as certain aggregates of this data on a gross notional basis only.

ISDA continues to support the development of options for participants in CDS to undertake their business in the most prudent and efficient manner and to the highest standards of commercial conduct. We welcome the development of clearing and settlement arrangements which would provide the benefits of choice and flexibility to participants within the sound industry framework developed by ISDA over 20 years ago; a framework that benefits from the significant counterparty credit risk mitigation of legally enforceable netting and collateral arrangements.

Recommendations of the President's Working Group

On November 14 the PWG announced a series of policy objectives for the OTC industry. The PWG broke their recommendations into four broad categories: (1) improve the transparency and integrity of the credit default swaps market; (2) enhance risk management of OTC derivatives; (3) further strengthen the OTC derivatives market infrastructure; and (4) strengthen cooperation among regulatory authorities. ISDA agrees with these four objectives, and believes that continuing to pursue the improvements industry and regulators have worked on over the last several years is key to ensuring the OTC derivatives industry in the U.S. remains healthy and competitive.

Within those four broader objectives the PWG lists a number of specific recommendations. These can be separated into recommendations for policymakers (*e.g.*, "Regulators should establish consistent policy standards and risk management expectations for CCPs or other systemically important derivatives market infrastructures and apply those standards consistently"); recommendations for industry (*e.g.*, "Market participants should adopt best practices with respect to risk management for OTC derivatives activities, including public reporting, liquidity management, senior management oversight and counterparty credit risk management"); as well as recommendations of an operational nature (*e.g.*, "Details of all credit default swaps that are not cleared through a CCP should be retained in a central contract repository"). These recommendations provide a helpful framework for policymakers and industry alike to discuss while reviewing and reforming the current regulatory structure. Of particular importance from ISDA's perspective is the PWG's statement acknowledging the continued need for bilateral, custom tailored risk management contracts. As the PWG states: "Participants should also be able to bilaterally negotiate customized contracts where there are benefits in doing so, subject to continued oversight by their prudential supervisors." While some have posited that all OTC derivatives contracts should be made to trade on-exchange, as the PWG notes there will continue to be the need for customized OTC transactions.

On the same day the PWG announced its policy objectives, it also released a Memorandum of Understanding among the Federal Reserve, the Commodity Futures Trading Commission and the Securities and Exchange Commission related to regulation of central counterparties. This Memorandum is an important step in ensuring that regulators do not work at cross-purposes while working to facilitate the creation of a central clearinghouse. It would be unfortunate were the creation of a CDS clearinghouse to be unnecessarily delayed because of a lack of agreement among Federal regulators.

Other Industry Developments

According to ISDA's semi-annual survey at mid-year 2008, the notional amount outstanding of CDS decreased by 12 percent in the first 6 months of the year to \$54.6 trillion from \$62.2 trillion. This reduction represents the efforts of the industry to clean up outstanding trades through a process known as "tear-ups", whereby trades between counterparties which are still on the books but effectively cancel one another out are removed, or "torn up". This reduction in outstanding trades represents a significant achievement for the industry in addressing operational issues, and is but one example of efforts being undertaken, in coordination with regulators, to help ensure the operational infrastructure of the OTC industry is sound and able to withstand any challenges.

It may also be useful at this point to speak for a moment about "notional" amounts. These figures are inevitably cited to promote unease about the size of the OTC market. It is helpful to note that the notional amount of a derivative contract refers to an underlying quantity upon which payment obligations are calculated. Notional amounts are an approximate measure of derivatives activity and reflect the size of the field of existing transactions. For CDS this represents the face value of bonds and loans on which participants have written protection; the exposure under a CDS contract is in fact a fraction of the notional. For example, according to the DTCC (a private organization which processes payments under derivatives contracts) when Lehman Bros. failed the "notional" amount of CDS which referenced Lehman was roughly \$72 billion. However the actual money that exchanged hands was 7% of that total, or a little over \$5 billion.

As the Lehman settlement illustrates the transfer of payments under CDS contracts is nowhere near the jaw dropping amounts often popularly portrayed. And the Lehman settlement further illustrates the ability of the market to settle payments even when the failure occurs at a very large and important market participant. While work remains in addressing operational issues within the industry the Lehman settlement has reassured many about the ability of the OTC market to handle a very large and systemically significant credit event.

Issues Related to the Global Nature of CDS

As the Members of this Committee well know from your recent fact-finding mission, the European Commission is very interested in these same issues. In both public and private conversations they have stated their belief in the need for a "European clearing solution," regardless of what is done in the United States. Given that Europe is the largest global center for OTC derivatives activity actions taken by regulatory officials there will likewise have a tremendous impact on market participants in the United States.

As policymakers on both sides of the Atlantic debate how to address clearing and OTC operational issues it is important to bear in mind the global nature of these products. If a multi-national financial institution is required to clear OTC contracts in each jurisdiction in which it enters into CDS contracts it is likely to incur significant costs. Depending on how great these costs are, onerous requirements in one jurisdiction could lead to a multinational choosing to book all of its derivatives business in just one jurisdiction. Thus for cost-effectiveness purposes there exists the possibility that only one jurisdiction will become the center for a "global clearing solution". Alternatively, firms may find they can clear in each jurisdiction provided there is linked clearing across platforms. As policymakers consider various approaches to addressing and facilitating clearing it would be beneficial to maintain maximum flexibility in terms of where and how firms choose to clear. In this regard the efforts undertaken to date by the NY Federal Reserve and other regulators to encourage clearing should serve as a model. This process has encouraged industry initiative while at the same time working to remove unnecessary obstacles to the development of clearing options. Further, it builds upon the flexibility already extant in U.S. law which provides that a clearinghouse may be regulated by the CFTC, SEC or a Federal banking regulator. Having multiple clearing options, across jurisdictions and regulatory bodies, will allow the market to choose any ultimate "global clearing solution". This result is likely to be best in terms of operational efficiency, cost effectiveness and ensuring the continued health of the CDS market.

Conclusion

The current stress which the global economy is facing has placed severe burdens on market participants and the operational infrastructure of the entire financial services industry, as well as spreading harm to businesses, workers and consumers. While the roots of the market turmoil lie in imprudent lending decisions there are lessons to be learned across markets and products. With respect to CDS, in general the market has held up extremely well under the strains of multiple failures of

large market participants and issuers of debt. Thus far the auction and settlement process have performed effectively, and the collateral and netting arrangements among market participants have likewise operated as intended. Nevertheless the current turmoil has exposed the need for market participants to increase the speed with which they implement operational improvements to which they have already committed, as well as to commit to examining what further improvements might be necessary. ISDA looks forward to continuing to work with this Committee, the Congress and regulators to help ensure that the strength and liquidity the CDS market has shown in this environment continues in the future. Thank you.

The CHAIRMAN. Thank you, Mr. Pickel.
Mr. Thompson, welcome to the Committee.

**STATEMENT OF DON THOMPSON, MANAGING DIRECTOR AND
ASSOCIATE GENERAL COUNSEL, J.P.MORGAN, NEW YORK,
NY; ON BEHALF OF SECURITIES INDUSTRY AND FINANCIAL
MARKETS ASSOCIATION**

Mr. THOMPSON. Thank you, Mr. Chairman. The credit default swap market has experienced significant growth in recent years because credit default swaps are useful tools for managing and investing in credit risk, and they provide significant and economic benefits. For example, credit default swaps have increased the availability of credit. Because they enable banks and other lenders to efficiently manage credit exposure, credit default swaps increase lenders ability to extend credit to their customers. Incidentally, credit default swaps spreads also provide a convenient and accurate measure of the relative riskiness of companies and other economic entities.

The mainstream financial press frequently cites increases in credit default swap spreads as evidence that particular companies are in financial distress. Although the derivatives business is sometimes described as unregulated, that is inaccurate. Virtually all of the significant participants in the CDS market are U.S. and foreign banks or bank holding company subsidiaries.

Banks are subject to extensive regulation by state and Federal regulators and bank holding companies are regulated by the Federal Reserve. The broad authority given to these regulators includes the authority to obtain information about bank and bank holding company business activities, transactions and asset portfolios, and also the authority to prohibit activities that might threaten the safety and the soundness of a bank.

Bank regulators establish minimal capital requirements, review risk management and control practices, and conduct ongoing examinations of the institutions they regulate. Credit default swap market participants are also subject to the SEC's anti-fraud and anti-manipulation authority under the 1934 Act. The Commission has broad authority to investigate whether any person has violated the Act, including authorities that require the production of books and records.

Even though most swap dealers that engage in credit default swap transactions already are subject to comprehensive oversight and regulation, we strongly support efforts to improve systemic stability, in particular by using a clearinghouse to reduce counterparty credit risk. We also strongly support enhanced regulatory oversight of credit default swap markets and market participants. Recent events have shown that a poorly managed credit default swap busi-

ness can threaten not only the financial condition of the firm engaged in that business, but also the stability of other firms and financial markets generally.

Additional steps that should be included; giving a single Federal regulator additional information gathering authority with respect to clearinghouse facilities and significant market participants, and empowering that regulator to adopt regulations to ensure prudent business practices and to minimize systemic risk.

Because the credit default swap market is global, we believe that regulation at the Federal level with international consultation and cooperation is the correct approach. Participants in the credit default swap market generally support the OTC derivatives initiatives announced by the President's Working Group on financial markets on November 14th, 2008. In particular, we strongly support implementation of central counterparty services for credit default swaps.

My bank, J.P.Morgan, is working with other market participants to establish a clearinghouse for credit default swap transactions. We believe the clearinghouses will be in operation shortly, although full implementation will be phased in over time. We believe that the development of the clearinghouse with credit derivatives with a central counterparty is an effective way to reduce and mutualize counterparty credit risk, which, in turn, will help promote market stability.

The clearinghouse, also, will facilitate regulatory oversight by providing a single location for access to information about the credit default swap transactions it processes. We also generally support the PWG's policy objective of improving the transparency and integrity of the credit default swap market. Although care should be taken to protect information that might adversely effect the competitive positions of market participants.

In summary, Mr. Chairman, credit default swaps are financial instruments that are useful tools for managing credit risk. Their importance in our economy is demonstrated by the tremendous growth in the credit defaults swap market in recent years. We recognize, however, that the credit defaults swaps, like any finance instrument, can be misused or mismanaged. We believe that the industry's implementation of a credit default swap clearinghouse will reduce risk. And we appreciate the encouragement and support regulators have given to our efforts.

Additional steps to improve regulatory oversight of credit default swap activities will further reduce risk. And we look forward to working with Members of Congress and other governmental official on initiatives to enhance the effectiveness of regulation without imposing unnecessary limitations on the markets or its participants. Thank you.

[The prepared statement of Mr. Thompson follows.]

PREPARED STATEMENT OF DON THOMPSON, MANAGING DIRECTOR AND ASSOCIATE GENERAL COUNSEL, J.P.MORGAN, NEW YORK, NY; ON BEHALF OF SECURITIES INDUSTRY AND FINANCIAL MARKETS ASSOCIATION

Introduction

Chairman Peterson, Ranking Member Goodlatte, and Members of the Committee:

My name is Don Thompson and I am the co-head of the derivatives legal practice group at J.P.Morgan. I am appearing on behalf of J.P.Morgan and the Securities Industry and Financial Markets Association.¹ Thank you for inviting both organizations to testify at today's hearing.

The Role of Credit Default Swaps in Our Economy

Credit derivatives were developed in the mid-1990s and have experienced significant growth² due to their usefulness for purposes of managing and investing in credit risk. Among the various types of credit derivatives, credit default swaps (CDS) are the most widely used product and they play an important role in our economy.

For example, the availability and use of CDS has increased liquidity in credit markets. Because they enable banks and other institutional lenders to efficiently manage credit exposure in their portfolios, CDS make it possible for these lenders to provide more liquidity to particular companies than they otherwise would if they did not have the option to hedge in the CDS market. CDS also provide a convenient and accurate measure of the relative riskiness of companies and other economic entities. CDS represent pure credit risk, isolated from the other risks that are inherent in bonds and other financial instruments, such as interest rate risk. As such, CDS spreads, the prices quoted by swap dealers for CDS covering a particular company's obligations, send prompt and clear signals to the market when the company's credit risk changes. The mainstream financial press frequently cites increases in CDS spreads as evidence that particular companies are in financial distress.

Regulation of Credit Default Swaps

Although derivatives markets and products are sometimes described as unregulated or not subject to regulatory oversight, that is inaccurate and misleading. Virtually all of the significant participants in the CDS market are U.S. and foreign banks or bank holding company subsidiaries. (One notable exception, of course, is the AIG affiliate that was an active CDS market participant, but not a bank or bank holding company subsidiary.)³ Banks are subject to extensive regulation by state and Federal bank regulators, and bank holding companies are regulated by the Federal Reserve. The broad authority given to these regulators includes the authority to obtain information about bank and bank holding company business activities, transactions and asset portfolios and also the authority to prohibit activities that might threaten the safety and soundness of a bank. The banking regulators establish minimum capital requirements, review risk management and control practices, and conduct ongoing examinations of the institutions they regulate. CDS market participants also are subject to the SEC's anti-fraud and anti-market manipulation authority under the Securities Exchange Act of 1934 and the Commission has broad investigatory authority to determine whether any person has violated the Act, including the authority to require the production of books and records.

Even though most swap dealers that engage in CDS transactions already are subject to comprehensive oversight and regulation, we strongly support efforts to improve systemic stability, in particular by using a clearinghouse to reduce counterparty risk. We also strongly support enhanced regulatory oversight of CDS markets and market participants. Recent events have shown that a poorly managed CDS business can threaten not only the financial condition of the firm engaged in that business (*e.g.*, AIG), but also the stability of other firms and financial markets generally. Additional steps that should be considered include giving a single Federal financial regulator additional information gathering authority with respect to clearinghouse facilities and significant market participants, and empowering that regulator to adopt such regulations as might be appropriate to ensure prudent business practices and minimize systemic risk. Because the CDS market is global, we believe

¹ The Securities Industry and Financial Markets Association brings together the shared interests of more than 650 securities firms, banks and asset managers locally and globally through offices in New York, Washington, D.C., and London. Its associated firm, the Asia Securities Industry and Financial Markets Association, is based in Hong Kong. SIFMA's mission is to champion policies and practices that benefit investors and issuers, expand and perfect global capital markets, and foster the development of new products and services. Fundamental to achieving this mission is earning, inspiring and upholding the public's trust in the industry and the markets. (More information about SIFMA is available at <http://www.sifma.org>.)

² The International Swaps and Derivatives Association estimates the total notional amount of outstanding CDS grew from \$8.42 trillion at the end of 2004, to \$34.4 trillion at the end of 2006, and to \$54.6 trillion as of June 30, 2008. Although these statistics provide an indication of growth in the use of CDS, they greatly overstate net CDS exposure.

³ This AIG affiliate, which has incurred significant losses in connection with its CDS business, was not subject to regulatory oversight in the manner that banks are, nor was it regulated by any insurance regulator.

that regulation at the Federal level, with international consultation and cooperation, is the right approach. Vesting authority in a single regulator would promote consistency in the application of regulations and provide comprehensive oversight of markets and market activity.

President's Working Group Initiatives

Participants in the CDS market generally support the OTC derivatives oversight and infrastructure initiatives announced by the President's Working Group on Financial Markets (PWG) on November 14, 2008. In particular, we strongly support implementation of central counterparty services for CDS. My bank, J.P.Morgan, is an active member of the group of CDS market participants that have been working to establish a clearinghouse for CDS transactions and I believe it will be in operation in a matter of weeks, although full implementation will be phased in over a period of several months. We believe that the development of a clearinghouse for credit derivatives with a central counterparty is an effective way to reduce and mutualize counterparty credit risk, which in turn will help promote market stability. In addition to reducing counterparty credit risk and operational risk, the clearinghouse will facilitate regulatory oversight by providing a single location for access to information about the CDS transactions it processes.

We also generally support the PWG's policy objective of improving the transparency and integrity of the CDS market, although care should be taken to protect information that might adversely affect the competitive positions of market participants. We agree with the steps outlined by the PWG to enhance risk management of OTC derivatives and would emphasize the importance of consistent standards being adopted by different regulatory bodies. The objective of further strengthening OTC derivatives market infrastructure is advisable, although we do not believe that the use of an exchange for standardized CDS contracts⁴ should be mandated. We believe that the OTC markets and exchange-traded markets can coexist and that market conditions should determine which market is used in a particular circumstance. We agree that the ability to negotiate customized contracts should be maintained.

We believe the objective of strengthening cooperation among regulatory authorities is important, particularly insofar as it promotes regulatory consistency and efficiency through information sharing. Minimizing regulatory overlap and duplication results in more effective regulation without the imposition of unnecessary burdens.

Memorandum of Understanding Between Federal Reserve, CFTC, and SEC

We support the objectives of the Memorandum of Understanding between the Federal Reserve Board, the CFTC, and the SEC regarding central counterparties for CDS. Its provisions are designed to confirm that information can be shared by the agencies without waiving confidentiality, that information about customers shared among the agencies is exempt from notice requirements under the Right to Financial Privacy Act, and that the CFTC can keep private any information that would disclose confidential business information. We believe these provisions are appropriate.

Conclusion

Credit default swaps are financial instruments that are useful tools for managing credit risk. Their importance in our economy is demonstrated by the tremendous growth in the CDS market in recent years. We recognize, however, that CDS, like any financial instrument, can be misused or mismanaged. We believe that the industry's implementation of a CDS clearinghouse will reduce risk and we appreciate the encouragement and support that financial regulators have given to our efforts. Additional steps to improve regulatory oversight of CDS activities will further reduce risk and we look forward to working with Members of Congress and regulatory authorities on initiatives that will enhance the effectiveness of regulation without imposing unnecessary limitations on the market or its participants.

The CHAIRMAN. Thank you, Mr. Thompson. We appreciate your being with us.

Dr. Corrigan, welcome to the Committee.

⁴ An example of a standardized CDS contract is an index-based CDS that references a common group of firms and covers a fixed 5 year period.

**STATEMENT OF E. GERALD CORRIGAN, Ph.D., MANAGING
DIRECTOR, GOLDMAN, SACHS & CO., NEW YORK, NY**

Dr. CORRIGAN. Thank you, Mr. Chairman and Members of the Committee I submitted a rather lengthy statement I will not go through in any detail. I want to focus specifically on the end of my statement that focuses on what I call enhanced official oversight of the CDS-related markets. Here I am suggesting, for your consideration, five guiding principals and five suggestions, all of which are focused on enhanced financial stability, and all of which I believe are consistent with the spirit of the MOU between the Fed, SEC and CFTC.

The first of those guiding principals, Mr. Chairman, simply stresses the point that the leadership of major financial institutions across the board must understand that further financial commitments of resources are needed to enhance the stability of these CDS and related markets.

The second principle suggests that regulators, legislators and market participants alike should exercise great care in this effort so as not to fall victim to the laws of unintended consequences.

The third principle suggests that even in face of the substantial write-downs experience in the CDS base, they must recognize that subflaws probably reflect flaws in risk management as much, if not more, than they did in flaws in the design of the instrument.

Fourth from the viewpoint of financial stability, whether or not, or to what extent, CDS trades occur on organized exchanges is not a matter of overriding importance so as long as the details of such trades are made available on trade date to the DTCC Warehouse.

And finally, the prompt implementation of a CCP for credit default swaps will constitute a necessary, but in my judgment, not sufficient condition to facilitate the orderly wind down of seriously troubled and highly interconnected financial institutions.

To get the conditions of both, necessary and sufficiently, requires in my judgment the following. First, regardless of which CCP emerges as the industry standard, the authorities must satisfy themselves that the risk mitigation features of the CCP will have virtually failsafe operational and financial integrity, including the capacity to absorb the default of two of its largest members. Consistent with this philosophy, I believe there should be a single dedicated global CCP for CDS transactions, and that any approach that commingles CDS settlement funds with other funds for other financial instruments would be unwise.

Second, I think we need to continue to believe on the leadership of the New York Fed and other regulators to strengthen and sustain the public-private cooperation that has been so successful in the last 3 years in dealing with some of those issues.

Third, I believe the prudential supervisors should be a part of regular inspections and examinations to ensure that individual institutions are doing their part in meeting best practices to deal with these conditions.

Fourth, prudential supervisors should on a case-by-case basis, make inquiries regarding highly concentrated positions and crowded trades. And where necessary, encourage or require individual institutions to moderate the risk of such positions.

And finally, major American participants and their supervisors must ensure that risk monitoring, risk management and of special importance corporate governance regarding practices in the marketplace are subject of continuing and intense oversight by the private and the official community. Thank you, Mr. Chairman. I will complete my remarks with that.

[The prepared statement of Dr. Corrigan follows.]

PREPARED STATEMENT OF E. GERALD CORRIGAN, PH.D., MANAGING DIRECTOR,
GOLDMAN, SACHS & CO., NEW YORK, NY

Chairman Peterson, Ranking Minority Member Goodlatte, and Members of the Committee, I appreciate the opportunity to appear before you this afternoon in order to share with you my observations on the workings of the marketplace for credit default swaps (CDS). My remarks emphasize the further steps which I believe should be taken to enhance the efficiency, resiliency and the stability of that marketplace.

Needless to say, the CDS market is widely cited as a significant contributing factor to the volatility and uncertainty that has been at the center of the financial market crisis that has gripped the U.S. and the global financial system for the last 16 months. Having said that, I want to emphasize at the outset that despite the events of the recent past, a great deal of effort has, over the past 3 years, been devoted to enhancing market practices in the CDS space on the part of both the public and private sectors. Accordingly, I have attached to this statement two *Appendices* drawn from the July 27, 2005 and the August 6, 2008 Reports of the Counterparty Risk Management Policy Group (CRMPG) which contain valuable information on the subject of this hearing including an imposing list of Recommendations from the 2008 Report for further strengthening the CDS and related markets.

A number of these Recommendations have been, or are in the process of being, implemented. Indeed, I would respectfully suggest that had it not been for the improvements in market practices over the past 3 years, the events of recent months probably would have been even more damaging as difficult as it is to imagine such an outcome. But, we should make no mistake about the future reform agenda which remains formidable.

My written statement covers four subjects that are relevant to the purpose of the hearing as follows:

- Section I: The Nature of the Credit Default Swap Instrument
- Section II: The Structure of the Credit Default Swap Market
- Section III: Risk Monitoring and Risk Management for CDS Users
- Section IV: Enhanced Official Oversight

Section I: The Nature of the Credit Default Swap Instrument ¹

In essence, the CDS is a deceptively simple financial instrument in which counterparty A (the seller of credit protection) receives a fee from counterparty B (the buyer of credit protection) in exchange for protecting counterparty B against a decline in credit worthiness or a “credit event” of a so-called “reference entity.” The reference entity may be a credit claim (a loan or a bond) against a particular company or country (a single name CDS) or it may be a basket of single names (an index CDS). The reference entity may also be a specific asset-backed security or a structured credit product such as a collateralized debt obligation (CDO).

If the creditworthiness of the reference entity declines—the buyer of protection (counterparty B in the above example)—gains and the seller of protection (counterparty A above)—loses. In the extreme case in which the reference entity experiences a “credit event” (such as a default), the buyer of protection (counterparty B) delivers the defaulted instrument to the seller of protection (counterparty A) and receives the par amount of the CDS contract. Needless to say, in a volatile financial market environment in which credit quality is falling and the risk of default is rising, the counterparty risk management process in the CDS market becomes very challenging—to put it mildly (see *Section III* below).

Section II: The Structure of the Credit Default Swap Market

The CDS market is comprised largely of sophisticated financial institutions. There are about 16 so-called “dealers” at the center of the CDS market. These dealers—

¹ For a detailed description of the CDS see *Appendix A*.

all of which are owned and controlled by major U.S. and foreign banking institutions—play the vital role of market makers in a wide array of financial instruments including CDS. They also take proprietary positions in these instruments, in part, as a natural extension of their market making activities. While precise estimates of activity levels in the CDS market are not easy to compile, most observers would suggest that something approximating 90 percent of overall activity in the CDS market can be attributed to the dealer community. Whatever the precise number, it necessarily follows that the bilateral and multilateral counterparty risk exposures among the dealers to each other are very large.

The balance of the CDS market is comprised of several other classes of institutions including corporates, insurers (including monolines) and, in particular, hedge funds. As described in *Appendix A*, the rationale as to why individual institutions and classes of institutions choose to participate in the CDS market varies considerably across classes of institutions and over the credit cycle. At the risk of considerable oversimplification, however, the motivation for participation centers around a few key factors including (1) satisfying the needs of clients; (2) an explicit decision to be either long or short credit risk; and (3) an explicit decision to hedge credit risk.

Reflecting in part the huge structural changes in financial markets over the past decade or so and the even larger changes in the macro-economic and the macro-financial environment over the past 5 years, the growth of the CDS market has been explosive—and then some. Over roughly the last decade, the CDS market also experienced a radical transformation from a market that was, in large part, designed to mitigate relatively infrequent events (defaults) to a market that is dominated by trading activity in which very large trades with short durations are commonplace.

It is these patterns of trading activity that produce the headline news items about the \$60 trillion plus notional size of the CDS market even as we all know that notional amounts tell us very little about risk factors for the marketplace and its participants.

Unfortunately, the industry itself contributed to the focus on the gross notional sizes of the CDS market. That is, until recently when new trades were put in place to offset existing trades the existing trades typically were not closed out, thus swelling the gross notional size of the market. In recent weeks, and months, joint public-private efforts aimed at “trade compression” have resulted in dramatic declines in the gross notional amounts of CDS outstanding. For example, information released recently indicates that trade compression efforts have eliminated the notional value of CDS outstanding by \$27 trillion. Further reductions are expected in the period ahead such that even with new transactions growing rapidly, the notional amount of CDS will soon fall below \$30 trillion and will trend still lower over time.

There is one other feature of the CDS market that should be highlighted; namely, while in trade count terms a significant fraction of CDS trades are straight-forward in design and structure, a *relatively small number of high value trades are highly structured and highly complex*. These so-called “bespoke” trades are often initiated by clients of financial intermediaries and require quite complex and unique documentation. These bespoke trades are a very important source of the value added provided by the CDS market. Thus, efforts aimed at reform must not be so rigid and mechanical so as to undercut the ability of the market to forge unique solutions to unique problems.

Section III: Risk Monitoring and Risk Management for CDS Users

With the benefit of hindsight it is quite obvious that a number of large and sophisticated financial institutions experienced shortcomings in their risk monitoring and risk management activities before and during the crisis and that some such shortcomings occurred in the CDS space. The mere presence of a small number of highly concentrated CDS risk exposures across the financial landscape tells us in unmistakable terms that some market participants were quite slow in recognizing that these exposures risked material write-downs and very sizeable collateral calls. It is also true that the more complex the reference entity (*e.g.*, CDO's), the more difficult it is to anticipate credit problems and the more likely it is that collateral disputes between counterparties will arise. Having said that, failures in risk monitoring and risk management were by no means limited to the CDS space in a context in which hedging opportunities made possible by the CDS surely did help many institutions to mitigate credit exposures.

All of this raises the very difficult analytical question of whether, on balance, the CDS tempered or amplified the credit crisis. While I believe that we will gravitate toward an informed answer to that question only with the passage of time, based on what we now know I see the CDS as a net plus. In saying that, I must acknowledge that the CDS and other segments of the financial markets have benefited greatly from large scale central bank and governmental interventions. It is also true

that the CDS market has benefited from a handful of recently implemented critical reforms as follows:

- (1) The prohibition against novation of trades without the consent of the initial counterparty;
- (2) huge reductions in unsigned trade confirmations;
- (3) major advances in automation covering all steps in the trade processing cycles;
- (4) the building of a consensus approach to cash settlement in the event of a reference entity default which proved extremely valuable in the credit events at the housing GSE's and Lehman;
- (5) the agreement among the dealers on the use of a common close out methodology which, fortunately, was put in place only weeks before the Lehman bankruptcy. Had this agreement not been in place the very challenging aftermath of the Lehman bankruptcy would have been an even greater blow to market confidence; and
- (6) important strides have been made in increasing the transparency of the CDS market.

Turning to the subject of risk management more generally, *Appendix A* explains, in straight-forward terms, the nature of the risks associated with the CDS instrument. In examining the events leading up to and including the crisis it is quite clear that the very large write-downs and losses witnessed in the CDS space were importantly driven by either or both "basis" risk and "counterparty" risk.

To a considerable degree the basis risk problem arose because efforts to hedge risks did not always perform as expected due to sometimes very large disparities in the absolute and relative movements in the prices of position being hedged and the CDS designed to provide the hedge. In a few cases even the algebraic sign of the hedge was wrong; that is the price of the underlying asset and the hedging instrument actually moved in the same direction!

With regard to counterparty risk, it has been widely recognized in the press and elsewhere that highly concentrated positions at a relatively small number of institutions—particularly sellers of protection involving complex reference entities—resulted in massive collateral calls which caused large write-downs and impaired the liquidity position of the institutions in question. Even worse, there were situations in which basis risk, counterparty risk, and the embedded leverage in certain classes of structured credit products interacted with each other in ways that amplified contagion and volatility, and multiplied the size of margin calls and write-downs.

The legacy of these events in the CDS space will be with us for a long time. However, as we seek to draw lessons from these events we must proceed with care. Indeed, as discussed in the next section of this statement, I believe that the agenda for further reform in the CDS space is reasonably clear even if full implementation of the agenda will be challenging and time consuming.

Section IV: Enhanced Official Oversight

Given all that has occurred on the financial front over the past 16 months, it is only natural that this Committee, the Congress as a whole and the public at large are focused on enhanced official oversight of financial markets and institutions. Fortunately, the Memorandum of Understanding entered into by the FED, the SEC and the CFTC on November 14, 2008 regarding "Central Counterparties for Credit Default Swaps" provides something of an anchor for such focus as it applies to CDS and OTC derivatives more generally.

As I see it, the approach to enhance official oversight should be based on five guiding principles and five suggestions, all of which are focused on financial stability, as follows:

Guiding Principles

First; the financial industry, broadly defined, must recognize at the highest levels of management that a substantial further commitment of leadership and resources must be devoted to necessary enhancements in the efficiency, resiliency, stability and integrity of the OTC markets with specific emphasis on the CDS. *Second*; in shaping the reform agenda, the regulators, legislators and market participants should exercise great care so as not to fall victim to the laws of unintended consequences. As an example, even the hint of an approach that would raise questions about the legal standing of existing contracts could materially worsen the already badly shaken confidence in financial markets and institutions.

Third; even in the face of substantial write-downs experienced by some institutions in the CDS space, we must recognize that such losses probably reflect flaws in risk management much more than they reflect flaws in the instrument.

Fourth; from the viewpoint of financial stability, whether or to what extent CDS trades occur on organized exchanges is not a matter of overriding concern so long as the details of all such trades are made available *on trade date* to the DTCC warehouse.

Finally; the prompt implementation of a CCP for credit default swaps will constitute a necessary, *but not sufficient*, condition to facilitate the orderly wind-down of seriously troubled and highly inter-connected financial institutions.

With those guiding principles in mind, I would offer the following specific suggestions as to official initiatives that would further strengthen the CDS and related OTC derivatives markets. These suggestions are all focused on measures to further mitigate systemic risk. As such they complement the CCP and bring us closer to the goals of achieving the necessary and sufficient conditions of containing systemic risk arising from these markets.

Suggestions To Mitigate Systemic Risk

First; regardless of which CCP emerges as the industry standard, the authorities must satisfy themselves that the risk mitigation features of the CCP have virtually failsafe operational and financial integrity including the capacity to absorb the default of two of its largest members. Consistent with this philosophy, I also believe that there should be a single dedicated global CCP for CDS and that any approach that co-mingles CDS settlement funds with settlement funds for other financial instruments is unwise.

Second; building on the highly effective leadership of the New York Fed and the community of domestic and international supervisors, we must sustain and strengthen the public-private cooperative efforts to ensure that the necessary steps to strengthen the *industry wide* infrastructure surrounding the OTC markets are implemented in a timely fashion. These necessary initiatives are outlined in *Appendix B*.

Third; prudential supervisors should, as a part of their regular inspections and examinations, insure that individual institutions are doing their part to insure that such institutions' policies, practices, procedures and operating systems regarding the needed infrastructure improvements are in line with industry best practices.

Fourth; prudential supervisors should, on a case by case basis, make inquiries regarding highly concentrated positions and crowded trades and, where necessary, encourage or require individual institution to moderate the risks of such positions. On a voluntary basis, hedge funds and other unregulated financial institutions should be willing to respond to similar inquiries or face the prospects of greater direct regulation.

Finally; major market participants and their supervisors must ensure that risk monitoring, risk management and, of special importance, corporate governance practices are in line with best practices with particular emphasis on monitoring exposures and the application of rigorous valuation and price verification practices to complex transactions. Among other things, such best practices will play a constructive role in quickly resolving collateral disputes.

These five guiding principles and five suggestions to enhance official oversight of the OTC derivatives markets are, I believe, very much consistent with the spirit of the FED, SEC and CFTC Memorandum of Understanding. More importantly, they are also consistent with the broader objective of enhancing our shared vision of greater financial stability while striking a constructive and modest re-balancing of the role of marketplace and the role of public policy in fostering a more disciplined approach to financial intermediation, which of course, is essential to economic growth and rising standards of living.

APPENDIX A

The following is an extract from the July 27, 2005 Report of the Counterparty Risk Management Policy Group II entitled "Toward Greater Financial Stability: A Private Sector Perspective."

The credit default swap (CDS) is the cornerstone of the credit derivatives market. A credit default swap is an agreement between two parties to exchange the credit risk of an issuer (reference entity). The buyer of the credit default

swap is said to buy protection. The buyer usually pays a periodic fee and profits if the reference entity has a credit event, or if the credit worsens while the swap is outstanding. A credit event includes bankruptcy, failing to pay outstanding debt obligations or, in some CDS contracts, a restructuring of a bond or loan. Buying protection has a similar credit risk position to selling a bond short, or “going short risk.”

The seller of the credit default swap is said to sell protection. The seller collects the periodic fee and profits if the credit of the reference entity remains stable or improves while the swap is outstanding. Selling protection has a similar credit risk position to owning a bond or loan, or “going long risk.”

Other noteworthy aspects of the credit default swap market include:

- The most commonly traded and therefore the most liquid tenors for credit default swap contracts are 5 and 10 years. Historically, volumes are concentrated in the 5 year maturity. One large financial intermediary estimates that 70% of the CDS volume is in this tenor, with 20% in longer maturities and 10% in shorter maturities. Liquidity across the maturity curve continues to develop, however, demonstrated by CDX indices, which are quoted in the 1, 2, 3, 4, 5, 7, and 10 year tenors.
- Standard trading sizes vary depending on the reference entity. For example, in the U.S., \$10 million–\$20 million notional is typical for investment grade credits, and \$2 million–\$5 million notional is typical for high yield credits. In Europe, €10 million notional is typical for investment grade credits, and €2 million–€5 million notional is typical for high yield credits.

Credit default swap indices provide investors with a single, liquid vehicle through which to take diversified long or short exposure to a specific credit market or market segment. The first index product was the High Yield Debt Index (HYDI), created by JPMorgan in 2001. Like the S&P 500 and other market benchmarks, the credit default indices reflect the performance of a basket of credits, namely a basket of single-name credit default swaps (credit default swaps on individual credits). CDS indices exist for the U.S. investment-grade and high-yield markets, the European investment-grade and high-yield markets, the Asian markets and global emerging markets.

Unlike a perpetual index like the S&P 500, CDS indices have a fixed composition and fixed maturities. New indices with an updated basket of underlying credits are launched periodically, at least twice a year. New indices are launched in order to reflect changes in the credit market and to give the index more consistent duration and liquidity. When a new index is launched (dubbed the “on-the-run index”), the existing indices continue to trade (as “off-the-run”) and will continue to trade until maturity. The on-the-run indices tend to be more liquid than the off-the-run indices.

Probably the most important event in the CDS market in 2004 was the establishment of one credit derivative index family. The establishment of the Dow Jones CDX index family in the U.S. and the Dow Jones iTraxx® index family in Europe and Asia in the second quarter has led to increased liquidity in index products and the growth of other products (volatility, correlation) that require a standard, liquid underlying market. In DJ CDX Investment Grade and High Yield, bid/offer spreads have halved due to the liquidity benefit of having one single index family, and transaction volumes have increased.

1. Forces Driving Market Activity

Credit derivatives have been widely adopted by credit market participants as a tool for managing exposure to, or investing in, credit. The rapid growth of this market is largely attributable to the following features of credit derivatives:

1.1. Credit derivatives allow the disaggregation of credit risk from other risks inherent in traditional credit instruments

A corporate bond represents a bundle of risks including interest rate, currency (potentially) and credit risk (constituting both the risk of default and the risk of volatility in credit spreads). Before the advent of credit default swaps, the primary way for a bond investor to adjust his credit risk position was to buy or sell that bond, consequently affecting his positions across the entire bundle of risks. Credit derivatives provide the ability to independently manage default risk.

1.2. Credit derivatives provide an efficient way to short a credit

While it can be difficult to borrow corporate bonds on a term basis or enter into a short sale of a bank loan, a short position can be easily achieved by purchasing credit protection. Consequently, risk managers can

short specific credits or a broad index of credits, either as a hedge of existing exposures or to profit from a negative credit view.

1.3. Credit derivatives create a market for “pure” credit risk that allows the market to transfer credit risk to the most efficient holder of risk

Credit default swaps represent the cost to assume “pure” credit risk. Bond, loan, equity and equity-linked market participants may transact in the credit default swap market. Because of this central position, the credit default swap market will often react faster than the bond or loan markets to news affecting credit prices. For example, investors buying newly issued convertible debt are exposed to the credit risk in the bond component of the convertible instrument, and may seek to hedge this risk using credit default swaps. As buyers of the convertible bond purchase protection, spreads in the CDS market widen. This spread change may occur before the pricing implications of the convertible debt are reflected in bond market spreads. However, the change in CDS spreads may cause bond spreads to widen as investors seek to maintain the value relationship between bonds and CDS. Thus, the CDS market can serve as a link between structurally separate markets. This has led to more awareness of and participation from different types of investors.

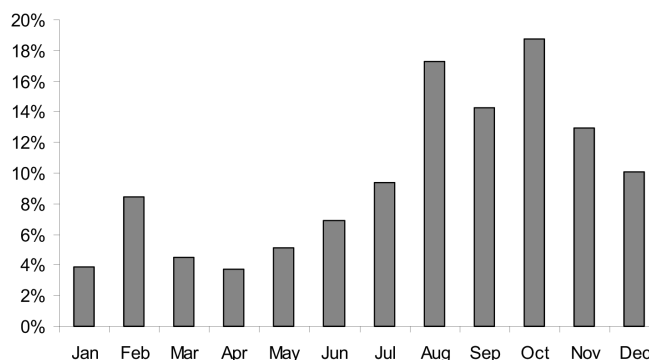
1.4. Credit derivatives can provide additional liquidity in times of turbulence in the credit markets

The credit derivative market can provide additional liquidity during periods of market distress (high default rates). Before the credit default swap market, a holder of a distressed or defaulted bond often had difficulty selling the bond, even at reduced prices. This is because cash bond desks are typically long risk as they own an inventory of bonds. As a result, they are often unwilling to purchase bonds and assume more risk in times of market stress. In contrast, credit derivative desks typically hold an inventory of protection (short risk), having bought protection through credit default swaps. In distressed markets, investors may be able to reduce long risk positions by purchasing protection from credit derivative desks, which may be better positioned to sell protection (long risk) and change their inventory position from short risk to neutral. Furthermore, the CDS market creates natural buyers of defaulted bonds, as protection holders (short risk) buy bonds to deliver to the protection sellers (long risk). CDS markets, therefore, have tended to increase liquidity across many credit market segments.

As the chart below illustrates, CDS volumes as a percentage of cash volumes increased steadily during the distressed spring and summer of 2002 in the face of credit-spread volatility and corporate defaults.

The CDS Market Remained Liquid During the Turbulent Second Half of 2002

HY CDS Volumes as a % of HY Cash Volumes - 2002



Source: JPMorgan

Credit derivatives provide ways to tailor credit investments and hedges. Credit derivatives provide users with various options to customize their risk profiles. Through the CDS market, investors may assume exposure to credits that do not actively trade in the cash market, customize tenor or currency exposure or benefit from relative value transactions between credit derivatives and other asset classes. With credit derivatives, investors have access to a variety of structures, such as baskets and tranches, that can be used to tailor investments to suit the investor's desired risk/return profile. As an example, investors who purchase risk through synthetic baskets of credits may attempt to hedge this risk by purchasing single-name credit default swaps. This can be a significant driver of single-name CDS volumes.

1.5. Credit derivative transactions are confidential

As with the trading of a bond in the secondary market, the reference entity whose credit risk is being transferred is neither a party to a credit derivative transaction nor is even aware of it. This confidentiality enables risk managers to isolate and transfer credit risk discreetly, without affecting business relationships. In contrast, a loan assignment through the secondary loan market may require borrower notification and may require the participating bank to assume as much credit risk to the selling bank as to the borrower itself. Because the reference entity is not a party to the negotiation, the terms of the credit derivative transaction (tenor, seniority and compensation structure) can be customized to meet the needs of the buyer and seller, rather than the particular liquidity or term needs of a borrower.

2. Long and Short Users

The following is a brief summary of strategies employed by the key players in the credit derivatives market:

2.1. Banks and loan portfolio managers

Banks were once the primary players in the credit derivatives market. They developed the CDS market in order to reduce their risk exposure to companies to whom they lent money, thereby reducing the amount of capital needed to satisfy regulatory requirements. Banks continue to use credit derivatives for hedging both single-name and broad market credit exposure.

2.2. Market makers

In the past, market makers in the credit markets were constrained in their ability to provide liquidity because of limits on the amount of credit exposure they could have on one company or sector. The use of more efficient hedging strategies, including credit derivatives, has helped market makers trade more efficiently while employing less capital. Credit derivatives allow market makers to hold their inventory of bonds during a downturn in the credit cycle while remaining neutral in terms of credit risk. To this end, a number of dealers have integrated their CDS trading and cash trading businesses.

2.3. Hedge funds

Since their early participation in the credit derivatives market, hedge funds have continued to increase their presence and have helped to increase the variety of trading strategies in the market. While hedge fund activity was once primarily driven by convertible bond arbitrage, many funds now use credit default swaps as the most efficient method to buy and sell credit risk. Additionally, hedge funds have been the primary users of relative value trading opportunities and new products that facilitate the trading of credit spread volatility, correlation and recovery rates.

2.4. Asset managers

Asset managers have significantly increased their participation in the credit derivatives market in recent years. Asset managers are typically end users of risk that use the CDS market as a relative value tool, or to provide a structural feature they cannot find in the bond market, such as a particular maturity. Also, the ability to use the CDS market to express a bearish view is an attractive proposition for many asset managers. Prior to the availability of CDS, an asset manager would generally be flat or underweight in a credit they did not like, as most were unable to short bonds in their portfolios. Now, many asset managers may also buy credit protection as a way to take a short-term neutral stance on a credit while taking a bullish longer term view. For example, an asset manager might purchase

3 year protection to hedge a 10 year bond position on an entity where the credit is under stress but is expected to perform well if it survives the next 3 years. Finally, the emergence of a liquid CDS index market has provided asset managers with a vehicle to efficiently express macro views on the credit markets.

2.5. Insurance companies

The participation of insurance companies in the credit default swap market can be separated into two distinct groups: (1) life insurance and property & casualty (P&C) companies and (2) monolines and reinsurers. Life insurance and P&C companies typically use credit default swaps to sell protection to enhance the return on their asset portfolio either through Replication (Synthetic Asset) Transactions ("RSATs" or the regulatory framework that allows some insurance companies to enter into credit default swaps) or credit-linked notes. Monolines and reinsurers often sell protection as a source of additional premium and to diversify their portfolios to include credit risk.

2.6. Corporations

Corporations are recent entrants to the credit derivatives market and promise to be an area of growth. Most corporations focus on the use of credit derivatives for risk management purposes, though some invest in CDS indices and structured credit products as a way to increase returns on pension assets or balance sheet cash positions.

Recent default experiences have made corporate risk managers more aware of the amount of credit exposure they have to third parties and have caused many to explore alternatives for managing this risk. Many corporate treasury and credit officers find the use of CDS appealing as an alternative to credit insurance or factoring arrangements due to the greater liquidity, transparency of pricing and structural flexibility afforded by the CDS market. Corporations are also focused on managing funding costs; to this end, many corporate treasurers monitor their own CDS spreads as a benchmark for pricing new bank and bond deals and are exploring how the CDS market can be used to hedge future issuance.

3. Risk Management Issues

The risk profile of a credit default swap is essentially equivalent to the credit risk profile of a bond or loan, with some additional risks, namely counterparty risk, basis risk, legal risk and operational risk.

3.1. Counterparty risk

Recall that in a credit event, the buyer of protection (short risk) delivers bonds of the defaulted reference entity, or other eligible assets, and receives par from the seller (long risk). Therefore, an additional risk to the protection buyer is that the protection seller may not be able to pay the full par amount upon default. This risk, referred to as counterparty credit risk, is a maximum of par less the recovery rate, in the event that both the reference entity and the counterparty default. While the likelihood of suffering this loss is remote, the magnitude of the loss given default can be material. Counterparties typically mitigate this risk through the posting of collateral (as defined in a credit support annex (CSA) to the ISDA Master Agreement) rather than through the adjustment of the price of protection.

3.2. Basis risk

Basis refers to the difference, in basis points, between a credit default swap spread and a bond's par equivalent CDS spread with the same maturity dates. Basis is either zero, positive or negative.

If the basis is negative, then the credit default swap spread is lower than the bond's spread. This occurs when there is excess protection selling (investors looking to go long risk and receive periodic payments), reducing the CDS coupon. Excess protection selling may come from structured credit issuers (or CDO issuers), for example, who sell protection in order to fund coupon payments to the buyers of structured credit products. Protection selling may also come from investors who lend at rates above LIBOR. For these investors, it may be more economical to sell protection and invest at spreads above LIBOR rather than borrow money and purchase a bond.

If the basis is positive, then the credit default spread is greater than the bond's spread. Positive basis occurs for technical and fundamental reasons. The technical reasons are primarily due to imperfections in the repo market for borrowing bonds. Specifically, if cash bonds could be borrowed for ex-

tended periods of time at fixed costs, then there would not be a reason for bonds to trade “expensive” relative to credit default swaps. If a positive basis situation arises, investors would borrow the bonds and sell them short, eliminating the spread discrepancy. In practice, there are significant costs and uncertainties in borrowing bonds. Therefore, if the market becomes more bearish on a credit, rather than selling bonds short, investors may buy default protection. This may cause credit default swap spreads to widen compared with bond spreads.

Another technical factor that causes positive basis is that there is, to some degree, a segmented market between bonds and credit default swaps. Regulatory, legal and other factors prevent some holders of bonds from switching between the bond and credit default swap markets. These investors are unable to sell a bond and then sell protection when the credit default swap market offers better value. Along this vein of segmented markets, sometimes there are market participants, particularly coming from the convertible bond market, who wish to short a credit (buy default swap protection) because it makes another transaction profitable. These investors may pay more for the protection than investors who are comparing the bonds and credit default swap markets. This is another manifestation of the undeveloped repo market.

A fundamental factor that creates positive basis is the cheapest-to-deliver option. A short CDS position (long risk) is short the cheapest-to-deliver option. If there is a credit event, the protection buyer (short risk) is contractually allowed to choose which bond to deliver in exchange for the notional amount. This investor will generally deliver the cheapest bond in the market. When there is a credit event, bonds at the same level of the capital structure generally trade at the same price (except for potential differences in accrued interest) as they will be treated similarly in a restructuring. Still, there is the potential for price disparity. Thus, protection sellers may expect to receive additional spread compared to bonds for bearing this risk. This would lead to CDS spreads trading wider than bond spreads and therefore contribute to positive basis. Thus, when investors invest in credit default swaps, they risk entering into a position that is relatively expensive as compared to entering into a similar risk position with bonds or loans.

3.3. Legal risk

Credit default swaps investors may face legal risk if there is a credit event and the legality of the CDS contract is challenged. Although not without specific disputes, as previously stated, ISDA’s standard contract has generally proven effective in the face of significant credit market stress. The large majority of contracts have tended to settle without disputes or litigation. As discussed in Section IV of the main CRMPG II Report, legal issues can and do arise in this market from time to time. Most of these disputes have involved contractual claims related to whether there was a credit event under the terms of the contract, the identity of the reference entity, the timeliness of notices delivered under the contract, the nature of the assets deliverable into the contract and the timeliness of the delivery of assets for settlement purposes.

3.4. Operational risk

With limited straight through processing, confirmation backlogs, and a clearing service in relatively early stages of operation, back offices have tended to feel the strain of handling a rapidly growing volume of activity. The recent credit event in which gross positions in the reference entity exceeded the available deliverable assets highlighted the potential difficulty for market participants in settling transactions in a timely and efficient manner. Section IV of the main CRMPG II Report addresses these issues more fully.

Other risk considerations:

- Credit default swaps are leveraged transactions. Unlike a transaction related to floating rate notes or corporate bonds with a similar amount of credit risk, principal amount is not exchanged upfront in a CDS. As noted above, large and/or sophisticated counterparties typically mitigate the risk of non-performance by the daily updating of collateral accounts reflecting gains or losses on positions.
- Credit default swaps are over-the-counter transactions between two parties and it is difficult to estimate the amount of default swaps which are outstanding. While the net amount of all credit default

swaps is zero, as the amount of long protection positions must be equal to the short protection position, there may be market participants who are very long or short exposure to specific credits.

- In marking the value of an open credit default swap to market, investors must estimate a recovery rate. If investors deviate from industry standard recovery rates, they can calculate different values for their open contracts.

APPENDIX B

CRMPG III Recommendations

The following is an extract from the August 6, 2008 Report of the Counterparty Risk Management Policy Group III entitled "Containing Systemic Risk: The Road to Reform."

Recommendation Number	
V-1.	The Policy Group <i>recommends</i> trade date (T+0) matching for electronically eligible transactions. Goal: End 2009.
V-5.	The Policy Group <i>recommends</i> that market participants should seek to streamline their methods for trade execution and confirmation/affirmation, which should facilitate an end-to-end process flow consistent with same-day matching and legal confirmation.
V-6.	The Policy Group <i>recommends</i> that senior leaders of trading support functions should clearly articulate to senior management the resource requirements necessary to achieve the same-day standards. Recognizing the expense management imperatives driven by recent market conditions, senior management should make every effort to help support functions achieve these standards for the overarching benefit of enhancing market resilience. Goal: Ongoing.
V-10.	The Policy Group further <i>recommends</i> frequent portfolio reconciliations and mark-to-market comparisons, including on collateralized instruments. Goal: Weekly end 2008, moving to daily for electronically eligible trades mid 2009.
V-11.	ISDA Credit Support Annex documents spell out the bilateral terms of the margin process. While the process is generally standardized, the Policy Group <i>recommends</i> that the industry needs to find an effective means to resolve valuations disputes, particularly for illiquid products. Doing so is likely to be a difficult and demanding matter and therefore an industry-wide approach may have to be considered. Goal: End of 2009.

Recommendation
Number

- V-12. The Policy Group *recommends* that, as mark-to-market disputes inevitably surface through the collateral portfolio reconciliation process, the information should be passed to the executing trading desks on a real-time basis to allow for research and resolution. This should, of course, be done with appropriate anonymity of the counterparty's identity, positions, and broader portfolio. A close alignment of the collateral team with trading desks—without violating the fire walls and controls that are critically important to the integrity of the financial system—would facilitate such information sharing. As necessary, significant and large value collateral disputes should promptly be escalated to the appropriate senior officers.
- Goal: Immediate.
- V-14. The Policy Group *recommends* that market participants actively engage in single name and index CDS trade compression. ISDA has agreed on a mechanism to facilitate single name trade compression with Creditex and Mark-it Partners. Established vendor platforms exist for termination of offsetting index trades, and we urge major market participants to aggressively pursue their use.
- V-15. Based on the considerations above, the Policy Group *recommends* that the industry, under the auspices of the current ISDA Portfolio Compression Working Group, commit immediately and with all due speed to achieve consistency of the current product, including potentially:
- utilizing industry preferred Reference Obligations or elimination of Reference Obligations;
 - eliminating Restructuring Basis distinctions, recognizing that this needs to be considered in a broader global perspective taking into account regional and national differences; and
 - standardizing fee calculations based on a single, common model analytic.
- V-16. The Policy Group *recommends* that ISDA should update its Credit Derivative Definitions to incorporate the auction mechanism so that counterparties to new credit default swap trades commit to utilize the auction mechanism in connection with future credit events.
- V-18. The Policy Group *recommends* that all large integrated financial intermediaries (*e.g.*, the major dealers) should promptly adopt the Close-out Amount approach for early termination upon default in their counterparty relationships with each other. We note that this can be agreed and suitably documented without making any other changes to the ISDA Master. The Policy Group expects that these arrangements will be in place in the very near term.

Recommendation
Number

- V-20. The Policy Group *recommends* that all major market participants should periodically conduct hypothetical simulations of close-out situations, including a comprehensive review of key documentation, identification of legal risks and issues, establishing the speed and accuracy with which comprehensive counterparty exposure data and net cash outflows can be compiled, and ascertaining the sequencing of critical tasks and decision-making responsibilities associated with events leading up to and including the execution of a close-out event.
- V-21. The Policy Group *recommends* that all market participants should both promptly and periodically review their existing documentation covering counterparty terminations and ensure that they have in place appropriate and current agreements including the definition of events of default and the termination methodology that will be used. Where such documents are not current, market participants should take immediate steps to update them. Moreover, each market participant should make explicit judgments about the risks of trading with counterparties who are unwilling or unable to maintain appropriate and current documentation and procedures.
- V-22. The Policy Group *recommends* that the industry should consider the formation of a “default management group”, composed of senior business representatives of major market participants (from the buy-side as well as the sell-side) to work with the regulatory authorities on an ongoing basis to consider and anticipate issues likely to arise in the event of a default of a major market counterparty.
- V-23. Recognizing the benefits of a counterparty clearing arrangement (CCP) as discussed above, the Policy Group strongly *recommends* that the industry develop a CCP for the credit derivatives market to become operational as soon as possible and that its operations adhere to the BIS Recommendations.

The CHAIRMAN. Thank you very much, Dr. Corrigan, I appreciate your testimony.

And last, Mr. Murtagh.

**STATEMENT OF BRYAN M. MURTAGH, J.D., MANAGING
DIRECTOR, FIXED INCOME TRANSACTION RISK
MANAGEMENT, UBS SECURITIES LLC, STAMFORD, CT**

Mr. MURTAGH. Thank you. Chairman Peterson, and Members of the Committee my name is Bryan Murtagh. I am Managing Director in UBS Investment Bank Fixed Income Division. I am responsible for Fixed Income’s transaction risk management function in the Americas.

I am pleased to appear before you today on behalf of the UBS Investment Bank to discuss the role of credit derivatives on financial markets and the regulatory framework that governs them. As the Committee is aware from its earlier hearings, there is a broad consensus among market participants and regulators that credit default swaps are a valuable risk management tool that they provide substantial benefits to U.S. and global economy.

With respect to the Committee’s interest in the regulatory framework for these products I would note that based principally on the institutional nature of market participants, the current regulatory

framework applicable is based primarily on oversight and supervision of market participants. As a result conduct in the credit default swap market is regulated through the supervision of derivative dealers by primary regulators. This is the case in the U.S. and overseas.

Consistent with the regulatory and supervisory responsibilities over OTC derivative dealers the relevant U.S. and international regulatory authorities launched a series of initiatives in 2005 to improve OTC derivative operations and risk management policies. It should be emphasized that the need to address the operational risk associated with directly expanding OTC derivatives market when identified by the dealer community and the counterparty risk management policy groups 2005 report on OTC derivative markets well before the onset of the current crisis in the credit markets. These efforts have been extremely unsuccessful in reducing operational risk in the credit derivative markets. Nevertheless, the current distress in our financial markets underscores the importance of continuing these efforts and, indeed, these efforts are continued.

On October 31st, dealers and major buy-side institutions committed to a series of new initiatives, significantly these commitments were accompanied by detailed memorandum summarizing the progress to date and outlining the plans for future enhancements of the OTC derivatives markets. A central component of these new commitments is the implementation of central counterparty for credit default swaps, which the President's Working Group described as its top near term priority for the OTC derivatives markets.

UBS and other major dealers have been actively involved in the development of an essential counterparty for the past 2 years. UBS is supportive of President's Working Group commitment to implementation of one or more central counterparties in this regard.

We applaud the adoption of the multi-agency Memorandum of Understanding that was designed to insure that jurisdictional issues do not interfere with the prompt implementation of central counterparties.

As a final point it should be emphasized that considerable time and effort has been dedicated by the industry to develop a central counterparty. While UBS is supportive of the establishment of one or more central counterparties, we believe it is imperative that Congress and the relevant regulatory agencies permit the industries initiatives to proceed.

In conclusion, we believe that the improvements made to date coupled with our plans for further enhancements, and the positive dialogue between dealers and the regulatory agencies, demonstrate the industry's commitment to strengthen the credit derivatives market and support the policy objectives set forth by the President's Working Group.

UBS looks forward to working with the Congress, the President's Working Group and other market participants to enhance the credit derivatives market by developing robust operational practices and infrastructure to support credit default swap trading.

Mr. Chairman, thank you for the opportunity to share our views with the Committee. I will be happy to answer any questions that you or Members of the Committee may have.

[The prepared statement of Mr. Murtagh follows:]

PREPARED STATEMENT OF BRYAN M. MURTAGH, J.D., MANAGING DIRECTOR, FIXED INCOME TRANSACTION RISK MANAGEMENT, UBS SECURITIES LLC, STAMFORD, CT

Chairman Peterson, Ranking Member Goodlatte and Members of the Committee, thank you for inviting UBS to participate in this hearing to review the role of credit derivatives in the U.S. economy and the regulatory framework that governs them.

My name is Bryan Murtagh. I am a Managing Director in UBS Investment Bank's Fixed Income Division and am responsible for Fixed Income's transactional risk management function in the Americas. In this capacity, I address legal, regulatory, operational and other issues associated with new businesses, new products and structured transactions, including various forms of credit derivatives.

UBS is a global financial services firm with operations in over 50 countries, including a sizeable presence in the United States, where we employ approximately 30,000 individuals in our Asset Management, Investment Bank and Wealth Management businesses. The views expressed here relate to the Investment Bank.

I understand that the Committee has held several hearings with respect to the nature of the credit derivatives market and its regulation. As the Committee is particularly interested in credit default swaps, I will focus my comments on those instruments.

Overview of Credit Derivative Market and Credit Default Swaps

Broadly speaking, credit derivatives are financial instruments that transfer the credit risk associated with a particular financial asset or a reference entity from one party to another party without transferring the underlying financial asset. These instruments are generally traded by financial institutions and certain financially sophisticated corporations and institutional investors (such as hedge funds). As a general rule, retail investors do not participate in the credit derivative market.

Credit default swaps (CDS) are a particular type of credit derivative. Specifically, CDS are privately negotiated contracts between two institutional counterparties in which one of the parties (generally called the "seller of protection") takes on exposure to the credit risk of a third party (generally called the "reference entity") in return for periodic payments from the other transacting party (generally called the "buyer of protection"). If certain types of credit-related defaults (generally called "credit events"), occur in respect to the reference entity, then the buyer of protection may be entitled to transfer qualifying debt obligations of the reference entity to the seller of protection at an agreed-upon price. This so-called "physical settlement" of the CDS transaction results in the seller of protection assuming the risk associated with collecting any amounts owed in respect to the delivered obligation.

Alternatively, the buyer and seller of protection may agree that, upon the occurrence of a credit event, the seller of protection will make a cash payment to the buyer of protection which is calculated based on the trading price of qualifying obligations of the reference entity. This so-called "cash settlement" alternative may be agreed to at the outset of the CDS transaction or may be agreed to upon the occurrence of the credit event.

In recent years, CDS market participants have increasingly relied on the cash settlement alternative to settle large numbers of CDS transactions following the occurrence of a credit event. These cash settlements have been accomplished through so-called auction protocols, in which market participants voluntarily agree to cash settle their CDS transactions based on an auction process. While market participants are not obligated to utilize the cash settlement auction protocol, an overwhelming number of CDS transactions have been settled through these voluntary protocols. This practice has significantly eased the operational pressures associated with the simultaneous settlement of large numbers of CDS transactions which follows the occurrence of a credit event.

Most credit default swaps relate to reference entities that are sovereigns or corporations. Over the last few years a number of indices referencing various segments of the credit market (*e.g.*, U.S. investment grade reference entities, U.S. non-investment grade reference entities, European investment grade reference entities) have been developed and have become the subject of significant trading in the credit default swap market. In addition, there are several kinds of specialized credit default swaps referencing mortgage-backed securities and other asset-backed securities (generally referred to as "CDS on ABS" transactions), but the number of transactions of these types is only a small part of the credit default swap market. Accordingly, my comments focus on CDS relating to corporate reference entities and to the related indices since they represent the overwhelming majority of transactions in the credit default swap market.

It should be noted that CDS transactions expose each of the counterparties (but particularly the buyer of protection) to counterparty credit risk (*i.e.*, the risk that its counterparty will fail to perform its obligations under the relevant swap transaction). As a result, the vast majority of CDS transactions are documented under ISDA master agreements which have been negotiated between the buyer and seller of protection. These master agreements are typically collateralized on a mark-to-market basis and, in some cases, may be subject to additional transaction-specific initial margin requirements depending on the creditworthiness of the parties. The existence of such collateral arrangements mitigates but does not eliminate the counterparty credit risk associated with CDS transactions. Although the terms of each CDS transaction will be individually negotiated by the parties, they will typically rely on certain standardized definitions and market conventions for CDS transactions that have been published by ISDA.

Role of Credit Derivative Transactions in the Economy

Credit derivatives (including CDS transactions) are important risk management tools in the financial markets and may be used by market participants for hedging or investment purposes. In either application, the key role that credit derivatives play is to effectively and efficiently transfer the desired risk elements from the buyer of protection to the seller of protection.

It should be emphasized that while certain elements of a typical credit default swap transaction are standardized, one of the most important features of the CDS market is the ability of counterparties to customize the economic terms of their transactions. The ability to customize CDS transactions to match specific hedging requirements or desired exposure characteristics distinguishes credit default swaps from futures contracts and other exchange traded financial products, which generally do not permit product customization.

CDS are frequently used by bond investors and bank lenders to hedge themselves against the default risk of an issuer/borrower. For example, a bank that desires to hedge a portion of its illiquid credit exposure to a customer may be able to transfer a portion of that credit exposure by entering into a CDS transaction with a derivatives dealer, which may in turn retain such credit exposure or hedge it with other market participants that are seeking to gain credit exposure to the customer. Although credit default swaps are most frequently employed to hedge default risks relating to bond or loan positions, CDS can also be used to hedge against the default risk associated with other types of claims or obligations. For example, a manufacturer can use credit default swaps to hedge against the potential losses on accounts payable that it might suffer if a key customer goes bankrupt and fails to pay its account payable balances.

Credit default swaps can also be used by market participants to express an educated view on the creditworthiness of a particular reference entity, based on such market participant's research, analysis and mathematical modeling. A market participant may sell credit protection if it believes the reference entity's creditworthiness is likely to improve or may buy protection if it believes the reference entity's creditworthiness is likely to deteriorate. Changes in reference entities' perceived creditworthiness will be reflected in its credit spreads which will result in gains or losses in the CDS transaction. It should be noted that such gains and losses are not dependent upon the actual occurrence of a credit event and may be realized by terminating the CDS transaction prior to its scheduled expiration date or entering into a new offsetting transaction.

U.S. Regulatory Framework

The U.S. regulatory framework for over-the-counter (OTC) derivatives has been the subject of considerable discussion since the mid-1990s. Based principally on the institutional nature of the OTC derivative markets' participants, the current U.S. regulatory framework applicable to credit default swaps is based primarily on oversight and supervision of market participants—particularly OTC derivative dealers. As a result, conduct in the credit default swap market is regulated indirectly through the supervision of derivative dealers by their primary regulators. In addition, credit default swaps, like all securities-related swap transactions, are subject to the anti-fraud and anti-manipulation provisions of U.S. securities laws. The significance of the applicability of the U.S. securities laws to credit default swaps should not be under-estimated. In our experience, derivative dealers are very sensitive to the need to manage their trading activities in a manner that ensures compliance with these laws.

Consistent with their regulatory and supervisory responsibilities over OTC derivative dealers, various U.S. regulatory agencies, together with regulatory and super-

visory authorities from other countries,¹ initiated a series of initiatives in 2005 to improve market participants' management of their OTC derivative operations and risk management practices. It should be emphasized that the need to address the operational risks associated with rapidly expanding OTC derivative markets and credit default swaps was identified by the dealer community in the 2005 Report of the Counterparty Risk Management Policy Group II—well before the onset of the current crisis in the credit markets.

As a result of these initiatives, UBS and other major credit derivative dealers have made a series of commitments to a growing group of global regulators which are designed to: (i) reduce the systemic and operational risks in the credit default swap market; (ii) strengthen the credit default swap market infrastructure; (iii) improve the transparency and integrity of the credit default swap market; and (iv) generally enhance risk management practices in the credit default swap market. These efforts have been extremely successful and have been expanded to include major buy-side market participants. To date, the specific improvements include: (i) a reduction in trade confirmations remaining unsigned or unacknowledged for more than 30 days by 92% (even though trade volumes have increased by 300% over the same period); (ii) the adoption of a protocol requiring that market participants request original counterparty consent before assigning trades to a third-party; (iii) the adoption of an online matching and confirmation platform for credit default swaps by the Depository Trust & Clearing Corporation and the commitment of the dealers to use it or another electronic confirmation platform for the great majority of trading activity; and (iv) the creation of an electronic "trade information warehouse" (also by the Depository Trust & Clearing Corporation), which serves as a central repository containing the details of credit default swap transactions and facilitates the processing of various events in the lifecycle of a CDS transaction.

Most recently, dealers and major buy-side institutions committed to new initiatives which were set out in a letter to the global regulators on October 31, 2008. Significantly, these commitments were accompanied by a detailed memorandum summarizing the progress that has been made since 2005 and the plans for future enhancements to the operational infrastructure supporting different segments of the OTC derivative market (*e.g.*, credit, equity, interest rate, commodities). These commitments include: (i) global use of central counterparty processing and clearing to significantly reduce counterparty credit risk and outstanding net notional positions; (ii) continued elimination of economically redundant trades through trade compression; (iii) electronic processing of eligible trades to enhance the issuance and execution of confirmations on the trade date; (iv) elimination of material backlogs in confirmation processing; and (v) central settlement for eligible transactions to reduce manual processing and reconciliation of payments.

President's Working Group Policy Objectives and Memorandum of Understanding

On November 14, 2008, the President's Working Group on Financial Markets (the "PWG") announced a series of policy initiatives designed to further strengthen the oversight and infrastructure of the OTC derivative markets, which included: (i) a statement of policy objectives for OTC derivatives (the "Policy Objectives"); (ii) a summary of the progress that has been made by dealers in addressing operational risks associated with OTC derivatives; and (iii) a Memorandum of Understanding regarding the development of central counterparties for credit default swaps.

Broadly speaking, the Policy Objectives include: (i) establishment of central counterparties and central trade repositories for CDS and possibly other OTC derivative transactions; (ii) public reporting of certain transactional information regarding standard CDS transactions; (iii) maintenance of additional information regarding standard and nonstandard CDS transactions; and (iv) establishment of consistent standards and best practices for centralized counterparties, dealers and other market participants. UBS supports the Policy Objectives and would note that they are consistent with the ongoing efforts of the U.S. and international regulators and major credit derivative dealers to improve the operational practices and infrastructure supporting the credit default market.

At the same time, UBS believes that it is critical that the regulators and other stakeholders continue to work in close collaboration with the dealers and other market participants to implement these Policy Objectives. Without such consultation, there is a danger of harm being done to the credit default swap market. For exam-

¹ These regulatory and supervisory agencies included the Federal Reserve Bank of New York, the Office of the Comptroller of the Currency, the New York Banking Department, and the Securities and Exchange Commission, as well as the U.K.'s Financial Services Authority, Germany's Federal Financial Supervisory Authority and Switzerland's Federal Banking Commission.

ple, price reporting should be implemented in a manner that does not reduce market liquidity or result in the publication of misleading information. Similarly, a broad-brush requirement that all eligible contracts be cleared through a central clearing-house could in some instances hamper derivative dealers' ability to manage counterparty risk.

While UBS strongly supports the ongoing development of stronger market infrastructure, including the ongoing initiatives to bring further "electronification" to the credit default swap market, it is important for these initiatives to be allowed to develop in a thoughtful and iterative manner, particularly with respect to such projects as the development of centralized counterparties, central contract repositories and exchanges and similar trading platforms for standardized credit default swap contracts. In addition, it is critical that the market infrastructure preserve the ability of market participants to customize transactions to meet their hedging or investment needs.

Centralized Counterparty

In its recent announcement, the PWG noted that successful implementation of central counterparty services in the credit default swap market is the PWG's top near-term priority in this market. In general, a central counterparty is an entity that will stand between counterparties to a financial contract, acting as the buyer to the seller and as the seller to the buyer.

This type of central counterparty is already in use in the interest rate swap market, where it is estimated that nearly 50% of U.S. dollar interest rate swaps are cleared with central counterparties. A number of central counterparty clearing initiatives are being developed in the U.S. and in Europe. UBS is supportive of those efforts and believes they will significantly reduce counterparty credit risk in the credit default swap market by allowing market participants to eliminate offsetting transactions.

We understand that the PWG has indicated that any central counterparty will need to satisfy the standards established by the CPSS-IOSCO Recommendations for Central Counterparties. We are supportive of these standards and believe that their adoption will ensure that the central clearing services are efficient and reliable.

Conclusion

Credit default swaps are an important risk management tool for financial institutions and generally provide key benefits to the financial markets. As the PWG noted in their November 14th announcement, credit default swaps and other over-the-counter derivatives "are integral to the smooth functioning of today's complex financial markets and . . . can enhance the ability of market participants to manage risk." We believe that the significant improvements made to the systemic and operational infrastructure for credit default swaps over the last 3 years, the positive dialogue between the major credit default swap dealers and the relevant regulatory agencies, and the ongoing market infrastructure projects (including the development of central counterparty platforms), demonstrate the financial services industry's commitment to strengthening the credit default swap market and support for the Policy Objectives set out in the PWG's announcement. UBS looks forward to working with the PWG, other market participants, and Congress in enhancing the credit default swap market by developing robust operational practices and infrastructure to support CDS trading.

Mr. Chairman, thank you for the opportunity to share our views with the Committee. I would be happy to answer any questions you or Members of the Committee may have.

The CHAIRMAN. I thank you very much, Mr. Murtagh. And we thank all members of the panel for their fine testimony and we will proceed to questions.

I am going to ask you the same questions I asked the other panel, that there have been proposals to mandate the clearing of credit default swaps. To each of you, do you believe that such a mandate is necessary?

Mr. DAMGARD. As you know, I represent many of the firms in the exchange traded space, so my view probably is not nearly as important as my member firms down the way, but I do understand that some of these lend themselves to clearing rather easily, and there are others individually negotiated and are unable to be cleared. And to the extent that participants in the market face the choice

of clearing or not clearing their contract, clearly recent experience has indicated that there is a whole lot more safety in removing the counterparty risk. So I think Congress is well advised to look for ways to encourage clearing on those kind of CDSs that lend themselves to clearing.

Mr. PICKEL. Mr. Chairman, I think in the process that Mr. Murtagh referred to that lead to the October 31 letter to the regulators. There was a very clear commitment from the major dealers in that they would look to clear as many transactions as possible. I think that that process of the private-public dialogue there is probably the best way to achieve a high degree of clearing, together with the fact with the first panel, we have four major organizations who are very actively looking to develop clearing solutions in this space.

I do think there is the President's Working Group objective to play out, there will continue to be privately negotiated, custom-tailored transaction that don't lend themselves to clearing solutions. We shouldn't restrict the abilities of parties to develop solutions that address their particular needs by requiring across the board clearing.

The CHAIRMAN. Mr. Thompson.

Mr. THOMPSON. I agree with that. I think that we have clearly committed to the regulators to clear the lion's share of contracts that can be cleared. But, an important feature of this market since its inception has been innovation and the ability to provide hand-tailored risk management solutions for clients. I would not want to see anything in terms of a mandate which would impede our ability to serve our clients in that regard.

The CHAIRMAN. Dr. Corrigan.

Dr. CORRIGAN. Mr. Chairman, I think it is rather widely known that I have been advocating such a result for quite a number of years, so my answer is enthusiastically yes. With one quick caveat. As I said before, we will probably have two or three or four different approaches for this on kind of a competitive basis, but over time, I rather suspect and frankly will not hurt my feelings if we gravitate toward a single, global CCP subject to the kinds of regulation that you and other Members of this Committee have also been advocating for some period of time.

Now I don't like monopolies, I want to emphasize that under the approach that is suggested, you would still have a great deal of front end competition between exchanges and other entities. But, to me, given my orientation about systemic risk and things like that, having the process at the end of the day in one place where the regulators and everybody else can see it and control it has a great deal of appeal, even though I recognize that, it has a monopolistic characteristic to it.

The CHAIRMAN. Mr. Murtagh, do you have a comment?

Mr. MURTAGH. With respect to the mandatory requirements I think I would say that as long as the standards are clear in terms of which types of credit default swaps the mandatory clearance would apply to would be fine, but I think as others have suggested, there are likely to be certain types of the bespoke transactions that would probably be best done off the clearing exchange.

The CHAIRMAN. Assuming such a mandate was imposed, how much time would the industry, and you, need to meet that mandate? In this regard, we had some discussion with the last panel, maybe you were here. With the standardized stuff is probably fairly quick. But say that we decided to mandate everything, including these so-called tailor-made deals, maybe that part of things will go away, but how long would it take to—should we give it some kind of time frame? I think there was a bill introduced in the Senate that would do it immediately, which seems to be a little drastic.

Mr. DAMGARD. I would take the exchanges at their word, if they said they were operationally ready right away for the standardized products, particularly the indexes, I believe that. And I think they were just waiting for regulatory approval. In the others I think it is such an interesting space, and there is so much innovation taking place, it is not clear that any of them would ever be able to clear all the new products that are coming down the line.

The CHAIRMAN. I think we have had about as much innovation as we can take. Mr. Pickel.

Mr. PICKEL. I think that, first of all, as it is, we would continue to focus on the privately negotiated transactions across the board whether it is credit default swaps or interest rates or equity, so in terms of our involvement and the timing, it is really not our position to say. We would work with all the exchanges we have to date to make sure that they can move forward if they were required.

The CHAIRMAN. You must have a view, though.

Mr. PICKEL. On timing of that?

The CHAIRMAN. Yes.

Mr. PICKEL. I really do not have a view of how long it would take for them to put this in place. It is important for us to continue to focus again on the infrastructure in the OTC business while working with the exchanges, all of whom are members of our organization.

The CHAIRMAN. Mr. Thompson.

Mr. THOMPSON. As a perspective of the user of the services as opposed to the designer of the service which would proceed extremely quickly. The limiting constraint would be for the exchanges to digest the large volume of outstanding transactions and new transactions as they arose. From our perspective, the sooner the better. The limiting factor will be the ability of exchanges to go through the processes they have to go through in order to get the products to the clearinghouse.

The CHAIRMAN. Dr. Corrigan.

Dr. CORRIGAN. Index trades, in a matter of weeks, single name trades, 2 to 3 months. Again, one *caveat* and that is the regulators that have to opine on the financial infrastructure stress testing and so on to satisfy themselves that the clearinghouse can function, even under extreme, extreme conditions should not be artificially expedited to meet an otherwise artificial time schedule.

Mr. MURTAGH. And I would agree with that. I think some of the people in the prior panel pointed out they would not necessarily want to be committed to clearing all the transactions that might come about. For exactly the reasons that I think were described, we have to come up with appropriate risk models for them so we can set appropriate marginal requirements.

The CHAIRMAN. Thank you, my time has expired. The gentleman from Texas, Mr. Neugebauer.

Mr. NEUGEBAUER. Thank you, Mr. Chairman. Without a mandate, will enough business migrate to the clearing facilities to mitigate concern about counterparty risk that have contributed some say to the credit freeze? I will go down the line.

Mr. DAMGARD. My view is there is a lot of incentive right now for people to seek the clearinghouse to eliminate the counterparty risk, so my answer would be that I think it is appropriate for Congress to look for ways to encourage and mandate is one of the ways to do that. But, my sense is that most participants in the market, as has been stated by others, are looking for ways now to seek clearing.

Mr. PICKEL. I think, again, with the commitment of the major dealers already to put as many trades as possible into the clearinghouse, I think we will see that. Whether there is sufficient volume over the long term to support four different clearing entities, I am not sure about that. I would tend to agree with Dr. Corrigan, but we will see how that will develop. I think that will happen. Again, existing framework under the ISDA contract will remain in place for the many transactions that would not be put into the clearinghouse. First, we will need to make sure that they continue to manage that effectively as they move a large number of trades into a clearinghouse.

Mr. NEUGEBAUER. Mr. Thompson.

Mr. THOMPSON. I think you have very real economic incentives to move about which can be cleared on to the clearinghouses. I think when you couple that with the fact that the major dealers have all made very firm commitments to the regulators to clear what can be cleared, I think that that critical mass will build up relatively quickly.

Dr. CORRIGAN. It keeps the pressure on.

Mr. MURTAGH. I understand the desire for the pressure, but I also believe that the industry had started moving in this direction actually before many of the problems had started. I think the benefits clearly outweighed the costs associated with the industry, it had already made the decision to go in that direction some time ago. I think what has happened in the market has forced us through that forward even more quickly.

Mr. NEUGEBAUER. If we didn't mandate the clearing, made it voluntary, in a sense what percentage, we talked about indexed, individual and somebody used the word "toxic." I don't have a good feel of what percentage of what swap transactions would probably not be brought to the clearinghouse. Can I get an opinion from the group on that?

Mr. DAMGARD. I would yield to my colleague on that.

Mr. PICKEL. I think the nature of the credit default swaps that are widely traded are fairly standardized products, so there would be a fairly strong incentive to put a lot of those transactions into the clearinghouse. Perhaps instructive is the experience with LCH SwapClear, which clears interest rate swaps, where firms do actually manage their OTC business together with the cleared business in a very dynamic way. I think we would expect to see that. And

perhaps most likely more so in the credit default swaps space given the more highly standardized nature of the contracts.

Mr. THOMPSON. I can assure you I never use the word "toxic." I think that the percentage would be certainly be north of 90 percent in terms of the outstanding notional volume of contracts. The market is very highly concentrated in terms of the standardized index and single name product. I think you would have an overwhelming percentage of outstanding contracts that could be eligible for clearing.

Mr. NEUGEBAUER. Dr. Corrigan.

Dr. CORRIGAN. I agree with Mr. Thompson. Again, one *caveat* here as well, the risk characteristics CDS depend in no small way on what the reference entity itself is. So in other words, if the reference entity is alone or a bond of a well-known visible corporation, the risk profile and characteristics associated with the instrument are one thing. But if, on the other hand, the reference entity unfortunately is something like a CDO, that is a very different ball game. So again, I think when we think about the profile of the marketplace, we have to keep in mind that the profile of the so-called reference entity matters a lot as well.

Now what I would hope as things evolve in a way, my colleagues have suggested that we keep that in mind, so as to make sure that the CCP itself is in a position to capture as much of that stuff as possible, even in the case of the more complex reference entities themselves.

Mr. MURTAGH. Maybe just be a little more specific on that point, because I agree with Dr. Corrigan. It is just that where many of the spectacular losses were incurred were in connection with CDOs backing residential mortgage-backed securities. And so I think it is very important in terms of capturing the risk associated with the current market would eventually bring those types of transactions to the clearing corporation, but one would need to do so with great care to make sure that the risk had been appropriately modeled and understood by everyone involved.

Dr. CORRIGAN. Exactly.

Mr. DAMGARD. I would like to add that a number of my member firms have expressed concern about the different risk profiles of a credit default swap *versus* what Mr. Duffy referred to as his core business. To the extent that separate pools of capital could be used in order to protect those members just using futures products would probably be advantageous to the market user.

Mr. NEUGEBAUER. Thank you, Mr. Chairman.

Mr. HOLDEN [presiding.] The chair thanks the gentleman. Assuming there is no clearing mandate, should there be a mandatory reporting requirement for parties in CDS who decide not to clear those agreements? And should there be a mandatory reporting requirement for parties in any over-the-counter transaction.

Mr. DAMGARD. I would yield once again to Dr. Corrigan on that, I would say the more pressure the better. Whether or not an absolute mandate would be disadvantageous to business done in the United States or not is not something that I feel I have a very good feel for.

Mr. PICKEL. I think with respect to the vast majority of participants in this market, the major dealers and banks, if they are not

already required by their regulators to provide that type of disclosure, then yes, to their regulator they should provide a great deal of disclosure. I do think a lot of that occurs, but by all means that should be reviewed and strengthened if necessary after review.

Mr. THOMPSON. Yes, we are broadly supportive of PWG's objective of public reporting of prices, trading volumes, and aggregate open interest to increase market transparency. Also to be crystal clear we think that to the extent regulators want information about the CDS market, they should get it in whatever form they would like, as frequently as they would like and whatever level of detail they like in order to allow them to fulfill their oversight responsibilities.

Dr. CORRIGAN. Again, I probably agree with what has been said. As I indicated in my statement, I certainly do agree that prudential supervisors should indeed feel free to ask for the kind of information you suggested. And as I also said, I would go one step further and say that on a case-by-case basis, if they don't like what they see, they should encourage, if not require, risk reduction on the part of individual market participants.

The other point I would make, Mr. Congressman, I think this was mentioned earlier, just within the past few weeks, the Depository Trust Clearing Corporation Warehouse for CDS transactions has begun to publish, I think, on a weekly basis, if I have it correctly, the names of the 500 largest reference entities and the volume of transactions against those reference entities. And this is really a significant enhancement in transparency for the marketplace across the board. Again, I just kind of wish it would have happened a little earlier, but I am not going to fight it, I think it is a terrific improvement.

Mr. THOMPSON. I would also point out that that DTCC information is available to the public at large, they post it on their website. It is not something which goes only to regulators or for which you need to pay a fee to obtain the service. It is like publishing in *The Wall Street Journal*.

Mr. MURTAGH. We are in support of those efforts, and would only suggest that we try and come up with something that is consistent internationally so the global market can get similar information across the globe.

Mr. HOLDEN. Where do you see the CDS market heading in the future months?

Mr. DAMGARD. To the clearinghouse.

Mr. THOMPSON. You stole my line.

Mr. PICKEL. I would say in addition to the clearinghouse with the focus on credit, people will want to look at ways in which they can manage the credit risk that they have. As I mentioned in my remarks, the credit default swaps market has remained available for those who wish to hedge their risk in some way even in light of the turmoil. So I think we will see that in the very short term short term.

Mr. THOMPSON. I continue to believe that the credit derivatives market will be a very active market. It is by far the most highly functioning of the credit markets out there today. It is increasingly being used as a benchmark for the creditworthiness of issuers, and as people see that most of it is migrating to a clearinghouse, thus

allaying the fears of systemic risk and counterparty credit risk, I think you will continue to see the market grow and prosper.

Dr. CORRIGAN. Ironically, if we get all the things done that we are talking about doing, it might accelerate the growth of the market, even though intuition might suggest the opposite. I think the market will continue to grow and grow rapidly. One *caveat* I would have is that I rather suspect that market participants are going to think a lot longer and a lot harder about providing so-called protection against some of these very, very complex financial instruments such as CDOs and CDO squared. And to the extent that occurs, I must say it is not going to hurt my feelings.

Mr. MURTAGH. I agree that the structured market is not likely to see very much volume over the next few months or years. I think what we will probably see is the economy continue to have some difficulties, we will have some more credit events occur over the course of the year, and the industry will have to work towards settling those transactions, hopefully, in as efficient a manner as we have to date.

Mr. HOLDEN. Do you foresee an increase in the rate of defaults for CDS reference entities?

Mr. DAMGARD. I have no view on that.

Mr. PICKEL. I don't have a personal view, but I think most observers would expect to see some additional level of defaults of firms in light of the economy.

Mr. HOLDEN. Anyone else care to add anything?

Mr. THOMPSON. I think the answer was no, I fear the answer is yes.

Dr. CORRIGAN. I am neutral.

Mr. MURTAGH. I have to confess, I didn't hear the question.

Mr. HOLDEN. Do you foresee an increase in the rate of defaults for CDS reference entities?

Mr. MURTAGH. Yes.

Mr. HOLDEN. Thank you, Mr. Chairman.

The CHAIRMAN [presiding.] The gentleman from Texas, Mr. Conaway.

Mr. CONAWAY. Thank you, Mr. Chairman. Continuing on that line of—maybe I will start at this end of the panel, you say the skyrocketing spreads on CDS is affecting these proposed central clearinghouses.

Mr. MURTAGH. I am sorry, I didn't hear your question.

Mr. CONAWAY. The increasing spreads on the CDS instruments, you see that as having impact on the migration to central clearinghouses?

Mr. MURTAGH. No, I don't.

Mr. CONAWAY. Dr. Corrigan.

Dr. CORRIGAN. If anything, it would accelerate it, the gravitation towards the CCP.

Mr. THOMPSON. I agree with that, the fact that a protection seller is taking increased credit risk to the protection buyer as a consequence of a much higher spread increases his counterparty credit risk concerns in a way that might not be as palpable in the case of a trade with a low spread.

Mr. PICKEL. I think the process would accelerate towards utilizing clearing.

Mr. DAMGARD. And I would agree with that.

Mr. CONAWAY. That is because it would lower the counterparty risks?

Mr. PICKEL. Yes.

Mr. CONAWAY. In spite of my Chairman's distaste for future innovation, are there other new instruments out there that are on the horizon that would create the same market instability that we ought to be watching, and looking at including in this sweep of regulatory revision.

Dr. CORRIGAN. I will take a stab at that, at least for starters. One thing, despite all we have been through over the past 16 months what we do not want to do is artificially suppress innovation. So consistent with that, I think it is inevitable and appropriate there will be continued innovation. Certainly, I would expect for example internationally, if you just take the CDS base, there will be a lot more reference entities.

Mr. CONAWAY. What is the CES again?

Dr. CORRIGAN. Credit default swaps.

Mr. CONAWAY. CES or CDS?

Dr. CORRIGAN. DS, sorry. We don't want to put the genie of innovation back in the bottle. I would strongly emphasize that, going forward, we can and should do a little better job, if not a lot better job, in making sure that we are vigilant in recognizing that innovation in the financial sector has something in common, if I may say this, with prescription drugs. There can be side effects, just as we have to be vigilant about side effects for prescription drugs, we have to be much more vigilant about side effects in the financial space as well.

Mr. THOMPSON. Yes, when I think about risk and innovation, I frankly worry more about how products are used and the nature of the products themselves. And one thing we have seen in a lot of the blowups of the past 18 months or so are very common themes that don't have a lot to do with product innovation, but present tremendous risks, such as the concept of funding very long dated assets which may become illiquid with very short-term money that can evaporate overnight.

I worry less about the products themselves than I worry about how people use them, and the amount of leverage on the part of users as well as lack of adequate capital on the part of users.

Mr. DAMGARD. I would add existing exchanges and new exchanges are certainly involved with the environment. And I expect to see a lot of innovation in climate and carbon type contracts, probably ultimately destined to be traded on an exchange.

Mr. PICKEL. Also the vast majority of these credit default swaps are single name and index trades which have a very well identified and appreciated usage in the marketplace. There was some reference earlier to the usage in the credit structure area where there may be a greater point of concern. I think also that a lot of focus on credit default swaps has been a function of just the sheer rate of growth as we have seen over the past 8 years in this particular product area, but that is a testament to the success of the utility of the product. If we were to look at other areas, whether it be emission derivatives, property derivatives, we are not seeing that

rate of growth just yet. So you wouldn't have that *indicia* of growth.

Mr. CONAWAY. What kind of early warning system should we put in place? In other words, derivatives are coming around in 1997-ish time frame through the writing of the Commodity Act really wasn't at a scope that threatened the world. It grew in the last 8 years to a staggering number. Is there some sort of an early warning system that you would look at for innovative products, new technique, new products that are out there, risks that are growing bigger that would help us at least see something that we might not have otherwise seen?

Mr. PICKEL. I think you have to see whether Dr. Corrigan organizes another counterparty risk management policy group report. I know he has published three of those going back to 1999, and has focused on different aspects of market of the market. So there is that ongoing private-public dialogue that we are seeing, particularly focused with the New York Fed. It goes on here in Washington regularly as well. So, there is the ability to identify areas where regulators, and legislators, should have greater focus.

Mr. CONAWAY. Is that dollar denominated; if the scope of the market gets to a point where you simply say, Congress take a look at this?

Mr. PICKEL. I think it is it is really a function of feedback that regulators can provide in that regular dialogue that they have in the oversight that they have of these regulated institutions. I think having the regulators, as well as the industry, up here regularly and hearing from them is an important part of the dialogue.

Mr. DAMGARD. And I would add CFTC has done an excellent job over the years of being organized by issue with advisory groups and they are constantly looking at that.

The CHAIRMAN. I thank the gentleman. The gentleman from North Carolina, the Chairman of the Subcommittee, Mr. Etheridge.

Mr. ETHERIDGE. Mr. Chairman, thank you. And along that line, let me follow that with a little different direction on my question, because it is kind of hard to follow it if you don't know what is out there. I grew up on a farm, if you don't know you have deer, you are not going to go deer hunting, you may be rabbit hunting.

I hear this from a lot of folks, they wonder why in the world we haven't had a clearinghouse for credit default swaps already. So my question to you is you are the folks involved in it, why do you think that a clearing solution for CDSs were not implemented in the past? Was it because we didn't get in trouble?

Mr. DAMGARD. My answer is basically hearsay, but I think the problem was that nobody knew how to value them. If you can't value it, you can't margin it, so it didn't fall into the kind of formula that worked very well in a traditional clearinghouse. That is something that the Fed and the industry have been working on for the last couple of years to determine what would work that isn't exactly like SPAN[®] margining.

Mr. PICKEL. The infrastructure that is utilized to engage in risk management of these activities is the infrastructure we have put in place with our members over the years, which is the master agreement and netting of positions and collateral that is used to provide credit protection against the net position. Keep in mind

that is comprehensive across different product types. So you have interest rates in there, as well as credit, equity, energy. And I think that the focus of the industry with the rate of growth in credit default swaps lead eventually—this really does go back over years where the industry participants first started looking at the possibility of clearing—with the growth of the market they felt it was important to explore a clearing solution.

Mr. THOMPSON. I agree with Bob in the sense that the industry has been very aware of, and focused on, counterparty credit risk for a long time, that predated the development of the credit derivatives market.

Mr. ETHERIDGE. Can you give us a date?

Mr. THOMPSON. It has been a long time since I started doing this in the late 1980s, everybody has recognized that these instruments, because they are market sensitive and present default risk, give you a counterparty credit risk. The way people have typically attacked that in the absence of a multilateral solution, such as a clearinghouse is by bilateral netting and collateral arrangements, whereby we agree that all exposures net down upon a default and that parties daily margin that net exposure, and that has worked relatively well. We have been working on a clearinghouse for a couple of years now, it has been challenging because, first, there are a significant number of issues that need to be dealt with in order to establish a clearinghouse. Second, it has been a very challenging market in which to do it where necessary resources for development of the clearinghouse have been diverted because of things like Lehman bankruptcy, which need to be dealt with on an immediate basis.

Mr. ETHERIDGE. Which led to the necessity of getting the clearinghouse in place real quick.

Mr. THOMPSON. Well, the necessity for the clearinghouse has been there for a long time and we recognized it, but like many good ideas in a complicated market, it takes time and effort and resources to achieve it. And we are committed to do that as an industry and we are actively working on it. But that is an explanation as to why it doesn't exist now.

Dr. CORRIGAN. Let me quickly add a couple of things. First of all, unfortunately, as we all know, there are circumstances in which things have to get bad before they get better. I think there may be some element of that here as well. But I don't think any of my colleagues would disagree with me when I say that the wisdom of the CCP has indeed been around a long time. But if we go back again to use CRMPG I, I have been the Chairman of three efforts in this area, one in 1999 after a long term capital, one in 2005 and one that we just published this past summer. At times it has been frustrating, it has been a struggle. What you have to do here, which I can't begin to overstate how difficult it is, you have to get everybody to agree to everything. And that is not easy to do. Especially when "the everybody" are all life and death competitors with one another.

So I do think, Mr. Congressman, it is fair to say that all things considered, a lot of progress has been made. We are almost there, we will get there. But all things considered, I would probably

would have been happier if we would have gotten there a little earlier.

Mr. MURTAGH. I want to make sure the Congressman is aware, I am not sure if your question related to OTC derivatives or about credit default swaps. With respect to the interest rate market, there is, in fact, the clearing function, swaps clear what is out there and it has been for some time. As Dr. Corrigan suggested, that one got going a lot more quickly because there was much more consensus more quickly around the terms. When the credit derivatives market first started, there was a lot of effort spent in refining the product. There were a number of years and iterations before it reached some level of regularity. It is only with the index that we ended up having that level of volume.

Mr. ETHERIDGE. Thank you.

The CHAIRMAN. I thank the gentleman, the gentleman from Georgia, Mr. Marshall.

Mr. MARSHALL. Thank you, Mr. Chairman. Dr. Corrigan, your description of agonizing process that you go through in order to reach some sort of an agreement that contemplates some progress where security is concerned is understandable and disconcerting at the same time. It almost sounds as if you need a big brother at the table to encourage you along, even though there are some dissenters here, it sounds good, we are going to go ahead and do it for the sake of the broader society that is affected by these financial markets.

While the big brother at the table are the regulators, there is nobody else in the room obviously, and it would be nice if we could avoid regulatory arbitrage with everybody running to one that is least likely to be the big brother who does encourage people to move along and to run to the one that is most likely to sort of leave the parties to the process they have been using all along.

Gentlemen what kind of changes should we be making legislatively to the regulatory scheme that governs this whole process, this whole area, this over-the-counter market? You know, the Financial Stability Forum was created right after long-term capital and supposedly had the best and brightest around the world anticipating what the next problem was going to be, missed this one altogether. And in April, frankly, issued recommendations as it started to see the dominoes falling, and then missed September altogether. There needs to be a lot of self-reflection here it seems to me. The industry has done society a huge disservice by not being able to move forward as rapidly as it should.

So what kind of changes do we need to make with authorities, with regulation, *et cetera*? Dr. Corrigan, I might as well start with you.

Dr. CORRIGAN. I could spend the afternoon on that one. Let me try to reduce it to the basics as best I can. First of all, I think the issues that this Committee is focused on, even today, in terms of keeping the momentum to get the CCP and the related regulatory oversight in place, are along the lines of the Committee's work, and some of my suggestions are clearly a step that has to be taken. So that is easy; not easy to do, but easy to agree on.

On the broader question of what can we do in the regulatory sphere, or for that matter in the private sphere to better anticipate.

Earlier the suggestion was made in terms of early warning systems. That is really tough to do. I have been at this for 42 years, and our collective capacity to anticipate the timing and triggers of the next financial dislocation shock, crisis, whatever you want to call it, unfortunately is quite limited, because we are dealing with a very specific form of human nature.

So I think that as we reflect on the events of the past 16 months, the first thing we have to do is agree on a couple of broad principals that are going to have to shape the regulatory structure and focus on the future. The first of those principals is to recognize that there is a difference between prudential supervision, which is aimed at financial stability as a public policy goal on the one hand, and market practice, which is equally important, but it is aimed at things like insider trading, front running, market manipulation. The first thing we have to figure out is how do we square the circle at a philosophical level between those two public policy goals, because we cannot, in my judgment, go on with a system like we have in the United States where there are 15 or so Federal agencies in the same sand box, and 50 state regulators in that same sand box. We have to simplify that and our chances to find our way to better insights or early warning, or whatever, would be much greater to the extent we can simply.

But the principle of simplification has, in my judgment, another meaning and that is because the world of contemporary finance is so complex, we can't put that genie back in the bottle. I think we also have to learn to get ourselves and our thought processes out of the trenches and up on the mountain a bit so we can see what is in front of us, as well as what is in back of us. So there is a big cultural change that we as a nation face in terms of trying to do a much better job in this sphere that obviously we have done in the recent past. And I apologize for being so long-winded, but as you can see this strikes a bit of a passionate chord with me.

Mr. MARSHALL. It is a huge question for the country and my time has expired. I don't know, Mr. Chairman, you may want to have answers from some of the others on what sort of regulatory changes they would like to see; your call, sir.

The CHAIRMAN. Yes, each of you respond briefly if you think we need to make changes.

Mr. DAMGARD. Well, we are always concerned about the competitive nature of the exchanges outside the United States and the race to the bottom is a problem. I think that in terms of recognizing that this is a global situation, I don't know whether it is going to require treaties, but truthfully, the CFTC has done an excellent job of relating to other regulators around the United States. And one of our concerns is yes, a lot has gone wrong, but not very much of it can be—the CFTC can't be held responsible for much of that, nor can this Committee.

This Committee can take a lot of pride in the kind of upgrades that you have made, since 1974, to the Commodity Exchange Act. Our concern is more along the lines of not throwing the baby out with the bath water. Everybody recognizes that the next Congress and the next Administration is going to take a good, long comprehensive look with very, very good debate on what makes more sense going forward. And from our standpoint, we want to make

sure that all the good things that have been done by this Committee on behalf of the regulated futures market don't get caught in some tsunami that results in a lot of over-regulation and disadvantages U.S. markets.

Mr. PICKEL. You pointed out clarification as to authorities. I think that came up in the first panel, as well, where there were some questions in terms of SEC involvement. Providing those clarifications and that is based, perhaps, in terms of who regulates which of the entities that are engaged in this business and who is therefore accountable to Congress among the regulators, is very important.

I think also the PWG objectives that a number of us have referred to provides a framework, and a lot of those are laid out as challenges to regulators under existing authorities and the requirements for market participants. Congress would want to look at those very closely and decide whether the Congressional action would be necessary to put a little umph behind them.

Mr. THOMPSON. Mr. Congressman, I agree.

First of all, it is critically important for the country. It is also an extraordinarily complex undertaking. When I think about it, I can't think of any way to do it on a product-by-product basis because, really, at the end of the day, we are not talking about products. We are talking about risk. And the only thing that I think has a chance of keeping us out of the current situation we are in is a holistic assessment of risk across all products by a prudential supervisor of every systemically important market participant. I think trying to regulate this pocket of risk or that pocket of risk just means that people who are inclined to blow themselves up will access another source for taking that risk, and unfortunately do so.

So I see no easy way out of this. I think that is the only thing in my mind that has a chance of success.

Mr. MURTAGH. I would agree with that and would suggest that you need to put most of the responsibility on the primary supervisor for the particular users of product. They are the ones who are going to see, holistically, exactly how different risks are being managed; and, ultimately, greater reporting and transparency will help make sure that people can see what is going on within a particular institution. That question is probably more focused on financial institutions than it is, perhaps, with certain other parties, but that is where I think most of the systemic risk comes from.

The CHAIRMAN. I thank the gentleman.

The gentleman from Ohio, Mr. Space.

Mr. SPACE. Thank you, Mr. Chairman.

Gentlemen, I wanted to ask a question that was asked to the first panel earlier today. We have been hearing that the European Union is desperately seeking to attempt a European solution to the need for clearing credit default swaps; and, to that end, the European Commission may be considering requiring all CDS agreements to which Europeans are the only parties to be cleared only through a European-approved clearinghouse. For CDS agreements between Europe, European, and non-European parties, the CDS would have to be cleared only through a European-approved clearinghouse if the agreement is denominated in Euros; and if the referenced entity in a CDS is a European company, that agreement,

too, would be required to be cleared through a European clearing-house.

What are your thoughts about these possible requirements? Would they expedite or delay the establishment of a CDS clearing-house here? And what would be, if adopted, their consequences? How important is it to have continuity of regulation on both sides of the Atlantic with regards to these clearinghouses?

Mr. PICKEL. The European dialogue is one that ISDA is very closely involved in on behalf of its members. It is the case—we have been of the view that there is room for competition in the clearing space even if ultimately there is one, or there is one in Europe *versus* one in the United States. But I think that it is important to allow competition to determine that, to make sure that there is that test, that ability to ensure that the one who prevails is the one that is most competitive. So I think it is most important to encourage that.

My impression is the regulators are engaged in a dialogue to try to make sure that there is coordination. But we know that there is a desire in Europe to establish one particular approach. But we will continue to engage in the dialogue to try to encourage the competition in the trans-Atlantic dialogue.

Dr. CORRIGAN. Let me respond to that as best I can.

First of all, I think there really are some substantial practical problems here. Because if you define a CDS that must be cleared in Europe as being denominated in the Euro, well, what do you do about a CDO written in New York by J.P.Morgan that is denominated in a Euro? Or what do you do about a subsidiary of UBS that is in Chicago and has a CDS against the European reference entity? So there is going to be a lot of very, very difficult practical problems here.

I think we should also recognize that, at least at the margin, I think the drive to have a separate CDS CCP in Europe, represents some frustration among our friends in Europe to the effect that a lot of the problems that we have seen in the last 16 months kind of had its roots here in the United States. They see this maybe as a way to insulate themselves a little bit from these kinds of events. And I, frankly, don't much agree with that myself at all.

But, having said all that, I go back to the language in my statement. Speaking for myself, if I was king for a day, what I would like to see happen would be a single credit default swap CCP on a global basis. And while that is not where we are likely to start out, I would be willing to make a small wager that that may be where we would end up.

Mr. DAMGARD. Yes. Only Dr. Corrigan can do that in 1 day.

Dr. CORRIGAN. Not in 1 day.

Mr. SPACE. So the concerns about looking for competitiveness raised by Mr. Pickel would not be something that would enter into your sphere as to how this should be set up. And I guess that is not so much a question as it is a statement. But I am concerned about, if competition and competitiveness is a criteria in determining where these CDSs are going to be cleared, doesn't that invite under-regulation or lack of regulation, and inherently create a system that may be more suspect to catastrophic failure?

Dr. CORRIGAN. I don't know. I am going to leave that one to others except to say that this is clearly a space where we want the best of the best to emerge as the winner. Very simple.

Mr. PICKEL. Yes. I would say that competition would be on the basis of things like price of clearing, as opposed to whether the collateral requirements are different. I think that the standards are the ones that either are at the international level or at the CFTC guidelines, and you would have to have a clearinghouse comply with those. Then, to the extent that they want to compete on price, that that will only encourage more people to clear through that platform.

Mr. THOMPSON. I agree with that. And I understand the need to—or the desire to avoid regulatory arbitrage and the race to the bottom. But to replace that with something which is essentially random, where if Goldman Sachs in New York and J.P.Morgan in New York do a trade denominated in dollars on a European-referenced entity, that means it has to be cleared in Europe, there doesn't seem to me to be a principle underlying that.

Dr. CORRIGAN. It is not going to work.

Mr. DAMGARD. If there were some way to create a linkage between clearinghouses and—because I think it is unreasonable to think that the U.S. firms will all yield to a single clearinghouse in Europe, any more than the European firms would all yield to—even though it may be Dr. Corrigan's dream, it is my judgment that that is unlikely. There may very well be a role for Congress in determining what kind of standardization would be necessary in order for these clearinghouses to develop some sort of a link.

Mr. MURTAGH. I think whatever benefits are likely to be had from having multiple clearing counterparties, you really want interoperability amongst them, such that if there is a problem that they can basically transfer their function to someone who is not having an issue.

The CHAIRMAN. I thank the gentleman.

The gentleman from California, Mr. Costa.

Mr. COSTA. Thank you, Mr. Chairman.

Starting with Mr. Damgard, I would like to ask and go through the lineup there whether or not you believe that there is a conflict of interest in a clearinghouse run by the same dealer banks that have the largest position in a current credit default swap market.

Mr. DAMGARD. Well, most clearinghouses actually are connected in a vertical silo to an exchange. So, for instance, the governance of the Chicago Mercantile Exchange decides what is going to happen at the clearinghouse at the Merc even though there is a risk committee made up of member firms that can make recommendations which can either be followed or not followed.

Mr. COSTA. Do you think there is a conflict of interest?

Mr. DAMGARD. I don't think the conflict of interest exists at the firm level. I think from time to time there may be a conflict of interest at the exchange level, and we would encourage exchanges to put as many public members as possible on their Boards in order to avoid that risk.

Mr. PICKEL. As far ISDA, we don't have a particular position on that issue.

Mr. COSTA. You don't have to have a position. Do you believe there is conflict of interest?

Mr. PICKEL. I think that you need to have robust governance in place, which I think Mr. Short and others on the first panel referred to. And I think that Dr. Corrigan referred to earlier about the tension among the firms who are competitors. I think you see that play out in the development of the clearing platform.

Mr. COSTA. I want to get to that competition issue. Mr. Thompson, how do you see that?

Mr. THOMPSON. I don't believe there is a conflict of interest. As we have gone through the process with ICE on ICE Trust U.S., it has become abundantly clear to me that they are making all of the important fundamental decisions. They will seek dealer input on particular risk management issues, but I don't view ourselves as having any conflict.

Mr. COSTA. Dr. Corrigan?

Dr. CORRIGAN. I think it is inevitable that there is at least a potential for conflict in some of these relationships. But, having said that, I would likely hasten to add that that potential for conflict I think is clearly manageable.

Mr. MURTAGH. I would agree with that and just say that these companies are typically providing services to financial institutions who are very much interested in making sure those services are performed properly.

Mr. COSTA. Well then, for the three representatives representing J.P.Morgan and UBS and Goldman, how much ownership interest would you have in an ICE Trust as being proposed?

Mr. THOMPSON. I don't believe we have any current ownership interest in them.

Dr. CORRIGAN. Again, I do not know the answer to that question.

Mr. COSTA. Mr. Thompson.

Mr. THOMPSON. I am informed we have some preferred shares but do not have a seat on the Board and do not own any of the equity.

Mr. MURTAGH. I am unaware of what our ownership interest is, but we can find out for you and get back to you.

Mr. COSTA. Please.

Mr. DAMGARD. Mr. Costa, each clearing member is required to own a substantial number of shares in the Chicago Mercantile Exchange in order to become a clearing member; and naturally, for competitive reasons, they belong to every clearinghouse. They don't want one of their competitors to be able to bring customers to a clearinghouse other than their own.

It is a two-edged sword. There is some capital inefficiencies in belonging to a lot of different clearinghouses, but there is also the advantage of competition, keeping prices in reasonable shape.

Mr. COSTA. Well, I want to get back up to about 50,000 feet here, because we talked a lot about risk and risk management and how we assess risk. And clearly, as my colleagues have stated earlier, I think our constituents are very frustrated and want to know why there weren't any canaries in the coal mine, so to speak, in indicating that risk wasn't being properly managed. Dr. Corrigan, in your experience, what are the hallmarks of prudent risks, since we haven't done it so well here lately?

Dr. CORRIGAN. Well, the way I think about it, Mr. Congressman, is you go back and you look at financial train wrecks over a fairly long period of time.

Mr. COSTA. We have a history of them.

Dr. CORRIGAN. Pardon me?

Mr. COSTA. We have a history of them.

Dr. CORRIGAN. Yes, we have. And so do others, by the way. I do think there is something to the proposition that there are three or four common denominators that tend to be associated with most of them.

The first is the phenomenon that Mr. Thompson mentioned earlier, and that is broad-based, wide-spread maturity mismatches in the credit space, and that has been there almost every time.

The second is a systematic tendency for a period of time to under-price credit risk, and that has been there almost every time. In this case, it is really the dimensions of that problem that are astonishing.

Mr. COSTA. But, as a manager, you have risk assessment wearing one hat and, as a risk manager, you are wearing another hat. I mean, you are trying to assess the risk and manage the risk.

Dr. CORRIGAN. Right. Right.

Mr. COSTA. And it seems to me that folks in the last 18 months, based upon the meltdown that we have, have not done a very good job in coordinating, managing the risk *versus* assessing the risk. I mean, how else did we get into this mess in the first place?

Dr. CORRIGAN. Well, as I said, if you go back, you can pretty well come up with clear diagnostics of how we got into this mess. But there is no single point. It is a collection of things that built up over a period of time.

Now, when you look at the crisis itself, I would suggest—and I suspect others would agree with this—that some of the worst failures were not so much the complexities of risk management but it was basic risk monitoring. There were failures on the part of institutions and markets to simply be able to monitor the extent to which they were at risk.

Mr. COSTA. Maybe that is why we are having the hearing.

Dr. CORRIGAN. I think it is. In a very real way, I think it is.

Mr. COSTA. I mean, through transparency and through a regulatory scheme, we hope they could in effect do a better job at monitoring that risk.

Dr. CORRIGAN. One of the things that these gentlemen have heard me stress is that, going forward, major financial institutions should have the capacity in a matter of hours to be able to monitor their counterparty exposures to any organization, anyplace in the world, across all products, across all services; and they should be in a position where they can share that information with their primary supervisor. And that is representative of the scale of some of the changes that I think we have to make.

And I don't mean to monopolize this conversation, but I assume the others would probably agree with what I just said.

Mr. COSTA. Since you are considered the sage, and I have gone way beyond my time, just one quick question, because it ripples through all of our constituencies. What scares you the most at this point in time?

Dr. CORRIGAN. I am sorry?

Mr. COSTA. What scares you the most at this point in time?

Dr. CORRIGAN. What, I don't know.

Mr. COSTA. Well, that is what scares all of us. But I am talking about as it relates to the potential downsides of—I mean, I don't think we have hit bottom yet.

Dr. CORRIGAN. Let me try to do the best I can.

What concerns me most of all right now is the pressure on the macroeconomic situation. Because as all of you know, for a variety of reasons, many of which are tied up with the financial crisis, our economy and the economies throughout much of the world are taking quite a beating. And that is why I think that one of the things that the Congress and the new President, when he takes office, has to this put right on the top of the list in a fresh stimulus package. So that is probably the thing that worries me most right now. I am mindful of the fact that there are still pressures on the financial side, but the number one issue for me is the economy.

Mr. COSTA. Thank you.

The CHAIRMAN. I thank the gentleman.

The gentleman from North Dakota, Mr. Pomeroy.

Mr. POMEROY. I thank the Chairman.

Dr. Corrigan, I will continue on with you, if you don't mind.

You were involved in the aftermath postmortem of long-term capital, assessing what happened, what the consequences were. It looks to me like the core of long-term capital's problems were extraordinary dimensions of leverage that weren't easily understood or maybe were impossible to understand until it all fell apart. It seems to me that we took the long-term capital model and, rather than take steps to make sure nothing like that could happen again, it became the *modus operandi* of doing a lot of business. Credit default swaps going from \$108 billion of notional activity, notional value in 1998 to \$57 trillion in 2008.

Now, you indicate that timing and triggering of events can't be anticipated. But then you go through several recurring themes that have brought about financial collapse—and I agree with that analysis—the systematic tendency to under-price credit risk and the failure to monitor the credit risk taken.

Now, with those two things, in my opinion, you don't go from \$108 billion to \$57 trillion in a decade without having probably each of those factors just screamingly apparent in what is taking place. What frustrates me is no one was calling—I mean, the regulators weren't responding, the leaders of Wall Street didn't seem to be expressing concern, and now we have this collapse.

You indicate that we don't want to put the genie of innovation back in the box, and sometimes there are side effects. Well, it looks to me like the side effects here is to have credit default swaps and their unregulated activity and their astonishing growth. And the questions now, surrounding whether or not there is value behind them, have a terrible impact on our economy and economies through the world. Those are more than side effects.

What is the liability position of Goldman Sachs relative to its presently held positions on credit default swaps?

Dr. CORRIGAN. I can't give you the exact number. But I know it is fairly close to flat. In other words, we try very hard to avoid open

exposures on either side of the market, and that is not always possible to achieve that. But certainly we monitor those exposures very, very carefully.

Mr. POMEROY. Mr. Murtagh, what is the UBS position?

Mr. MURTAGH. I don't have the figure at my fingertips. I'm sorry.

Mr. POMEROY. Does the company know?

Mr. MURTAGH. Yes, we do. It is reported in our third quarter results. I know that.

Mr. POMEROY. What was the third quarter numbers?

Mr. MURTAGH. I just don't have the number with me. That is all.

Mr. POMEROY. Was it substantial?

Mr. MURTAGH. I don't believe so, no.

Mr. POMEROY. Mr. Thompson.

Mr. THOMPSON. Similar to Mr. Murtagh, I don't have the number on hand. I believe it is significant, but it is manageable. Much of it is collateralized. And, when you think about the things that probably keeps our Chairman up at night, I think he is worried much more about the things like our exposure to credit cards, to retail borrowers, to the home mortgage market and to the leverage loan market.

You know, we recognize that there is risk inherent in the credit default swap product. We manage it as intelligently as we can. It is one of a panoply of risks out there. And when you go through your litany of the various companies that have failed, I think it is important to note that many of them have had—credit derivatives have not been a major element of their failure. Other things, which Dr. Corrigan——

Mr. POMEROY. Other than AIG.

Mr. THOMPSON. AIG is the notable example.

Mr. POMEROY. Notable example to the tune of tens of billions of dollars of taxpayer money.

Mr. THOMPSON. And when I think about what happened to AIG—and it is part of the reason for my answer before about the only thing that has a prayer of working is a prudential regulator who has a holistic view of all of the risk activities of the firm—the problem with AIG was all of its credit derivatives activities were conducted in a non-insurance subsidiary which was not subject to meaningful regulatory oversight.

Mr. POMEROY. Right. Credit default swaps weren't regulated.

Mr. THOMPSON. It is not that the product wasn't regulated. It is that the entity AIG Financial Products was in a regulatory gap and thus had no meaningful regulatory oversight.

Mr. POMEROY. I think your distinction there is a little ridiculous in terms of you don't worry about the products. You worry about the participants. It is kind of like me not worrying about the insurance policy I have. It is a fine policy. It is just that the company backing it up has no assets. I mean——

Mr. THOMPSON. No. I think that you need to distinguish between the product and the entity. J.P.Morgan Chase Bank, which is subject to prudential regulation by the Fed, has all our CDS activities scrutinized very, very closely by the Fed. They are in constant contact with us about information, and they have a good picture of our overall risk profile with respect to our CDS activity.

Mr. POMEROY. So was the Fed monitoring—you are fairly new under the Fed, right?

Mr. THOMPSON. No. We have been under the Fed forever.

Mr. POMEROY. Okay. Would they assess then your net position for credit default swap activity you were engaging in?

Mr. THOMPSON. They look at our credit default swap activities in a variety of ways. One is—I think what you are getting at is our net position. In other words, how much are we exposed if GM were to default, for example. And they scrutinize that very closely. They also scrutinize very closely the counterparty credit risk which arises as a consequence of our credit default swap activities.

Mr. POMEROY. Not to interrupt but just to cut to the chase, the Fed was monitoring your ultimate exposure on credit default swap activity?

Mr. THOMPSON. Yes.

Mr. POMEROY. Okay. Insurance commissioners weren't clearly in the component of the AIG holding company.

Mr. THOMPSON. Insurance commissioners had no jurisdiction.

Mr. POMEROY. And the SEC wasn't, relative to their entities, under their regulation that were engaging in this unregulated activity.

Mr. THOMPSON. That is my understanding.

Mr. POMEROY. I don't understand how the SEC could basically be signing off on reported financial statements of regulated entities without having the same kind of comprehensive notion that you are just saying the Fed did relative to your position on credit default swaps. Do you have a thought about that?

Mr. THOMPSON. I think that is a reasonable question to ask, but a question not to ask of me.

The CHAIRMAN. The gentleman's time has expired.

We have found out, a month ago, that your total notational value, according to your filing with the OCC, is \$8 trillion at J.P.Morgan. And they only justify they have as much shorts as longs. But from what I know about this, that is not the problem. The problem is that there might be something in there that looks fine now that might not be, and that is what has jumped out and got a lot of people. So, anyway, we have to move on.

In the November 28 issue of the *Financial Times*, there was a story in there about how the banks—you guys are setting your interest rates. And there is a provision in there that ties the movement of the interest rates to what happens in the credit default swap market, in terms of, if somebody starts moving against somebody and drives up their illiquidity or drives down the price of their stock, then you reprice their interest based on the movement in that credit default swap. And according to this article, people were going in and shorting the company and then making a move against it where one person would sell a swap to another and then they would sell it to another and that person would sell it back to the first person so they didn't have any exposure, and they bankrupted the company and made a bunch of money on this move. And, I was questioning the SEC doing this, stopping the short selling. But it clearly looks likely to be a ridiculous situation if you are stopping it on stock and not stopping it on the CDS situation.

But getting back to—are you guys doing this? Are you tying the interest rates to the movement in the CDS market?

Mr. THOMPSON. The question is directed to me?

The CHAIRMAN. You were named, J.P.Morgan, UBS. I think all of you guys were named as doing this, writing this into your loan.

Mr. THOMPSON. It is my understanding that, in certain parts of the loan market, pricing is sometimes a function of your borrower's CDS spreads, on the theory that that is a much more reliable indicator of the actual credit risk that you are assuming, as opposed to other tests which have been used in the past, such as your long-term credit rating by one of the major credit rating agencies. I don't think inherently in and of itself there is anything improper about that.

The second part that you mentioned, where you have a daisy chain of people selling protection on a prearranged basis in order to drive those CDS spreads up, presumably so that you would change the loan pricing, is I believe called market manipulation. It is illegal under current law, and anybody who does it should be prosecuted.

The CHAIRMAN. But if the CDS market moves, you can change the interest rates on it?

Mr. THOMPSON. I don't know how common a practice that is in the loan market. I am a derivatives guy. But I do hear of that from time to time. And if you would like us to report back on how common a practice this is, we would be delighted to get you that information.

The CHAIRMAN. I would like that.

Along that line for you and Dr. Corrigan and Mr. Murtagh, what percentage of your existing credit default business do you expect you will take to clearing? Do you have any idea if we get do this set up.

Dr. CORRIGAN. I would estimate—and, again, let me—I apologize once more—draw a bit of a distinction here, Mr. Chairman, because this is a very good question.

In volume terms, the answer to your question is going to be well up into the 90s. In value terms, it might be somewhat less than that. And the reason why it might be somewhat less than that is the point that all of these gentlemen have made before, and that is there is the incidence of a relatively small number of high-value, highly complex so-called bespoke trades that just don't fit into a nice neat little box that lends themselves to either exchanges or to CCPs.

So, overall, I would guess the percentage is probably around 90, with high 90s for the volume of trades, somewhat lower number for a small number of high-value trades.

Mr. MURTAGH. Mr. Chairman, I don't have a precise number. I will say it will depend very much on the eligibility requirements and some of the issues that were alluded to earlier in terms of the impact of any European initiatives. It is really very dependent on how this is all taken forward. We do expect to move a substantial majority of our trading positions, again by volume, onto a clearing platform as, and when, it is available. I think it has been suggested earlier there will be some time lag as we bring these onto the plat-

form. There are many years of exposure that needs to be brought along.

Mr. THOMPSON. My answer would be consistent with these gentlemen.

The CHAIRMAN. What about in the future? What do you expect of your products, going forward, would be able to be cleared? You know, I mean, one of the things that I worry about, especially with this idea that you guys have cooked up with ICE, that you are trying to get around something. You know, maybe I am wrong; but I am suspicious.

And so I am just kind of wondering, going into the future, is that percentage going to stay the same? Are you still going to be having the same percentage of these ostensibly complex or structured products as you have in the past? Is that going to change, or has the marketplace changed so the appetite for this is not there anymore?

Do you understand what I am talking about?

Mr. THOMPSON. I do. I don't anticipate it to change materially from the answers we have given. I think there is a temporary lull in the market with respect to highly structured one-off transactions. But I suspect that that will change over time as well and return to something approximately of what it was in 2006 where, in terms of the notional amount of outstanding transactions, the overwhelming percentage are highly standardized and susceptible to clearing. And there will be some residue that are not.

The CHAIRMAN. If there is more than one clearinghouse created, how will you make your decision about where to clear these things? By price or—because you are setting up this—if you get this thing set up with ICE because you guys are part of that, you will do everything there or what?

Mr. THOMPSON. I think we would decide which clearinghouse to use on the totality of relevant factors: price, service, capabilities they offer, the claim, the liability we might have under the guaranty fund. I haven't thought of an exhaustive list, but we would try to presumably take everything into account and make the best decision for the firm overall.

Mr. MURTAGH. Clearly, there is going to need to be an identity of who your counterparty is, that they also clear on the exchange. And then to the point we made earlier in terms of the eligibility of the contract. But other than getting those basic points nailed down, I think ultimately after that it will be a variety of other factors in terms of ease and whoever provides the best service ultimately.

Dr. CORRIGAN. I would hope that most of us would base our decisions to a very, very important extent on the robustness as we judge it of the financial infrastructure associated with the clearinghouse. It is the whole set of arrangements, margins, maintenance margins, guaranteed funds, quality of stress tests. For me at least, having comfort on that infrastructure would be more important than a nickel a trade or something like that.

The CHAIRMAN. Thank you.

The gentleman from Pennsylvania, Mr. Holden.

Mr. HOLDEN. Thank you, Mr. Chairman.

I have two questions for Mr. Pickel. Mr. Pickel, please tell us about your experience in conducting CDS auctions; and does ISDA run all of the auctions itself?

Mr. PICKEL. The auctions are not run by ISDA. We have contracted with two organizations, one called Markit, which is a data provider for the CDS business, the other called Creditex, which is an electronic platform, another service provider, which was acquired over the summer by ICE. So it is a subsidiary now of ICE. So they are the ones who, on the day of the auction, will actually collect the information from the marketplace and calculate the final price based on a very wide indication of interest from market participants, both dealers and customers of the dealers who engage in the auction itself.

Mr. HOLDEN. And how much data have you been able to collect regarding recovery rate for CDS reference entities that have defaulted?

Mr. PICKEL. Well, we don't have the data regarding the recovery rates. That is published in, recently, DTCC in both the Lehman situation, I believe, and the Washington Mutual situation, published information about the amount of payments that were settled on the—that were made on the settlement date for the particular name. And that was information that is available from DTCC.

Mr. HOLDEN. Thank you, Mr. Chairman.

The CHAIRMAN. Thank you.

Apparently, this DTCC had been told that this data could be downloaded to either the CME or the Eurex. Is that true, that it could be downloaded?

Mr. PICKEL. Well, this information—the information that is made publicly available on the website regarding outstanding volumes for the vast majority of names traded in the market is publicly available information, and I think could be downloaded.

Separately I think for purposes of clearing the——

The CHAIRMAN. That wasn't what I was getting at. The suggestion had been made that we should take all this stuff and just do a hypothetical—just have it downloaded to CME or to Eurex. Nobody would have to declare anything. Just put it on there and see what we would get. What do you think about that idea?

Mr. PICKEL. I don't know exactly how that would work. But, again, the information is out there. I suspect that people at the CME and Eurex are probably looking at how they can crunch that information, use that information to——

The CHAIRMAN. Well, it would be for us or for some policymakers to see what the potential exposure is. By putting all of this—and I am talking about everything. Just dumping the whole data into their computers and trying to figure out the risk and just see where we are at.

Because that is the question that everybody has, is what is out there that we don't know and how big is it? Is it part of what is freezing up the credit market? I don't know if this is a good idea or not. But it came up someplace that this would be, on an artificial basis, you would put it on there and see what it generates. But I don't know how you would price it.

Mr. PICKEL. I am not sure that the information that is on the website would be——

The CHAIRMAN. I am not talking—everything that you have on the DTCC, which should be all of these trades, even the ones that are not cleared. So I am not putting everything on it. Not just the stuff that is public.

Mr. MURTAGH. I think the suggestion may be to take the data and just drop it into the risk models and run the models and see what sort of marginal requirements currency it would actually produce.

Mr. THOMPSON. We would be supportive of that.

Dr. CORRIGAN. I think that, to some extent, this has already been done. I am not familiar with the details, but I know I have read reports that suggest, for example, that ex-post, after the fact, precisely that kind of thing was done in great detail with regard to trying to simulate the Lehman failure, for example, and to see how that would actually have played out had it occurred real-time, and if I—I may be wrong about that. I know I am right. I am not just not sure I have the facts right. But, hell, that never stops me. I know that people have done those ex-post simulations. I just can't give you the chapter and verse.

The CHAIRMAN. Theoretically, this could be done.

Dr. CORRIGAN. I will find out and let your staff know, Mr. Chairman.

The CHAIRMAN. That was something that came up in some discussion we were having. I just thought I would ask you guys about it.

Anybody have anything else? I guess we have dragged this on long enough.

Well, thank you all very much for being with us today. You have been very generous with your time and answers. We appreciate it. We are trying to learn as much as we can about all of this stuff, and I am sure we will be having more discussions in the future. So thank you all for being with us.

And, with that, the Committee stands adjourned until the call of the chair.

[Whereupon, at 4:43 p.m., the Committee was adjourned.]

[Material submitted for inclusion in the record follows:]

SUBMITTED STATEMENT OF HON. BART STUPAK, A REPRESENTATIVE IN CONGRESS
FROM MICHIGAN

I want to commend Chairman Peterson and the Committee on Agriculture for this recent series of hearings to assess whether loopholes in the Commodity Exchange Act have permitted the credit default swaps market to, in the words of Warren Buffett, become a “financial weapon of mass destruction” against our economy.

Credit default swaps are supposed to insure against the decline in the value of debt instruments such as mortgages. However, unlike traditional debt insurance, there is no regulator who requires that the underwriter have the money to pay up on the insurance policies they write.

It is estimated that the credit default swaps market has skyrocketed to at least \$57 trillion, which is nearly ten times the size of the underlying debt obligations that these swaps ostensibly insure. That means 90% of the credit default swaps are simply bets by entities that have no underlying insured interest—such as a mortgage that they hold and want insurance against the borrower’s inability to repay the loan.

Credit default swaps are naked insurance contracts, and are no different than a gambling ticket—whereby a party puts a small amount down for a large potential payoff tied to a specific event.

Gambling like this creates perverse incentives and Congress should examine whether these instruments should be outlawed in the future.

For example, major investment banks, such as Goldman Sachs, reportedly took huge bets on the decline of the mortgage securities they were simultaneously marketing to their clients.

University of Texas Professor Henry Hu has questioned whether bankruptcy creditors who also hold credit default swaps would be incentivized to force a company out of business rather than allow them to successfully reorganize—to the detriment of other creditors and employees. *Financial contracts that create the incentive to bring about loss beg to be regulated by insurance regulators.*

The 2000 amendments to the Commodity Exchange Act provided “legal certainty” that swaps would not be subject to regulation. This enabled a massive dark market in commodity swaps to flourish. The unregulated commodity swaps market now dwarfs the size of trading on regulated commodity futures exchanges. In addition, the CFTC has allowed swaps dealers to be exempted from rules which prevent excessive speculation when they take positions in futures markets. These loopholes when combined with a massive inflow of capital contributed to an oil price bubble which, at its peak, reached \$147/barrel in July. Then over the past 5 months, as investment banks and insurers were forced to liquidate, bets on commodities were unwound. Coupled with plunging economic activity, oil prices have fallen over \$100 per barrel to \$42 per barrel today—a 71% drop in a matter of 5 months. Changes in supply and demand by themselves do not explain this volatility in oil or other energy commodity prices.

This volatility has inflicted severe damage to the economy. Airlines that sought to hedge rising jet fuel prices last summer when investment banks predicted \$200/barrel oil, now face hundreds of millions in losses because they are obligated to buy fuel far above today’s market price. Ethanol producers who sought to protect themselves against skyrocketing corn prices watched a bushel of corn drop by half in a matter of months, and now face collateral calls that have forced some into bankruptcy. How can automakers gear up to meet demand for fuel efficient cars that are competitive at \$4.00 per gallon when prices dramatically plummet to \$1.75 per gallon in a matter of months?

Reasonable regulation is needed to ensure commodity prices reflect the underlying supply and demand, and that credit default swaps are either regulated or eliminated. We respectfully ask that the following questions be addressed in the course of your hearings:

- The Federal Reserve has proposed centralized clearing of trading in credit default swaps. Is centralized clearing sufficient to ensure these instruments cannot create a systemic risk to financial system?
- Should credit default swaps be regulated as an insurance product so that those selling the product have enough money to pay claims? If so, should credit default swaps be subject to state insurance regulations, or should there be a Federal regulator?
- Should the same regulator which oversees trading and clearing of swaps transactions also serve as the insurance regulator? Or should there be separate regulators?

- Should credit default swaps be deemed an unlawful if there is no underlying insurable risk held by the owner of the swap?
- Given the availability of traditional bond insurance, why shouldn't credit default swaps be deemed contrary to the well being of society and outlawed altogether?
- To what extent are the incentives to reorganize companies in bankruptcy undermined by creditors who can profit more through credit default swaps holdings than through a successful restructuring which might permit continued operations and repayment of creditors? *Should financial contracts that create the incentive to bring about loss beg to be regulated by insurance regulators?*
- Should the Administration work to reach agreement with the G20 countries on a common basis for regulation, or is a supranational regulator needed to monitor and protect against systemic risk?
- Should swaps exemptions in the CEA be eliminated? Should preemption of state bucketing and gaming laws be removed from the CEA? Should the concept of exempt and excluded commodities be eliminated from the CEA? Should foreign boards of trade operating in the U.S. be subject to U.S. regulation?

We look forward to working with you as you consider reforms to the Commodity Exchange Act. Please contact me at [Redacted] if you have any questions.

SUBMITTED STATEMENT OF CITIGROUP INC.

Citigroup Inc. welcomes this opportunity to submit written testimony regarding the role of credit derivatives in the U.S. economy.

The Credit Derivatives Market

CDS are the most common type of credit derivative traded in the market today. Although CDS are a relatively recent financial innovation, they have become the most important tool available to market participants for managing and trading credit risk. Unlike cash instruments, such as bonds and loans whose values are also influenced by factors other than credit risk, such as interest rate movements, CDS allow market participants to purchase and trade "pure" credit risk.

In addition, CDS enable market participants to hedge credit exposures to individual companies, industry or geographic sectors, or several companies at the same time. The versatility of CDS has led to the development of a liquid CDS market, providing market participants with access to an efficiently priced measure of the financial condition of reference entities.

As a result, CDS have quickly become important and widely used instruments in the financial markets. The ability of companies to issue securities or obtain loans at attractive pricing levels is significantly enhanced by the CDS market due to the ability of investors and lenders to hedge their resulting credit exposures through the purchase of CDS protection. Further, CDS enable banks to hedge the credit risks inherent in corporate financings that are essential to economic growth, and, in turn, reduce the cost of funds for borrowers. CDS also free up additional credit capacity, which enables banks to expand credit facilities available to their corporate clients. In addition, many market participants use CDS pricing to provide a more accurate valuation of credit risk than would otherwise be possible by looking solely to less liquid cash markets. We have seen the CDS market for corporate issuers continue to perform this important function very effectively during the current crisis at a time when related credit markets had become illiquid.

The Performance of CDS in the Current Market

The corporate CDS market, as a whole, has performed well and provided much needed liquidity throughout the current market turmoil. The bond markets, by comparison, have become increasingly illiquid as investors have either hoarded cash or lost the ability to access financing. The strength and resiliency of the corporate CDS market has been demonstrated over the last few months as multiple entities referenced under large numbers of CDS contracts failed, including Lehman Brothers, Fannie Mae, Freddie Mac, Washington Mutual, and several significant Icelandic financial institutions. Despite these defaults, the CDS market has continued to perform well and has remained liquid. CDS trades that referenced the defaulting companies were settled in an orderly manner and in accordance with CDS participants' expectations. Although the significant size of the notional amounts of the CDS contracts referencing these entities was often reported in the media and cited as a danger to the stability of the markets, the settlement of obligations due under such CDS contracts went smoothly, in part, due to standard market conventions pursu-

ant to which sellers of credit protection collateralize their commitments to buyers of credit protection as the credit of reference entities deteriorates. The effective operation of these markets was also benefited by the use of a voluntary auction settlement process that facilitates an orderly settlement of trades based on a single market-determined settlement price.

The segment of the CDS market that experienced large losses and the greatest difficulties involved CDS related to asset backed securities linked to the subprime real estate market. Although the asset backed CDS market is a relatively small segment of the overall CDS market, large leveraged exposures in this segment magnified losses in the subprime real estate market. The root causes of the problems experienced with this segment of the CDS market arose from a number of sources, including primarily: the failure of sellers of credit protection, most notably monoline insurance companies, to collateralize their commitments as is customary in the corporate CDS market; an historic collapse in housing prices accompanied by soaring rates of mortgage delinquency and default; and a market-wide failure to appreciate the scope of the risk represented by exposure to the subprime real estate sector.

It also should be acknowledged that the fast-paced growth in the CDS market has presented significant operational challenges for major market participants. Numerous initiatives by the private sector in coordination with the official sector have contributed successfully to addressing these issues. One of the most important of these that is near completion is the creation of a central counterparty to clear CDS transactions.

Creation of Central Counterparty for CDS and Other Infrastructure Issues

Citigroup supports the creation of a clearinghouse to act as the central counterparty to CDS transactions. Citigroup has been an active participant in developing a central clearinghouse solution since the initiative to establish a clearinghouse for CDS was first launched in early 2007. Having a central counterparty will significantly reduce the scope of credit risks, capital inefficiencies and operational challenges that are currently associated with CDS trading, and will enable regulators to better monitor trends in CDS, including the positions of market participants, and provide access to aggregate end-of-day pricing for market participants.

Citigroup believes that clearinghouse and settlement services should be open to numerous trading venues in order to encourage competition in execution services, provide all market participants with more choice and lower execution fees, and spur innovation in a regulated environment. This year has seen the beginning of this process as several electronic trading venues were launched. Each provides auditable trading capabilities to enhance transparency and each offers effective straight-through-processing solutions to increase operational efficiency. The central clearinghouse will also help provide additional market data beyond the significant amount of data currently published weekly by the Depository Trust & Clearing Corporation on the most commonly traded corporate reference entities.

In addition to the development of a central counterparty for CDS, Citigroup continues to support the numerous initiatives among both industry representatives and regulatory agencies from across the globe that are currently underway to build a more efficient operational infrastructure for the over-the-counter CDS market. Such initiatives, which began in 2005, include improvements to the back-office processes for credit derivatives and other products, increased use of electronic processing and faster confirmation of trades, greater use of central repositories, faster trade confirmation, efforts to eliminate redundant trades that cause capital inefficiencies and increase operational risk, and the hardwiring of an auction settlement process into standard CDS transactions.

The Regulation of CDS

As a bank holding company, Citigroup is subject to comprehensive regulation by Federal banking regulators with respect to all of its activities, including its CDS activities, as well as to the SEC's anti-fraud and anti-manipulation authorities. Nonetheless, to the extent there are gaps in oversight of the CDS market, Citigroup is receptive to carefully tailored Federal regulation that addresses such gaps, while preserving the ability of the CDS market to continue to evolve and provide the considerable benefits that this market currently provides to all segments of the U.S. economy. In particular, Citigroup believes that any additional regulation of CDS should adhere to the following principles:

Consolidated Oversight. Citigroup strongly believes that oversight of both over-the-counter and centrally-cleared CDS should be consolidated in a single Federal regulator that has the resources and authorities necessary to address systemic risk. Consolidation of regulatory oversight of the CDS market can help prevent gaps in oversight, duplication, inconsistency, and ambiguity as to the jurisdiction of one reg-

ulator over another. Unfortunately, both the industry and the regulatory community are dealing with these issues today as a result of the fragmented nature of our current regulatory structure. Accordingly, in the near-term, we believe it is imperative that regulators coordinate with one another in overseeing the CDS market. In this regard, Citigroup believes the execution of the Memorandum of Understanding between the Federal Reserve Board, the CFTC, and the SEC is a helpful interim measure. In addition, we believe it is imperative that any action taken in the U.S. is coordinated with actions taken in other jurisdictions, particularly the EU, as they seek to address the CDS market.

Enhanced Information to Regulators. Citigroup supports measures that would provide regulators enhanced access to information regarding the CDS market. In this regard, we believe the formation of a central clearinghouse will provide an important tool and centralized source for regulators to obtain enhanced information on pricing, on significant position concentrations of central clearinghouse participants, and on trends within the CDS market more broadly. In addition, Citigroup also supports measures to allow regulators to obtain information from systemically significant market participants regarding their CDS activity. Such reporting requirements must be coordinated among regulators both within the U.S. and internationally to prevent duplicative or inconsistent information requests; information sharing arrangements among regulators can mitigate occurrences of such requests, while significantly benefiting the ability of regulators to obtain information regarding CDS market participants.

Maintain Benefits of CDS. Citigroup believes it is necessary that any regulation preserve the considerable benefits that the CDS market currently provides to all segments of the U.S. economy. In particular, we believe that a central clearinghouse should supplement, rather than replace, over-the-counter bilateral CDS trading venues. Regulation mandating submission of all CDS transactions to a central clearinghouse would have a detrimental impact on the CDS market by preventing market participants from entering into tailored contracts designed to achieve specific risk management or investment objectives or developing new products that lack the degree of standardization and product maturity necessary to facilitate clearing. Mandated submission would stifle innovation in the CDS market, limiting the ability of both the industry and regulators to continue to improve the CDS market, and significantly reducing the benefits of the CDS market described earlier. Similar concerns would be presented by any mandate that CDS be limited to exchange trading. This view is in line with those expressed by the President's Working Group in November, which recognized that market participants must have the flexibility to enter into customized bilateral contracts as circumstances and risk management objectives warrant.

Conclusion

Despite the fact that CDS are a relatively recent financial innovation, they have rapidly become an important tool for mitigating and transferring credit risk, and, as such, have provided significant benefits to banks, borrowers, investors and the U.S. economy as a whole. Recognizing the importance of CDS, Citigroup will continue to support efforts to address the risks and further improve the efficiencies and operational infrastructure of the CDS market, and we look forward to working with Congress and regulators on initiatives to improve oversight of CDS, while maintaining the significant benefits the CDS market currently provides.

SUPPLEMENTAL MATERIAL SUBMITTED BY BRYAN M. MURTAGH, J.D., MANAGING DIRECTOR, FIXED INCOME TRANSACTION RISK MANAGEMENT, UBS SECURITIES LLC

December 16, 2008

Hon. COLLIN C. PETERSON,
Chairman,
Committee on Agriculture,
Washington, D.C.

Dear Chairman Peterson:

Thank you for the opportunity to testify as part of your Committee's review of the role of credit derivatives in the economy and the regulatory framework that governs them.

During the course of last week's hearing, I was asked two questions by Members of your Committee Mr. Costa of California and Mr. Pomeroy of North Dakota for which I did not have an answer readily available. Below are my responses to both of these questions:

Congressman COSTA. "How much ownership interest would you have in an ICE Trust being proposed?"

UBS will receive 6.31% of the Class B units (*i.e.*, its current percentage interest in The Clearing Corporation). Based on the profit participation of the Class B units, UBS would receive 3.1575% of the ICS Trust's net profits. The Class B units have limited voting rights relating to certain dilutive actions or affiliated transactions. In addition, the Class B units participate in the selection of the ICS Trust's Risk Committee, which performs an advisory role to ICE Trust's management.

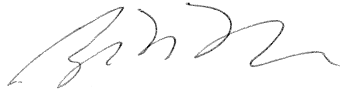
Congressman POMEROY. "What is the liability position of UBS relative to its presently held positions on credit default swaps?"

On November 4, 2008, UBS published its third quarter results. On page 63 of this report (attached), we include a table outlining information relating to credit derivative contracts, which includes credit default swaps. As described in that table, the aggregate notional amount of UBS' credit derivative contracts as of September 30, 2008 was 4,574 billion SFr (\$4,084 billion). The net replacement value of these credit derivative contracts as of that date was 5.0 billion SFr (\$4.4 billion), which reflected positive replacement value (*i.e.*, amounts owed to UBS) of 149 billion SFr (\$133 billion) and negative replacement value (*i.e.*, amounts owed by UBS) of 144 billion SFr (\$129 billion). The table includes similar information for as of June 30, 2008 and December 31, 2007.

Mr. Chairman, we thank you again for the opportunity to testify before your Committee.

Should you or other Members of the Committee require any additional information as you continue your review of credit derivatives, please do not hesitate to contact me.

Sincerely,



BRYAN M. MURTAGH.

cc:

Hon. BOB GOODLATTE,
Ranking Minority Member;

Hon. JIM COSTA;

Hon. EARL POMEROY.

Off-balance sheet

In the normal course of business, UBS enters into arrangements that, under International Financial Reporting Standards, lead to either de-recognition of financial assets and liabilities for which UBS has transferred substantially all risks and rewards or the non-recognition of financial assets (and liabilities) received for which UBS has not assumed the related risks and rewards. UBS recognizes these types of arrangements on the balance sheet to the extent of its involvement, which, for example, may be in the form of derivatives, guarantees, financing commitments or servicing rights. When UBS, through these arrangements, incurs an obligation or becomes entitled to an asset, it recognizes them on the balance sheet, with the resulting loss or gain recorded in the income statement. It should be noted that in many instances, the amount recognized on the balance sheet does not represent the full gain or loss potential inherent in such arrangements. Generally, these arrangements either meet the financial needs of customers or offer investment opportunities through entities that are not controlled by UBS. Off-balance sheet arrangements include purchased and retained interests, derivatives and other involvements in non-consolidated entities and structures. UBS has originated such structures and has acquired interests in structures set up by third parties.

The following paragraphs discuss several distinct areas of off-balance sheet arrangements. Note 11 to the financial statements of this report discusses committed amounts of undrawn irrevocable credit facilities, credit guarantees, performance guarantees, documentary credits and similar instruments, as well as commitments to acquire auction rate securities from clients.

Potential support to non-consolidated investment funds is discussed in the "Risk management and control" section of this report.

Liquidity facilities and guarantees

At the end of third quarter 2008, UBS had no significant exposure through liquidity facilities and guarantees to structured investment vehicles, conduits and other types of special purpose entities (SPEs). Losses resulting from such obligations were not significant in the first nine months of 2008.

Non-consolidated securitization vehicles and collateralized debt obligations

UBS sponsored the creation of SPEs that facilitate the securitization of acquired residential and commercial mortgage loans, other financial assets and related securities. UBS also securitized customers' debt obligations in transactions that involve SPEs which issue collateralized debt obligations. A typical securitization transaction of this kind involves the transfer of assets into a trust or corporation in return for beneficial interests in the form of securities. Generally, UBS intended to sell the beneficial interests to third parties shortly after securitization but beginning in the second half of 2007, certain retained interests could not be sold due to illiquid markets for certain instruments linked to the US mortgage market. The volume and size of new securitization structures originated by UBS significantly declined in 2008.

In October 2008, UBS announced the repositioning of its fixed income, currencies and commodities (FICC) business around client servicing and facilitation. The repositioning includes a substantial downsizing of the real estate, securitization, and proprietary trading activities. Please also refer to pages 6 to 8 of this report which describes the expected sale of financial assets to a fund controlled by the Swiss National Bank. Both measures will significantly reduce UBS's relationships to non-consolidated securitization vehicles and CDOs in the future.

Consolidation of securitization vehicles and CDOs

UBS continually evaluates whether triggering events require the reconsideration of the consolidation conclusions made at the inception of its involvement with securitization vehicles and CDOs. Triggering events generally include items such as major restructurings, the vesting of potential rights and the acquisition, disposition or expiration of interests. In these instances, SPEs may be consolidated or de-consolidated as the conditions have changed. Starting in December 2007, due to adverse market conditions, various non-consolidated CDOs in which UBS held a majority stake in super senior securities were declared to have breached default provisions pursuant to the entities' governing documents. In these instances, various contingent decision-making rights

became immediately vested in the super senior class holders. UBS determined that, in certain instances, the rights arising from such events caused it to be in control of these entities and therefore consolidated the affected entities. The consolidation had no material incremental impact on UBS's income statement and balance sheet.

On 20 May 2008, UBS sold a portfolio of USD 15 billion of US residential mortgage-backed securities (RMBSs) to the RMBS Opportunities Master Fund, LP, a fund managed by BlackRock, Inc. The fund was financed with approximately USD 3.75 billion of equity from third party investors and an amortizing USD 11.25 billion loan collateralized by the fund's assets provided by UBS. Since inception, the fund has amortized the loan through monthly payments in line with original expectations. UBS does not consolidate the fund because it concluded that the equity investors continue to receive the majority of the fund's risks and rewards. UBS would reassess the fund's consolidation status if loan

amortization would significantly fall behind schedule or the performance of the underlying portfolio deteriorated to such an extent that UBS would not fully recover the loan made to the fund.

Risks resulting from non-consolidated securitization vehicles and CDOs

The "Risk management and control" section of this report provides a detailed disclosure of UBS's main risk concentrations, including risks associated with UBS's involvement in consolidated and non-consolidated US mortgage securitization vehicles and CDOs. If future consolidation of additional securitization vehicles is required by accounting standards, UBS does not expect this to have a significant impact on its risk exposure, capital, financial position or results of operations. Positions with significant impact on the income statement are disclosed in Note 3 to the financial statements of this report.

Derivative instruments

CHF billion	30.9.08			30.6.08			31.12.07		
	Replacement values		Notional values	Replacement values		Notional values	Replacement values		Notional values
	Positive	Negative		Positive	Negative		Positive	Negative	
Derivative instruments¹									
Interest rate contracts	170	175	38,855	174	177	36,825	164	162	33,466
Credit derivative contracts	149	144	4,574	127	129	4,627	105	106	5,361
Foreign exchange contracts	168	170	8,423	111	103	7,826	98	99	7,718
Equity/index contracts	50	59	884	40	52	1,090	40	55	848
Precious metals contracts	6	6	213	6	6	159	6	7	147
Commodity contracts, excluding precious metals contracts	21	20	669	38	38	869	14	14	488
Total	564²	574³	53,618	495²	504³	51,396	428²	444³	48,028

¹ Replacement values based on IFRS netting. Refer to Note 23 to UBS's financial statements 2007 for details. ² The impact of netting agreements by the Swiss Federal Banking Commission (SFBC) for capital adequacy is to reduce positive replacement values to CHF 174 billion on 30 September 2008, CHF 154 billion on 30 June 2008 and CHF 136 billion on 31 December 2007. ³ The impact of netting agreements by the SFBC for capital adequacy is to reduce negative replacement values to CHF 184 billion on 30 September 2008, CHF 163 billion on 30 June 2008 and CHF 151 billion on 31 December 2007.