

**OVER-THE-COUNTER DERIVATIVES: MODERNIZING
OVERSIGHT TO INCREASE TRANSPARENCY AND
REDUCE RISKS**

HEARING
BEFORE THE
SUBCOMMITTEE ON
SECURITIES, INSURANCE, AND INVESTMENT
OF THE
COMMITTEE ON
BANKING, HOUSING, AND URBAN AFFAIRS
UNITED STATES SENATE
ONE HUNDRED ELEVENTH CONGRESS
FIRST SESSION
ON
MODERNIZING THE REGULATION OF THE OVER-THE-COUNTER DERIVA-
TIVES MARKETS AND THE INSTITUTIONS THAT PARTICIPATE IN
THESE MARKETS

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JUNE 22, 2009
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Printed for the use of the Committee on Banking, Housing, and Urban Affairs



Available at: <http://www.access.gpo.gov/congress/senate/senate05sh.html>

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U.S. GOVERNMENT PRINTING OFFICE

54-589 PDF

WASHINGTON : 2010

For sale by the Superintendent of Documents, U.S. Government Printing Office
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MONDAY, JUNE 22, 2009

U.S. SENATE,
SUBCOMMITTEE ON SECURITIES, INSURANCE, AND
INVESTMENT,
COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS,
Washington, DC.

The Subcommittee met at 3:03 p.m., in room SD-538, Dirksen Senate Office Building, Senator Jack Reed (Chairman of the Subcommittee) presiding.

OPENING STATEMENT OF CHAIRMAN JACK REED

Chairman REED. Let me call the hearing to order. I want to thank all of our witnesses for joining us this afternoon. I am particularly happy to welcome back Chairman Schapiro. Thank you. And also I want to thank Chairman Gensler for asking to testify before us on the derivatives issue, which gives us a chance to talk directly to you about this issue which transcends several different agencies, and also Pat White from the Federal Reserve. Thank you.

I also, obviously, want to recognize Chairman Harkin and his colleagues on the Agriculture Committee for their longstanding work on derivatives issues, and I look forward to having both Committees coordinate closely as we work to provide transparency and reduce risk in the financial sector.

This week, we find ourselves more focused than ever on the important work of modernizing an outdated financial regulatory system. I have called this hearing to explore one of the key aspects of such reforms: to modernize the regulation of the over-the-counter derivatives markets and the institutions that participate in these markets.

Both exchange-traded and over-the-counter markets have grown extremely rapidly over the past decade. Until the recent downturn of the economic markets, every category of derivatives saw almost a decade of extreme growth, in many cases more than tripling or quadrupling trading volumes. According to data compiled by the Congressional Research Service, between 2000 and 2008, the number of financial futures contracts traded on exchanges rose by 425 percent, and the total notional amount of over-the-counter contracts outstanding rose by 522 percent over that period, representing trillions of dollars of trading.

This afternoon's hearing will focus in particular on over-the-counter derivative markets which today are subject to no direct regulation. One of the key questions we will examine is the extent to which existing and emerging derivatives markets should be subject to regulatory oversight. Until recently, the prevailing presumption was that market discipline alone largely protected us from any potential risks we faced from OTC derivatives. But we received a wake-up call, having had to seize AIG to keep its credit default swaps, worth trillions of dollars, from greatly exacerbating the financial crisis.

It is now clearer than ever that we need to find ways to make these markets much more transparent and to ensure that the dealers and other users of these markets do a better job than AIG of ensuring that their derivative activities do not threaten the stability of the overall financial system.

But we face difficult questions as we move forward in accomplishing this goal. These products are often extremely complex, and there is an equally complex history of regulation, or lack thereof, of such products. As a result, we need to take a careful and thoughtful approach to these issues. There is no doubt that improving the regulation and oversight of derivatives markets, and those who trade in them, is a key part of modernizing our financial regulatory system. I hope my colleagues and our witnesses will help us identify the key steps that we can and should take right now to address the serious problems that we are confronting.

For example, what key decisions need to be considered as Congress weighs proposals to move more over-the-counter derivatives to central counterparties or exchanges? How do various proposals to enhance oversight of OTC derivatives affect different market participants? How does the issue of improved OTC derivatives regulation relate to broader regulatory reform issues, such as the creation of a new systemic risk regulator? And to what extent do U.S. efforts require international coordination? And these are just a few of the challenging questions that we will face together, and we will rely on your expertise and your insights as we go forward.

At this time, I would like to call on the Ranking Member, Senator Bunning, for his comments. Senator Bunning.

STATEMENT OF SENATOR JIM BUNNING

Senator BUNNING. Thank you, Mr. Chairman. I appreciate all of our witnesses coming here today for this very important hearing. It is important for everyone to understand the financial nature of derivatives and, thus, the Banking Committee's interest in overseeing them.

Let me say at the beginning that I do not know what regulations and restrictions we should put on these products. Figuring that out is the purpose of this hearing. But it should be clear to everyone that the current regulations are not enough.

I understand the desire of firms to hedge their risks, whether those risks are interest or exchange rates, commodity prices, credit exposure, or something else. Genuine hedges that are accurately priced can provide the risk management that firms need. But it is not clear that all derivative products are genuine hedges or accu-

rately priced. In fact, some look a lot more like a way to get around regulations and proper risk management, or just plain gambling.

Regulators in the public need a better understanding of all the exposures of firms to eliminate uncertainty and the justification for further bailouts. Increased transparency and standardization of derivative contracts will help and must be accomplished. How far standardization requirements should go depends on whether there are true economic benefits to the custom products that outweigh the costs and risks associated with them. So far, specific and credible evidence on that point is thin.

Credit derivatives may present the toughest questions. Should these products be treated as insurance with proper reserves? Should the buyer have an insurable interest and have to suffer actual losses or deliver the reference assets? How do we make sure credit protection does not undermine credit research or lead creditors to push debtors into bankruptcy? Should they even exist if not traded on an exchange?

Someone has to bear the risk of every financial transaction so we must not allow the wizards of finance to pretend it has disappeared.

Finally, just like with banks, we must eliminate the opportunity to avoid or choose favorable regulators or regulations. Similar activity must be regulated the same way by the same regulator. Otherwise, firms will be able to game the system, and regulators will not be able to effectively enforce the rules.

Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Bunning.

Senator CRAPO, do you have an opening statement?

Senator CRAPO. I do, if I could, Mr. Chairman.

Chairman REED. Please.

STATEMENT OF SENATOR MIKE CRAPO

Senator CRAPO. First of all, Mr. Chairman, let me thank you for holding this hearing. I believe that although there is a breadth of derivative action in our economy, I believe that a significant amount, if not the significant majority of the amount of those transactions falls under the jurisdiction of this Committee, and I appreciate your attention to that fact.

I also agree with the comments that both the Chairman and Ranking Member have made. Recent events in the credit markets have highlighted the need for greater attention to risk management practices, and counterparty risk in particular; and although I agree with the need to focus on where we can standardize and the types of risk reduction and better practices that we need to address, I also want in my remarks to just focus very quickly on one specific part of it, and that is, not letting the pendulum swing too far to the other side to where we cause damage to an efficient economy.

The creation of clearinghouses and increased information to trade information warehouses are positive steps to strengthen the infrastructure for clearing and settling credit default swaps. While central counterparty clearing and the exchange trading of simple standardized contracts has the potential to reduce risk and increase market efficiency, market participants must be permitted to

continue to negotiate customized bilateral contracts in over-the-counter markets.

Many businesses use over-the-counter derivatives to minimize the impact of commodity price, interest rate, and exchange rate volatility in order to maintain stability in earnings and predictability in their operations. If Congress overreaches or bans or generates significant uncertainty with regard to the legitimacy of decisions to customize individual OTC derivatives transactions, I believe there could be very significant negative implications on how companies manage risk.

In the contemplation of this hearing and this issue, Mr. Chairman, I actually requested that a number of the end users of these types of transactions respond to a question about what increased flexibility or reduction of flexibility would do, and at this time, I would like to just share three or four examples of the responses that I received.

David Dines, the President of Cargill Risk Management, indicates, "While margining and other credit support mechanisms are in place and utilized every day in the OTC markets, there is flexibility in the credit terms, the credit thresholds and types of collateral that can be applied. This flexibility is a significant benefit for end users of OTC derivatives such as Cargill in managing working capital. Losing this flexibility is particularly concerning because mandatory margining will divert working capital from investments that can grow our business and idle it in margin accounts. While it depends on market conditions, the diversion of working capital from Cargill for margining could be in excess of \$1 billion. Multiply this across all companies in the United States and the ramifications are enormous, especially at a time when credit is critically tight."

Kevin Colgan, the Corporate Treasurer of Caterpillar: "Our understanding of currently pending regulation in this area is that it would require a clearing function which would standardized terms like 'duration' and 'amount.' Any standardization of this type would prohibit us from matching exactly the terms and underlying exposure we are attempting to hedge. Thus, in turn it would expose us to uncovered risk and introduce needless volatility into our financial crisis."

I have a number of other examples which I will insert for the record, Mr. Chairman.

Chairman REED. Without objection.

Senator CRAPO. And if possible, I would like the permission of the Committee to insert the letters that I received in response to these inquiries into the record. I may get another in the next couple of days.

The bottom line, Mr. Chairman, is I completely agree with the need to do as much as we can to assure that we have covered the risks in our economy that have been created by the utilization of these types of derivatives, the different types of derivatives, credit default swaps, for example. I just believe that we want to pay very careful attention to making sure that we do what is necessary to protect and strengthen our markets and that we leave flexibility where it is necessary and helpful for the utilization of these credit instruments to advance the interests of our businesses.

Chairman REED. Thank you, Senator Crapo. I think you have illustrated the challenges ahead very well in terms of that balance.

Senator Bennet, do you have an opening statement?

Senator BENNET. I do not, Mr. Chairman. Thank you for holding the hearing, and I am very appreciative that the witnesses are here.

Chairman REED. Senator Johanns, do you have an opening statement?

Senator JOHANNNS. I do not. I am ready for witnesses.

Chairman REED. Thank you very much.

Let me at this juncture introduce our witnesses. We are very pleased to be joined today first by the Honorable Mary Schapiro, Chairman of the Securities and Exchange Commission. Prior to becoming SEC Chairman, she was CEO of the Financial Industry Regulatory Authority, FINRA, the largest nongovernmental regulatory for all securities firms doing business within the United States. Chairman Schapiro previously served as a Commissioner of the SEC from December 1988 to October 1994 and then as Chairman of the Commodity Futures Trading Commission from 1994 until 1996. Thank you, Chairman.

Next is the Honorable Gary Gensler. Gary Gensler is the Chairman of the Commodity Futures Trading Commission. He previously served at the U.S. Department of the Treasury as Under Secretary of Domestic Finance from 1999 to 2000 and as Assistant Secretary of Financial Markets from 1997 to 1999. Prior to joining the Treasury, Chairman Gensler worked for 18 years at Goldman Sachs, most recently as a partner and cohead of finance.

Our third witness is Ms. Patricia White, Associate Director of the Federal Reserve Board's Division of Research and Statistics. Ms. White has oversight responsibilities for sections that analyze risk and process microeconomic data, and she has participated in domestic and international working groups on central counterparties, securities settlement, and financial regulation.

I very much thank all of you joining us here this afternoon, and, Chairman Schapiro, would you begin your testimony?

**STATEMENT OF MARY L. SCHAPIRO, CHAIRMAN, SECURITIES
AND EXCHANGE COMMISSION**

Ms. SCHAPIRO. Thank you very much, Chairman Reed.

Mr. Chairman, Ranking Member Bunning, and Members of the Subcommittee, I am very pleased to have this opportunity to testify on behalf of the Securities and Exchange Commission concerning the regulation of over-the-counter derivatives. The severe financial crisis that has unfolded over the last 2 years has revealed serious weaknesses in the structure of U.S. financial regulation. One of these gaps is the gap in regulation of OTC derivatives, which under current law are largely excluded or exempted from regulation.

The current regulatory framework has permitted certain opaque securities-related OTC derivatives markets to develop outside of investor protections afforded by the securities laws. The SEC is committed to working closely with this Committee, the Congress, the Administration, and our fellow regulators to close this gap and restore a sound structure for U.S. financial regulation.

I am pleased to be able to report to you that U.S. regulatory authorities have reached a broad consensus on the pressing need for a comprehensive regulatory framework for OTC derivatives. This consensus covers all of the basics of sound financial regulation in the 21st century, including record keeping and report requirements, appropriate capital and margin requirements, transparent and efficient markets, clearing and settlement systems that monitor and manage risk, business conduct and disclosure standards to protect the interests of market participants, and vigorous enforcement against fraud and other wrongdoing.

The SEC is also strongly supportive of ongoing initiatives to promote the standardization and central clearing of OTC derivatives. The SEC, working in closing consultation with the Board of Governors of the Federal Reserve System and the Commodity Futures Trading Commission, and operating under the parameters of the current legislative structure, already has taken a number of actions to help further centralized clearing for OTC derivatives, including providing temporary conditional exemptions for three central counterparties to begin centrally clearing credit default swaps.

More needs to be done, however, and in building a new regulatory framework for OTC derivatives, it is vital that the system be designed to protect the public interest, manage systemic risk, and promote capital formation and general economic welfare.

Treasury Secretary Geithner's May 13th letter to the congressional leadership outlined the Administration's plan for establishing a comprehensive framework for regulating OTC derivatives. Multiple Federal regulatory agencies will play critical roles, including those represented here today.

In fashioning a regulatory framework for OTC derivatives, it is crucial to recognize the close relationship between the regulated securities and futures markets and the now mostly unregulated markets for OTC derivatives. For example, with respect to the securities markets, when an OTC derivative references an issuer of securities, such as a public company or a security itself, it can be used to establish synthetic long or short exposures to an underlying security or group of securities. In this way, market participants can replicate the economics of either a purchase or sale of securities without purchasing or selling the securities themselves. Because market participants can use these securities-related OTC derivatives to serve as synthetic substitutes for securities, the markets for these OTC derivatives are interconnected with the regulated securities markets.

Moreover, the markets for these securities-related OTC derivatives implicate the policy objectives for capital markets that Congress has set forth in the Federal securities laws, including investor protection, the maintenance of fair and orderly markets, and the facilitation of capital formation.

For this reason, it is important that Congress carefully consider whether securities-related OTC derivatives should be subject to the Federal securities laws so that the risk of arbitrage and manipulation is minimized. And, certainly, a similar analogy can be made to the futures markets by the CFTC.

My goal today is to assist the Congress in its efforts to craft legislation that empowers the respective regulatory authorities to do

their jobs effectively and cooperatively. I am confident that, working together, we will meet the challenge that is so important to the financial well-being of individual Americans.

I would be pleased to answer your questions. Thank you.

Chairman REED. Thank you very much, Chairman Schapiro.
Chairman Gensler.

**STATEMENT OF GARY GENSLER, CHAIRMAN, COMMODITY
FUTURES TRADING COMMISSION**

Mr. GENSLER. Chairman Reed, Ranking Member Bunning, other Members of the Subcommittee, thank you for inviting me here to talk to you today about the over-the-counter derivatives market. I would like my full testimony to be entered into the record, if that is all right. I, too, am speaking on behalf of the full Commission.

I believe we must urgently move to bring the over-the-counter derivatives marketplace under regulation, and there are four key objectives in accomplishing this goal. One is to lower systemic risk. Two, we need to provide the transparency and efficiency to these markets that we believe we have in our securities and futures and options markets. Three, we need to ensure integrity in these markets, preventing fraud, manipulation, and other abuses. And, four, we need to protect the retail public in these markets as we do in other markets we oversee. Meeting these objectives will also require close coordination between the CFTC, SEC, and other Federal regulators.

Senators, I believe that we must establish a regulatory regime that governs the entire over-the-counter marketplace, no matter who is trading them, what type of derivative is traded, whether it is standardized, tailored, or highly customized. I think this should include interest rate product, currency product, commodity product, equities product, credit default swaps, and those swaps that we have not yet thought of that are just a blip on the horizon.

As the Administration laid out in its May 13th letter, I believe this can best be accomplished with two complementary regimes: one to regulate the derivative dealers, or the actors, so to speak; and another regime to regulate the big market functions, or the stages upon which the actors perform their duties.

For the dealers in this marketplace—the large financial institutions—we should set capital standards and margin requirements to help lower the risk in the system. We should set business conduct standards to make sure that the market is free from fraud, manipulation, and other abuses. And, third, we should set record keeping and reporting, with audit trails, so that we have transparency. So lower risk, promote market integrity, and enhance transparency.

But I think this dealer regime will not really be enough. It is important, and it gets all the markets customized and standardized. We can further lower risk by having central clearing on standardized products, and also bringing the standardized products onto regulated trading venues, whether they be full exchanges or electronic platforms. This will lower risk and further enhance transparency.

To fully achieve these objectives, we must enact both of these complementary regimes. Regulating both the traders and the

trades will ensure that we cover both the actors and the stages upon which they create the significant risks.

I am fortunate to have a partner in this effort in SEC Chair Mary Schapiro. She brings invaluable expertise that gives me great confidence that we will be able to work together on what is bound to be many challenges moving forward. We will also work together to advise Congress and the rest of the Administration on how we can best harmonize some of the rules between the securities and futures world and cover gaps in our regulatory oversight.

President Obama has called for action to strengthen market integrity, lower risk, and protect investors, and I look forward to working with Members of this Committee and others in Congress to accomplish this goal.

I thank you again for the opportunity to testify, and I look forward to answering any of your questions.

Chairman REED. Thank you very much, Chairman Gensler.
Ms. White.

**STATEMENT OF PATRICIA WHITE, ASSOCIATE DIRECTOR,
DIVISION OF RESEARCH AND STATISTICS, BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM**

Ms. WHITE. Chairman Reed, Ranking Member Bunning, and other Members of the Subcommittee, I appreciate this opportunity to provide the Federal Reserve Board's views on the development of a new regulatory structure for the over-the-counter, or OTC, derivatives market.

The events of the last 2 years have demonstrated the potential for difficulties in one part of the financial system to create problems in other sectors and in the macroeconomy broadly. Centralized clearing of standardized OTC products is a key component of efforts to mitigate such systemic risk.

The Board believes that moving toward centralized clearing for most or all standardized OTC products would have significant benefits. If properly designed and overseen, central counterparties, or CCPs, offer an important tool for managing counterparty credit risk. The benefits from centralized clearing will be greatest if CCPs are structured so as to allow participation by end users within a framework that ensures protection of their positions and collateral.

Infrastructure changes in OTC markets will be required to move most standardized OTC contracts into centralized clearing systems. Such changes include agreement on key terms that constitute standardization and development of electronic systems for feeding data to CCPs. For their part, CCPs must have in place systems to manage the risk from this new business. Of particular importance are procedures to handle defaults because OTC products are likely to be less liquid than the exchange-traded products that CCPs most commonly handle.

Although implementation challenges no doubt lie ahead, the Board will work to ensure that these challenges are addressed quickly and constructively. Major dealers have committed to making improvements in back-office systems that are important prerequisites for centralized clearing.

Dealers also have committed to clearing standardized OTC products, and they will be expected to demonstrate progress on this commitment even as the broader regulatory reform debate evolves.

Substantial progress in improving the transparency of the credit default swap, or CDS, market occurred with the creation of the Trade Information Warehouse, a contract repository that contains an electronic record of a large and growing share of CDS trades. The Board supports creating contract repositories for all asset classes and requiring a record of all OTC derivative contracts that are not centrally cleared to be stored in these repositories.

Aggregate data on volumes and open interests should be made public by repositories, and more detailed data should be made available to authorities to support policy objectives related to the prevention of manipulation and systemic risk.

Although the creation of CCPs will provide an important new tool for managing counterparty credit risk, enhancements to risk management for individual market participants will continue to be a high priority for supervisors. If the reforms outlined here are implemented, the firms currently most active in bilateral OTC markets will become the firms most active as clearing members of CCPs. As such, the quality of their internal risk management is important to the CCP. Supervisory efforts are already underway to improving collateralization practices and to examine whether the current capital regime can be improved.

Policy issues associated with OTC derivatives are not limited to the United States. The markets are global, and issues are unlikely to be fully addressed without international coordination.

Much work must be done, but with effective oversight by supervisors, prudent risk management by end users and dealers, and appropriate changes in the regulatory structure, derivatives can continue to provide significant benefits to businesses and investors who use them to manage financial market risks.

Thank you very much. I look forward to answering your questions.

Chairman REED. Thank you very much. This is an issue of great complexity and great importance, and so this is the beginning of a process, I think, not the conclusion of one, in trying to determine what Congress must do and will do to provide adequate regulation for a complicated part of our financial markets.

Let me begin by saying that one aspect that we have to get right is to cover the whole waterfront, if you will, to make sure that there are no gaps, that there is an effective and efficient way to do this, and I wonder if all of you in turn could give your comments about how we ensure there is a comprehensive approach, that we don't create these areas where there is an opportunity to operate outside of the framework. We will start with Chairman Schapiro.

Ms. SCHAPIRO. Thank you very much, Mr. Chairman. I agree with you completely that it is really important that as we seek to solve the existing gaps, we not create any additional ones. So I think there are several mechanisms for that.

The first is to encourage and use the tools like capital and margin, standardization and central clearing, to the greatest extent possible and even encourage exchange trading of currently OTC derivatives. That will give us, as Chairman Gensler said, some con-

trol over the stage and it will allow us to have a centralized view of what is happening in these markets and the benefits of capital and margin requirements with respect to those institutions.

But it is also critically important that we have regulation of the dealers who participate in the marketplace, meaning, in my view, registration, capital requirements, margin requirements, record keeping, reporting to regulators, reporting at least aggregated information to the public, and very tight risk management processes within the dealers, including governance, risk controls, trading limits, all of the things we would normally think about as being important for dealers to control the risks that they are undertaking.

I also think that whether we have a systemic risk regulator at the end of this process or a council or a combination as in the Administration proposals, it will be very important for the regulators to share as much information on a continuing basis as possible so that as new products are being developed, and I am sure that as we sit here, somebody is developing a new product that perhaps falls between the regulators' current authorities, that we know about those products as quickly as possible, understand their implications for the system, and bring them under the Federal regulatory umbrella, either by moving that into a central clearinghouse or exchange platform or through the regulation of the dealers who participate in those transactions on a bilateral basis.

Chairman REED. Thank you.

Chairman Gensler.

Mr. GENSLER. I think that Chair Schapiro summed it up well, but I think, if I might say, one of the great lessons out of this financial crisis is that we had large financial institutions that were, by and large, outside of the regulatory regime. I mean, some had ineffective Federal oversight, but AIG is Exhibit A, and I think, frankly, the derivative dealers that were affiliated with Lehman and Bear Stearns and others were only modestly regulated. I think we all now feel we have to bring them under regulation.

By regulating the dealers, we get nearly 100 percent of the marketplace. It would be possible to be outside this regulation. Senator, if you and I entered into a derivative contract, neither one of us is a dealer. But any dealer that holds themselves out to the public and offers these types of transactions, I think we can lower risk by having the capital and margin requirements, and increase transparency with record keeping reporting.

We can let the tens of thousands of users of these products take greater comfort by regulating the stages, or moving the standard products onto exchanges and onto central clearing while at the same time recognizing there will still be some tailored products. There could be an airline company that needs a certain grade of jet fuel delivered in a certain location on a certain day. That would still be regulated because the dealer offering that product would have to put aside capital and margin and not participate in manipulation and fraud. Accordingly we allow some customization so the tens of thousands of users could still use those products.

Chairman REED. Well, thank you. In Senator Crapo's comments and your comments, there seems to be a range of real economic arrangements. I mean, there is a specific thing. They need the fuel on a certain day. They are hedging a certain price. And there is a

whole category, as Chairman Schapiro said, of synthetics that are mimicking the Dow, that are more sort of the creations and almost an infinite supply of them. Is that one dimension that you would consider in terms of putting items on an exchange?

Mr. GENSLER. I believe, Mr. Chairman, that anything that a clearinghouse would accept for clearing under prudent risk reduction should be accepted for clearing as standardized. The regulators could also be given authority, working with Congress, to list additional contracts as standardized such as a high-volume product or similar product, so that customization it is not just used to avoid centralized clearing.

I also believe that those products that are not on central clearing and not on exchanges are by their definition less liquid and thus should appropriately have higher capital or margin requirements. So if a dealer wants to retain that customized product, it might have to meet higher capital requirements or require higher margin from their customers.

Chairman REED. Chairman Schapiro.

Ms. SCHAPIRO. I would just add to that that one of the benefits of higher capital and margin might be to encourage more transactions into central clearing or onto exchanges. But I do think the challenge will be standardization and how do we achieve a significant proportion of this market moving into central clearing. There was clearly a need for customized bilateral transactions, as Senator Crapo has said and as Chairman Gensler has mentioned. The key thing is that they be brought into the regulatory umbrella through the regulation of the dealers and that there is adequate margin for those positions and adequate capital on behalf of the dealers, and again, the regulators have the ability to see what is happening between counterparties.

Chairman REED. Before I recognize Senator Bunning, Ms. White, do you have a comment?

Ms. WHITE. The Board has been focusing on the aspects of the market that relate to systemic risk and how to fill gaps there, and in particular what infrastructure would be helpful. One thing we would like to point to is the creation of Trade Information Warehouses for all asset classes and all contracts. That will provide an important base of knowledge for the authorities as they try to evaluate what is standardized enough to next move into a cleared environment.

In addition, I would want to add that in terms of gaps, it is important to keep in mind that these are really international markets and we are going to need a lot of international coordination to make sure all the gaps are filled.

Chairman REED. Thank you very much.

Senator Bunning.

Senator BUNNING. Thank you, Mr. Chairman.

As I said in my statement, I think similar activities should be regulated the same way by the same regulator. In other words, we need just one regulator for derivative products. Do you agree or disagree with that statement? Go right ahead.

Ms. SCHAPIRO. Thank you. I think my greater concern than having a single regulator for all derivative products is disconnecting securities-related derivatives from securities markets, because as I

go on to probably in too great length in my written statement, the concern is that you can create a synthetic securities position utilizing derivative products that are intimately tied to the securities markets for which we have primary concern. They are important for capital formation. They are important to millions of investors in the United States. And so the impact that these securities derivatives can have on the primary securities market is a concern that I would hate to see be decoupled. It has been, as many derivatives have been decoupled from their primary markets over the last 15 or 20 years or so. But I think, to me, that is the more important linkage, is between the securities derivatives and the securities markets, and the same would be true for the markets that CFTC regulates.

Senator BUNNING. Go right ahead.

Mr. GENSLER. Well, I think, Senator, you raise a very important point. We have two market regulators—the securities and options markets that the SEC regulates and the futures markets that the CFTC regulate. Now we are bringing this market of derivatives, hopefully, with Congress' help, under regulation. Derivatives have a lot of attributes of securities and a lot of attributes of futures. In some cases derivatives have more attributes toward futures on those products, I think we have broad agreement, that they would be best regulated by the CFTC. Some are far more similar to securities and can clearly influence the markets for an individual company's stock or be used in insider trading. That would really be an area where the SEC can best protect the investor.

So I think working together and with this Committee and Congress as a whole, we aren't going to leave any gaps, but recognize that these derivatives have attributes sometimes more similar to securities and sometimes more similar to futures. Under your basic concept—

Senator BUNNING. Well, I am trying to prevent any from slipping through the cracks.

Mr. GENSLER. And we, I think, both agree with that goal, and I think we can achieve that goal together.

Senator BUNNING. Ms. White, does the Fed have some opinion on this?

Ms. WHITE. The products in the market have a lot of diversity to them and both the CFTC and the SEC will bring different skills to the regulatory oversight of those products. For the Board, what is most important is that we try to avoid jurisdictional overlaps and harmonize the treatment of products.

Ms. SCHAPIRO. Senator, if I could just add one point there—

Senator BUNNING. Go ahead.

Ms. SCHAPIRO. I think that where you have products that are effectively economic substitutes for each other under the jurisdiction of different regulators, it is really critical that we work as closely as we can to try to harmonize our regulatory regimes.

Senator BUNNING. But isn't that where we failed in the last 15 years?

Ms. SCHAPIRO. Well, except that with respect to most over-the-counter derivatives, they have been exempted from or excluded from virtually all regulation.

Senator BUNNING. But that is because we have had two Chairmen of the Federal Reserve who said to us at the Banking Committee that they shouldn't be regulated. I can go back and get you the testimony—

Ms. SCHAPIRO. Oh, I am sure that is right. That is certainly not the position of the Securities and Exchange Commission. We believe that these products absolutely should be regulated and need to be regulated effectively because of the impact that they can have on the economy broadly, but also on particular markets, like the equity market.

Senator BUNNING. There seems to be agreement that all derivatives need to be reported to someone. Who should the trades be reported to, and what information is necessary to be reported, and is there any information that should not be available to the public? Anybody?

Mr. GENSLER. Senator, I think that we need to bring a great deal more transparency to the markets, and I think this will actually lower the pricing for the tens of thousands of users. What we have found over many decades is that when you have greater transparency, markets are more efficient.

All of the products that dealers trade in should be reported into a central trade repository that regulators can monitor so that we can police for fraud and manipulation. The public should also get to see anything that could be on an exchange or a trading platform. I fully subscribe to what Secretary Geithner's letter says. There should be a real-time reporting, a development of sort of like a consolidated tape very similar to what is in the over-the-counter bond market—

Senator BUNNING. What do we do about the derivative or credit default swap or that individual, personalized hedge? Use Delta Airlines as an example and the delivery at a certain date at a certain price and that personalized derivative that they use for hedging against the market.

Mr. GENSLER. I believe, sir, that that should be reported to all the regulators and certainly aggregated in the aggregate positions by underlying commodity. In that way, jet fuel derivatives should be reported to the public. I think working together, we have to think through whether that should also be part of this consolidated tape or whether there are some that would be so unique that the commercial attributes of, as you said, Delta Airlines might be put at risk. But they, I believe, should be—

Senator BUNNING. I think—

Mr. GENSLER. —aggregated in part, seen clearly by the regulators, and possibly be part of the consolidated tape.

Senator BUNNING. I can't see how Delta Airlines would be put at risk if they are smart enough to hedge against the market's advance in future oils or future jet fuel or whatever it might be—

Mr. GENSLER. Right, and in that case, I would recommend that it be part of that consolidated tape. But I recognize there may be some transactions—

Senator BUNNING. Thank you, Mr. Chairman.

Chairman REED. Thank you, Senator Bunning.

Senator Bennet.

Senator BENNET. Thank you, Mr. Chairman.

I just had a couple of questions. The first goes back to this question of the clearing of centralized contracts versus customized contracts, because on both the Agriculture Committee and the Banking Committee, we have had some similar conversations, and I heard you today, Chairman Gensler, talk about how, well, it might be OK if we can't put the customized on a centralized clearinghouse because we will have different capital requirements, I think, or some capital requirements, which I think makes a great deal of sense.

My question is what, as you think about this—all of you think about this—what incentives there might be, if any, for people to structure around the clearinghouse for no good business purpose. I mean, what really would the incentives be to create a customized hedge here that didn't have a business purpose of some kind?

Mr. GENSLER. I would hope that once there is a fully running central clearinghouse, there would be great benefits to moving all the transactions that a dealer could into clearing because it does lower risk for them, instead of having this interconnected spider's web. One of the lessons we learned is not only are institutions too big to fail, but they are too interconnected to fail. Centralized clearing helps lower their risk, and that is why I subscribe to maybe lower capital or margin. But it may well be that some dealers don't agree with my point of view and that they would want to keep some product outside of that standardized central clearing. I think that clearing actually would help lower risk for their institutions and lower risk for the system.

Also, it would enhance transparency. The public would see it if it were on an exchange or trading platform. It may well be that some dealers would like to keep the information advantage, but many decades of markets have taught that broad commerce and the economy benefit by having that type of information. And if you see the standard transaction in jet fuel—we were talking about jet fuel—if you see the standard transaction in jet fuel or interest rates—it could be a very plain vanilla interest rate—and I think the small municipality or the small hospital that wants to hedge a four-and-a-half-year interest rate instead of a 5-year interest rate would benefit by seeing that on an open and transparent exchange.

Senator BENNET. Do either of you—

Ms. SCHAPIRO. The only thing I can think of is the informational advantage that one has from not trading in a transparent market and the benefits, to the extent there are some, of anonymity. That is why I think it is so important that the dealer regulation include full transparency, at least to the regulators, and then over time, a decision, I think, by regulators about how much information needs to be made publicly available.

I think what is really critical is that we not structure the regulatory regime in any way that creates unintended incentives to go off exchange or off central clearing and stick with bilateral contracts.

Senator BENNET. I completely agree with that, and I think that as we proceed here with this and much of the other regulation that we are talking about, we need to be very careful that we aren't creating perverse incentives that end up doing more harm than good. I was just trying to scratch my head to think about—I get the point

on transparency, but on the other hand, if it is reported to the regulator, I am not sure there is much of an issue, but we will keep working on it.

The other question I had, and it may go back to the systemic risk regulator proposals that we have seen in the last week or so around here, you talked, Chairman Gensler, about the swap that hadn't yet been invented and I started to sweat again about what we might be facing, because the American people are so tired of having us look in the rearview mirror and say what happened while there is all this carnage out there. And I just wondered whether, on a going forward basis, all of you felt that we were going to be in a better position, not to predict the future necessarily, but in a better position to monitor when things are starting to move in a certain way in our financial markets.

My understanding, for example, is that between 2000 and 2008, the number of over-the-counter derivatives contracts grew by 522 percent, but during that time, our regulatory authorities had little power to examine any of that. I wasn't here to know whether you asked Congress for that or not. But prospectively, is this some of the work that this council is meant to do? How are we going to keep track of these swaps that have no name?

Mr. GENSLER. I think, as it relates to over-the-counter derivatives, that the Federal regulators should have broad authority. If somebody holds themselves out to the public as a dealer, whether it is in the known derivatives, from interest rates to securities to credit default swaps, or something that is not yet known, we should work together to make sure the statute gives broad authority to also bring that into this regulatory regime. I think that is important. It is one of the big lessons of the past, certainly that I have learned.

I think in terms of a systemic regulator, what the Administration has put forward is to make sure that the largest financial institutions, those that are either interconnected or by scale or scope, that can affect the American public have to be under prudential regulation, meaning you can set capital and margin and so forth. And I think that is very important.

Ms. SCHAPIRO. The only thing I would add to that is in addition to the systemic regulator, the continuing role of the functional regulators, the SEC and the CFTC, or bank regulators looking at the business of the dealers in a way that really we have never been able to before because of the exemptions that exist under existing law, ought to make a big difference in our ability to understand what kind of products are being developed and marketed, and I think the business conduct rules that really try to get to how these derivative products might be marketed and sold, whether to State and local governments or pension funds or even less sophisticated institutions, will give us real insight into what is happening within the firms and the ability, hopefully, to shut down problematic practices before they grow out of control.

Senator BENNET. Thank you. Thank you, Mr. Chairman.

Chairman REED. Thanks, Senator Bennet.

Senator CRAPO.

Senator CRAPO. Thank you very much, Mr. Chairman.

Each of you in your testimony have indicated, as I indicated in my opening remarks, that there are circumstances in which non-standard products are very legitimate and that there are legitimate reasons for us to engage in customized transactions. Obviously, the question that I am interested in here today is how do we make sure that we regulate to the extent possible in such a way that makes certain that we don't basically engender greater inefficiencies and risk in our economy as a result of the way we treat these types of customized transactions?

As I have read your testimony, Ms. White, for example, indicates that these nonstandard products can pose significant risk management challenges because they can be complex, opaque, illiquid, and difficult to value, and in your testimony, Chairman Schapiro, you indicate that one way to deal with these nonstandard types of arrangements is to impose appropriate margin and capital requirements on the participants in these customized transactions to reflect the risk that they pose to the system in general.

The question I have when we get to that point is do these—can we evaluate the level of risk that these transactions pose? I think that you would each agree with me that as we have watched derivatives operate in the last few years, that there have been some incredible abuses that have put incredible systemic risk in our economy, but there have also been a phenomenal number of very effective uses of credit default swap and of other derivatives that have helped to create efficiencies and strength in our economy.

So the question I am getting at is can we evaluate these non-standard arrangements in such a way that we can tell whether they are truly generating risk that should then be subjected to greater margin and capital requirements?

Ms. SCHAPIRO. I think we can. Can we do it perfectly? Probably not, but I think through imposing risk limits on dealers, stress testing, ensuring that the margin levels are sufficiently conservative and high and stress tested so that we can have some comfort about that, requiring operational controls, it is things as simple as separation of duties and trading limitations on individual traders, requiring that they have robust compliance systems, that the firms have credit policies that they are required to know their counterparty and understand the risks of a bilateral arrangement with that particular counterparty. I think through real vigilance on the part of dealers, which will come mostly with real vigilance on the part of the regulators overseeing the dealer conduct, I think we can certainly do a much better job than has been done historically.

Senator CRAPO. Mr. Gensler.

Mr. GENSLER. I think we can. It certainly poses challenges. Much of the marketplace is standardized. There are various estimates, and I haven't seen any very good data, but more than half of the market is certainly standardized and some would say a lot more. Even on the tailored or customized side, sometimes it is just that it is 1 month off. But on the truly exotic, you know, if it is highly customized, I think it will be appropriate to have higher capital and higher margin standards for that dealer.

You mentioned the letter earlier from Caterpillar. I think they could absolutely customize and make sure that they hedge their risk. But if their risk is a little different than the standard, well,

it is probably almost the same capital. But if their risk is really quite different, then it is hard to value that risk, and the dealer on the other side might have to put up even more capital in that regard. But risk, if I might say, is risk. If it is really highly standardized, we want to make sure that dealers have enough cushion in tough markets to survive.

Senator CRAPO. So are we saying, then, that our inability to standardize the risk means that the risk is higher?

Mr. GENSLER. Well, it generally does mean that. It is not always the case, but generally, if you can't standardize a product or you don't see other people trading in that product, that risk is a little harder to unwind—it is not a technical term. If a commercial enterprise wants to enter into a transaction and standardize it, it probably means there are 10 or 20 or maybe hundreds of other parties that want to either speculate on that risk or hedge that risk. The greater difficulty is when there is no other party on the other side, and frankly, that is also the problem in crisis, when there are no other parties to take the other side.

Senator CRAPO. Thank you.

Ms. White.

Ms. WHITE. The Board believes that there is value in these non-standardized products, but it also recognizes that there are challenges in managing the risk associated with a nonstandardized product, both from the standpoint of the firms and from the standpoint of the supervisors.

Clearly, improvements need to be made, and there are projects already underway in the supervisory community evaluating, for example, the appropriateness of the capital standards associated with them to make sure that the capital charges attached to non-standardized products fully reflect the risks of those products.

Senator CRAPO. Thank you.

Chairman REED. Thank you, Senator Crapo.

Senator Johanns.

Senator JOHANNNS. Let me thank the witnesses for being here.

Chairman Gensler, let me follow up on some things that Senator Crapo was asking, and I will be very blunt. Your testimony worries me. So if I have a very standardized product, it is going to go through this system lightning speed. We are going to know exactly what the rules are. But if I have a little bit or maybe even significantly different product, it is going to hit a barrier, because you are going to have to analyze the risk. Some bureaucracy is going to have to shake it and bake it and figure it out and discuss it. And then somebody is going to have to say, well, it is not standardized, and, therefore, it has got to be XYZ in terms of the capital requirement.

Isn't that kind of what you are getting us to?

Mr. GENSLER. Senator, I appreciate your concern. What we are recommending is that clear rules of the road would be put out by the regulators that are best at setting capital. For these dealers, it is most likely going to be either their bank or other prudential. In some cases it would be the Securities and Exchange Commission or possibly the systemic regulator. Those capital standards set by rule would be set out for customized and standardized products as well.

So I would not envision a trade-by-trade circumstance or a contract-by-contract, as you asked.

Senator JOHANNNS. No, but the nature of this system and the reason why it got some legs underneath it is because it was so darn adaptable. Now, in the end, that had its downside, too, and then you add stupidity to it, and greed, and it really went south.

But as Senator Crapo points out, many companies and, therefore, many shareholders got great benefit from this process. And it seems to me that if you run into anything that is not standardized, you run into the bureaucracy.

Mr. GENSLER. Well, I appreciate your concern and I share that concern, but I think that through clear rules of the road, the Federal regulators can lay out what capital and margin is appropriate for the customized products.

I do believe that we benefit as an economy and a society that commercial enterprises can hedge their risks and focus on producing a product or a service for the public. That is what the CFTC has been overseeing for decades in the agriculture, energy, and financial markets. I think we have to promote that, but at the same time recognize that if it is not standardized, it might be appropriate to have a little higher margin and higher capital, but set, again, by a public process where you do not have to come in and check each contract.

Senator JOHANNNS. OK. What if I am a competitor and you have gone through your process, however long it takes, and you have now set the new capital requirements, and I want to challenge that and appeal it because I think your capital requirements are too low. Are we going to have—will I have the benefit to do that? Can I slow the process down even further?

Mr. GENSLER. Well, I think it will probably be—it might not be the CFTC, but it might be the Federal Reserve or the SEC that is setting capital in this regime, so I would defer to—

Senator JOHANNNS. Chairman Schapiro.

Ms. SCHAPIRO. I guess I would like to add that even the practice today among counterparties is to analyze the risk of our doing business with each other and to demand collateral against the position that they are creating. So much of that analysis that would be required here is an analysis that I think the dealers are very comfortable doing.

The difference would be that there would be—

Senator JOHANNNS. Government oversight.

Ms. SCHAPIRO. Government oversight, but not—I do not think we will have the capacity to second-guess every transaction and whether the risk was analyzed appropriately. But we would expect the firms to stress test their models and to ensure that their risk management procedures were really first class.

The difference, I think, will be that there will be capital standards, as there already are for banks and broker-dealers, that will help them, given what their risk analysis shows, determine what the appropriate level of capital is to hold against those positions or potentially the appropriate level of collateral or margin to seek with respect to each transaction.

Senator JOHANNNS. I am running out of time. We never have enough time in a hugely complicated area, but let me ask this

question: As AIG was ramping up its exposure and risk—and hindsight is always 20/20, and we can look back and say, Boy, that was really dumb. What about your system would have stopped that? Would your system have kicked in at some point and you would call the CEO of AIG and say, “Whoa, you are at \$200 billion,” or whatever, “you are done. You are out of the marketplace. You cannot do this anymore”? Would we have stopped AIG?

Mr. GENSLER. Senator, it is always hard in hindsight, but I think that a number of features here would have slowed down and maybe even stopped it.

AIG put on an enormous book of business without putting aside capital or margin. And what happened just last fall, when the rating agencies downgraded AIG, all of a sudden they had to post significant collateral. I think it was over \$30 billion within a day or two. They would have to have done that across the daily basis. It is a harsh discipline, I know. It is one that I learned when I was in the investment banking business. But it is one I think is an important one—to value on a daily basis or weekly basis the risks that a firm has and put aside appropriate capital margin, and AIG was not doing that.

There were a lot of other problems in AIG as well that I think the system would have highlighted earlier.

Chairman REED. Senator Johanns, we are going to do another round.

Senator JOHANNNS. OK, great.

Chairman REED. Because you are right, this is a complex topic, and we are extraordinarily fortunate to have the Chairmen and Ms. White from the Federal Reserve.

Let me just ask one question, though, and that is: We are engaged in a very complicated regulatory reform process which is going to touch many, many different areas. So I would ask you to just tell us what do you believe are the two or three most important legislative changes that we have to enact given the fear that it is going to be so big and so broad that every detail will be considered. But we need to know what you think the most important priorities are in terms of the legislative changes.

Chairman Gensler, you seemed poised to answer.

Mr. GENSLER. I was poised to let Chair Schapiro answer first.

[Laughter.]

Mr. GENSLER. You know, it is a very appropriate question. It is hard when one's President lays out a bold agenda, and I think it is very bold agenda that President Obama laid out. But I think it is incumbent upon all of us to address over-the-counter derivatives. So if I am allowed two, I would say one priority is absolutely over-the-counter derivatives and protecting the consumers. I mean, the whole approach to having a strong, vigorous oversight of the mortgage—I think the mortgage sales practices in this country failed, failed terribly, all the way through the process of mortgage securitization. But I would say the second big one for me—there are others, but I would say it is the consumer side.

Chairman REED. I should be more specific. Within the context of regulating over-the-counter derivatives or the derivatives market, any specifics?

Mr. GENSLER. Mr. Chairman, it is hard to break it down because I really do think these are complementary regimes. I think that if we are not able to fully regulate the dealers, we will not give the American public the comfort they need, and it will feel like we leave a loophole. If we just did central clearing, which is a good idea, a very good idea, and even if we mandate it, I think we will not have covered the legitimate concern of covering the risk of the customized products.

Chairman REED. Well, let me turn to Chairman Schapiro now, but also will there be a definitional debate about who is a CFTC dealer and who is an SEC dealer? Because I think that there is agreement among both of you that the dealers have to be regulated.

Ms. SCHAPIRO. I would agree with that, and actually I would go so far as to say that if we do not regulate the dealers, we will realize Senator Bennet's concern that there is not really any reason to go the standardized route because you can really, with anonymity and in a very opaque way, continue to engage in OTC derivatives through unregulated dealers or dealers at least that we cannot adequately examine and inspect.

I think that to the extent there are disagreements between the SEC and the CFTC—first of all, most dealers will be regulated by the bank regulators, frankly, and certainly if the Administration's plan to create a systemic risk regulator is effectuated, that systemic risk regulator is likely to regulate, in addition to the functional regulator, any OTC derivatives dealer of any size at all.

Chairman REED. Thank you.

Ms. White, do you have a comment?

Ms. WHITE. My portfolio is much narrower than the Chairmen of the two Commissions. But I would point out that we really do think it is important to move on these trade information warehouses so that we have the data for all of the contracts, non-standardized as well as standardized.

Chairman REED. Thank you very much.

Senator Bunning.

Senator BUNNING. Thank you.

For the Chairman of the SEC, can and should the Securities and Exchange Commission require all reporting companies to disclose counterparties and reference entities and assets in their derivative portfolios?

Ms. SCHAPIRO. Require public disclosure? If their relationships are material and they have material contracts with counterparties, they should be disclosed—at the risk of saying something incorrect here—in their public filings if they are material to the company.

Senator BUNNING. I am talking—you are talking about someone to regulate these people. I am talking about—

Ms. SCHAPIRO. For example, if Boeing were to enter into a customized—

Senator BUNNING. Customized, or even—yes, a customized one.

Ms. SCHAPIRO. If they were regularly engaged in this market, I think that that should bring them under the umbrella of being regulated. But, otherwise, I believe our view would be that we could get at the information through the dealer's requirement to keep

records about counterparties, an audit trail of the transaction, all of the terms of reference of the transaction.

Senator BUNNING. In other words, I am asking about any entities.

Ms. SCHAPIRO. Other than just dealers?

Senator BUNNING. That is correct.

Ms. SCHAPIRO. I believe that we think we can get the information through access to all the dealer information about who they were—who their counterparty was.

Senator BUNNING. I am worried about people slipping through, like we had for the last 10 years.

Ms. SCHAPIRO. I share that concern very much with you. I think to the extent anybody did not have a dealer as their counterparty, so a Boeing or another commercial company, and they were engaged in this market with any frequency at all, we could get at that directly. But I believe we could get the information very clearly through our regulation of the dealer and access to the complete books and records of the dealer, where they would show that they were transacting with Boeing.

And, of course, if the information is in a trade information warehouse or the transaction is done through a central counterparty, we would have access to the information in that method, in that way as well.

Senator BUNNING. This is one for all of you. How do we prevent a clearinghouse or an exchange from being too big to fail? And should they have access to Fed borrowing?

Mr. GENSLER. Senator, I think that we actually already have a number of clearinghouses that have been very well and successfully regulated for decades in the securities, options, and futures markets. But if they were to fail—and they have been successfully regulated—they're systemically relevant already.

We are hoping that we will have large clearinghouses for derivatives, so I think all will be somewhat systemically relevant. And we, as you say, will need to sort of address this in statute as to that possibility.

Senator BUNNING. Tell me how.

Mr. GENSLER. Well, I think that they should be regulated, as they have been for decades, by the principal—

Senator BUNNING. The clearinghouses.

Mr. GENSLER. The clearinghouses and exchanges should be regulated by the principal market regulators, as each of our agencies has for decades, and the derivative regulation should embody that similarly. They should be regulated for risk management, making sure they have capital and margining and various practices on how they net the contracts and also regulation about their clearing members. At the same time, I recognize there may be something for the systemic regulators' interest to make sure that if they are going to be called upon in an extreme case to lend money, that they also have some authorities.

Senator BUNNING. In other words, you would not rule out the Federal Reserve as being a source they could go to in case of emergency?

Mr. GENSLER. Well, I think that—it has never happened, but we cannot rule it out, and we should make sure that—and it is one

of the lessons of this crisis, is that we have to make sure that our statutes are up to date so that in an extreme circumstance—

Senator BUNNING. That is all we are trying to go through.

Mr. GENSLER. Right, so I am agreeing with you, Senator.

Senator BUNNING. OK.

Ms. SCHAPIRO. I do not have much to add to that. I would say that the securities clearinghouses did work very well in the last year over really extraordinary circumstances, but I think the last year also taught us that almost anything can happen that we have not anticipated historically.

I think the real key for clearinghouses will be very robust risk management, so that they are very well capitalized, they have effective oversight, and real vigilance from the regulators, whether it is the Fed as a backstop regulator to clearance and payment systems or the functional regulators, the SEC and the CFTC. It will be important for them to have conservative margin requirements and very important for them to have procedures that are well understood, very transparent for how they will resolve the default of a participant in the clearinghouse.

Senator BUNNING. Ms. White, would you like to comment anyway?

Ms. WHITE. The Board believes that CCPs are critical utilities in the financial markets and they need to be regulated and they need to have risk management that would ensure that they carry out their functions in a sound manner. They are, as you pointed out, subject to the possibility of needing liquidity in extreme situations. The Administration has proposed broadening the Fed's ability to provide liquidity in extreme situations, and the Board supports that.

Senator BUNNING. Thank you very much.

Chairman REED. Senator Johanns.

Senator JOHANNNS. Thank you, Mr. Chairman.

One of the observations at least that I have made as I look back over the last months is it seems to me the big got bigger, they got more tangled up in so many parts of the economy. Very, very bad decisions were made, and you are off to the races. And then the taxpayer was asked—or told, as in General Motors' case—that, guess what, they bailed them out.

If you are adding more regulation, capital requirements, transparency, somebody is going to have to comply with that within the dealer's organization, and there is going to be a cost to that.

Where, in your judgment, will the cost of that be borne? I mean, somebody has to pay for it. If it is the airline industry and they are hedging against the rising cost of fuel for their jets, won't consumers pay for that in higher ticket prices?

Ms. SCHAPIRO. I will take a stab at that. The cost of regulation clearly will ultimately be borne by consumers, and I think that is just a given historically and going forward.

It would be my fervent hope that the costs of regulation going forward would pale in comparison to the costs of what we have been through in the last year or two. But it does, I think, point out, very rightfully so, that we have to be sensitive to the costs of the requirements that we may end up proposing—

Senator JOHANNIS. You know, and, Chairman, I am not—gosh, I am not debating that. I think some response to this is absolutely necessary. You know, I am one of the people screaming about General Motors. I thought it was a very bad decision to buy the company. But having said that, we now own it. I would hate to think that we are not doing something here that will protect taxpayers in the future. So that is not even really a debating point.

But one of the things I found out as Secretary of Agriculture, once you try to do these overarching regulations and press those down upon the agricultural system, the large operators who had access to capital, *et cetera*, they tended to survive and get bigger, because they needed to get bigger to pay the cost of the regulations. The small operators went out of business. They just could not endure what you were asking them to endure. And over time you ended up with exactly what we are trying to deal with here, is the big got bigger.

Ms. SCHAPIRO. Right. I completely agree with that, and I think we have to be sensitive to costs going forward. One of the segments of our financial services industry that actually weathered the past year reasonably well were smaller and medium-size financial institutions. And so I think it—which shows to me that the diversity of financial institutions in this country is an important safety and soundness feature in and of itself. And I think it is going to be very important for the regulators, as we create a new regulatory structure if Congress empowers that, to be sensitive to costs, particularly those that will be borne by smaller and medium-size businesses that are very important ultimately to access to financial services for millions of Americans who will not be going to the largest dealers.

Mr. GENSLER. If I might, Senator, I am actually quite the optimist at this table. I believe for small firms that this will actually lower costs of doing the standard product. Most small firms hedging an interest rate risk or shipping a product to Europe and want to hedge a currency risk do not have transparency right now. And even a few basis points, which is a hundredth of 1 percent, costs something over the years.

I think lending greater transparency to these markets will benefit the many thousands of small businesses and municipalities in this country, particularly on a standard product.

Senator JOHANNIS. The transparency is not the issue. You can bring up the transparency and I think everybody would love that. The issue is what they have to deal with every day to try to get their transaction done. And I will just tell you, having worked with overarching regulations, I think in the end you hammer the little guy. It just seems to me that the little guy is going to look at this and say, “I cannot make it. I do not have enough where I can pass it on to the consumer,” just like the person with a hundred cows today is struggling to survive. And I just worry that what you are doing here, unless you do something in that area, you are going to put the little guys out of business.

Mr. GENSLER. Well, I think that you raise a very important point, and as we work together on this regulation and legislation, I look forward to talking more. I think that they will also greatly

benefit by lowering some of the risk and increasing transparency in these markets.

Senator JOHANNIS. Thank you, Mr. Chairman.

Chairman REED. Thank you very much.

Thank you for your excellent testimony. There may be additional questions that will be submitted to you for the record, and we would ask you to respond in a very timely fashion. But thank you very much, and let me call forward the second panel.

Mr. GENSLER. Thank you.

Ms. SCHAPIRO. Thank you.

Chairman REED. Welcome, gentlemen. Let me introduce our second panel.

Our first witness is Dr. Henry Hu, the Allan Shivers Chair in the Law of Banking and Finance at the University of Texas School of Law. His research centers on corporate governance and financial innovation. A 1993 *Yale Law Journal* article showed how sophisticated financial institutions may make big mistakes as to derivatives. His work on the decoupling of debt and equity rights from economic interests has attracted wide attention, including, coincidentally, a story in the current issue of *The Economist*. So welcome, Dr. Hu. Thank you.

Our next witness is Mr. Kenneth C. Griffin. He is the founder, President, and Chief Executive Officer of Citadel Investment Group, L.L.C., a global hedge fund and asset management firm. Citadel operates in the world's major financial centers, including Chicago, London, New York, Hong Kong, and San Francisco. Mr. Griffin is also a member of several philanthropic boards, including service as Vice Chairman of the Chicago Public Education Fund. Thank you, Mr. Griffin.

Our next witness is Mr. Robert G. Pickel. He is the Executive Director and Chief Executive Officer of the International Swaps and Derivatives Association, or ISDA, which is the global trade association for over-the-counter derivatives. Previously, Mr. Pickel was the General Counsel of ISDA, serving in that capacity since November 1997. Prior to joining ISDA, Mr. Pickel was Assistant General Counsel in the Legal Department of Amerada Hess Corporation, an international oil and gas company, from 1991 to 1997. Welcome, Mr. Pickel.

Our fourth witness is Mr. Christopher Whalen, the Managing Director of Institutional Risk Analytics, a Los Angeles-based provider of risk management tools, but Mr. Whalen is a proud resident of Croton-on-the-Hudson, New York. They provide consulting services to auditors, regulators, and financial professionals. Mr. Whalen leads the company's risk advisory practice and consults for global companies on a variety of financial and regulatory issues. He is also the regional director of the Professional Risk Managers International Association and is a board adviser Eye on Asia, a global business security and risk consultancy based in Hong Kong. Thank you, Mr. Whalen.

Dr. Hu, would you please begin?

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

Mr. HU. Mr. Chairman and distinguished Members of the Subcommittee, thank you for this opportunity. My name is Henry Hu. I teach at the University of Texas Law School and my testimony reflects my preliminary views as an academic. In the interest of full disclosure, I recently agreed to begin working soon at the Securities and Exchange Commission. I emphasize that I am currently a full-time academic, have been so for over two decades, and after this forthcoming government service will return to my normal academic duties. What I will say today does not reflect the views of the SEC and has not been discussed with, or reviewed by, the SEC. I have submitted written testimony. I ask that it also be included in the record.

This is a seminal time for the regulation of over-the-counter derivatives. My understanding is that the Subcommittee wanted me to offer a broad perspective as to undertaking this task instead of analyzing specific elements of the President's proposal.

Almost from the beginning of the OTC derivatives markets in the late 1970s, two overarching visions have animated the regulatory debate. The first vision is that of science run amok, of a financial Jurassic Park. In the face of relentless competition and capital market disintermediation, big financial institutions have hired financial scientists to develop new financial products. Often operating in an international wholesale market open only to major corporate and sovereign entities—a loosely regulated paradise hidden from public view—these scientists push the frontier, relying on powerful computers and esoteric models laden with incomprehensible Greek letters.

But danger lurks. As these financial creatures are created, evolved, and mutate, exotic risks arise. Not only do the trillions of mutant creatures destroy the creators in the wholesale capital market, they escape to cause havoc in the retail market and economies worldwide.

This first vision focuses on the chaos that is presumed to result from the innovation process. The chaos could be at the level of the entire financial system. This motivated, of course, the Federal Reserve's intervention in 1998 of Long-Term Capital Management—perhaps they should have called this hedge fund something else—and the intervention in 2008 as to AIG. There could also be chaos at the level of individual market participants. Witness the bankruptcy of Orange County in 1994, and also in 1994, the huge derivatives losses at Procter and Gamble—but perhaps that company's name was appropriate.

But there is also a second vision, one that is the converse of the first vision. Here, the focus is on the order, the sanctuary from an otherwise chaotic universe made possible by the innovation process. The notion is this. Corporations and others are subject to volatile financial and commodities markets. Derivatives, especially OTC derivatives, can allow corporations to hedge against almost any kind of risk. This allows corporations to operate in a more ordered world.

If the first vision is that of a Jurassic Park gone awry, the second vision is that of the soothing, perfect, hedges found in formal English and Oriental gardens. While the first vision focuses on the private and social costs of derivatives, the second vision emphasizes the private and social benefits of OTC derivatives.

In fact, there are elements of truth to both visions and the essential task ahead is to try to reduce the costs of such derivatives without losing their benefits.

Now, that is easily said. How can we actually accomplish this?

Well, in my academic articles on this matter, I stress one theme. We must not just focus on the characteristics of individual OTC derivatives, but also on the underlying process of financial innovation through which products are invented, introduced to the marketplace, and diffused. That is, the financial innovation process itself, not just individual derivatives, has regulatory significance.

Because of time limitations, I simply refer to two or three examples, and only very briefly. First, the innovation process can lead to chaos by causing important market participants to make big mistakes. In an article published in 1993 in the *Yale Law Journal* entitled “Misunderstood Derivatives,” I argued that the particular characteristics of the modern financial innovation process will cause even the most sophisticated financial institutions to make big mistakes as to derivatives.

Second, the gaps in information as to this innovation process between the regulators and the regulated are extraordinary. Regulators may not even be aware of the existence of certain derivatives, much less how they are modeled or used. And so beginning in 1993, I have urged the creation of a centralized informational clearinghouse as to OTC derivatives.

Third, let’s focus on one particular example of the innovation process, the so-called “decoupling” process. I have—beginning in 2006—been the lead or sole author as to a series of articles suggesting that this decoupling process can affect the core disclosure and substantive mechanisms of our economic system. In the initial 2006 articles, the focus was on the equity side. Those articles showed how you could have an “empty voter” phenomenon. For instance, the person holding the highest number of votes in a company could be somebody with no economic interest or a negative economic interest. And similarly, there is a “hidden morphable ownership” issue. Those 2006 articles showed how some hedge funds and others have used cash-settled equity swaps in efforts to try to avoid making disclosures under Section 13(d) of the Securities Exchange Act of 1934.

In 2007, it suddenly occurred to me that the same kind of decoupling process can work on the debt side. For instance, using credit default swaps, you could have creditors who are “empty creditors.” With this empty creditor situation, these creditors might often have weaker incentives than traditionally to make sure that their borrowers stay out of bankruptcy. Indeed, if they hold enough credit default swaps, they might benefit from their borrowers going into bankruptcy. In these times, this is deeply troubling.

Let me conclude. Three econometricians went hunting in the wilds of Canada. They were getting hungry and they suddenly see a deer. One econometrician shoots and misses three feet to the

right. The second econometrician shoots and misses three feet to the left. The third econometrician doesn't shoot but shouts, "We got it! We got it!"

It is very difficult to come up with a good model, much less one that would actually put food on the table. The task of coming up with a good model for regulating derivatives is no less difficult, and we now all know that this task is essential to making sure that food is indeed on the table for everyone.

Thank you very much.

Chairman REED. Well, thank you very much, Dr. Hu.

Mr. Griffin, please.

**STATEMENT OF KENNETH C. GRIFFIN, FOUNDER, PRESIDENT,
AND CHIEF EXECUTIVE OFFICER, CITADEL INVESTMENT
GROUP, L.L.C.**

Mr. GRIFFIN. Chairman Reed, Senator Bunning, Members of the Committee, I am Kenneth Griffin, President and CEO of Citadel Investment Group and I appreciate the opportunity to testify and share our views regarding effective oversight of the OTC derivatives market.

The appropriate oversight of the OTC derivatives market is of paramount importance to the safety and soundness of our financial system. The events of recent months have made it abundantly clear that large financial firms are not too big to fail, but rather too interconnected to fail. The idea that extreme measures must be taken to prevent the failure of a single firm, such as Bear Stearns, which had just over \$10 billion of shareholders' equity and a few thousand employees, drives home the point that greater regulation of our financial markets is warranted.

Derivatives serve an incredibly important role in our financial markets. Current notionals exceed several hundred trillion dollars and reflect the important role of these risk transference contracts. The commercial justifications for this market are well established and well understood.

Regretfully, as this market has grown to almost unimaginable scale, the regulatory framework and market structure have not kept pace. Now is the time to put an end to the antiquated practice of bilateral trading. The use of central clearinghouses open to all market participants will end the era of too interconnected to fail. The use of central clearinghouses will bring considerable value to society in the form of far greater price transparency; fairer executions for all users of these instruments, and in particular for less frequent users, such as municipalities, smaller corporations, and local banks; far greater ease of regulatory oversight; and reduced responsibility for any systemic risk regulator.

In addition, a central clearinghouse will create a stronger regulatory framework for all users, including regional banks, insurance companies, pension plans, and other pools of investment capital. For example, margin requirements and daily mark-to-markets will apply to all users of the clearinghouse. Capital requirements on the trading of derivatives not cleared through a central clearinghouse should reflect the significant systemic risk they create and should be substantially higher than those in existence today.

Citadel has a vested interest in seeing this modernization of our financial markets. We and several of the largest asset managers in the world have united behind the CME group in the development of a neutral, open access, central counterparty clearing solution for credit default swaps. As part of a larger community of investors, we are committed to the improvement of the safety and soundness of our financial markets.

The commitment of many of the leading buy-side firms to a central clearinghouse reflects the inherent weaknesses in today's dealer-centric bilateral trading model. For example, customers are often required to post initial margin to their counterparties to initiate a trade. These funds are commingled with the dealer's other assets. Because customer margin is not segregated, customer funds could be lost in a dealer default. In times of stress, customers will rush to close out positions to recover their margin. This can intensify a liquidity crisis, as we saw last fall. And last fall, when customers sought to mitigate credit risk by closing out positions with dealers, the prices at which they could terminate contracts were often extremely unfair.

Customers do not have access to high-quality market data in today's paradigm, such as transaction prices. This information is closely held and not broadly available. Customers require transaction data and accurate prices to understand the riskiness of their portfolios. Without this information, the ability of customers to prudently manage their portfolios is substantially limited.

The large dealers earn extraordinary profit from the lack of transparency in the marketplace and from the privileged role they play as credit intermediaries in almost all transactions. The current market structure suits their interests and leaves their customers at a significant disadvantage. But the memories of AIG, Bear Stearns, and Lehman Brothers, to name a few, should prompt, in fact, demand, a swift and thoughtful response from our regulators and legislators.

Today, the vast majority of credit default and interest rate swap contracts have standardized terms and trade in large daily volumes. Arguments have been advanced about the importance of customized derivatives, which represent a small percentage of total activity. Customized derivatives are important, but they come with significant operational risk, model risk, and financial risk. We should permit the continued use of customized derivatives with appropriately heightened regulatory capital requirements and far clearer risk disclosures to nonfinancial institutions and users.

In the end, I strongly believe these arguments are nothing more than a strategy to obfuscate the real issues at hand, principally the need to bring much overdue modernization to our marketplace. This problem has an international dimension. We must work to coordinate our actions with foreign regulators. Otherwise, we face the risk of cross-border capital and regulatory arbitrage. The *status quo* cannot be allowed to continue. We must work together to drive market structure, reform that fosters orderly and transparent markets, that facilitates the growth and strength of the American economy and protects taxpayers from losses, such as those that we have witnessed in the last year.

Thank you for the opportunity to testify today. I would be happy to answer your questions.

Chairman REED. Thank you very much, Mr. Griffin.
Mr. Pickel, please.

**STATEMENT OF ROBERT G. PICKEL, EXECUTIVE DIRECTOR
AND CHIEF EXECUTIVE OFFICER, INTERNATIONAL SWAPS
AND DERIVATIVES ASSOCIATION, INC.**

Mr. PICKEL. Chairman Reed, Ranking Member Bunning, and Members of the Subcommittee, thank you very much for inviting ISDA to testify today. We are grateful for the opportunity to discuss public policy issues regarding the privately negotiated, or OTC, derivatives business. Our business provides essential risk management and cost reduction tools for many users. Additionally, it is an important source of employment, value creation, and innovation for our financial system.

In my remarks today, I would briefly like to underscore ISDA and the industry's strong commitment to identifying and reducing risks in the privately negotiated derivatives business. We believe that OTC derivatives offer significant value to the customers who use them, to the dealers who provide them, and to the financial system in general by enabling the transfer of risk between counterparties.

OTC derivatives exist to serve the risk management and investment needs of end users. They include over 90 percent of the Fortune 500, 50 percent of mid-size companies, and thousands of other smaller American companies. The vast majority of these transactions are interest rate and currency swaps and equity and commodity derivatives. These are privately negotiated, bilateral contracts that address specific needs of thousands of companies.

We recognize, however, that the industry today faces significant challenges and we are urgently moving forward with new solutions. We have delivered and are delivering on a series of reforms in order to promote greater standardization and resilience in the derivatives markets. These developments have been closely overseen and encouraged by regulators who recognize that optimal solutions to market issues are usually achieved through the participation of market participants. As ISDA and the industry work to reduce risk, we believe it is essential to preserve flexibility to tailor solutions to meet the needs of customers, and the recent Administration proposals and numerous end users agree.

Mr. Chairman, let me assure you that ISDA and our members clearly understand the need to act quickly and decisively to implement the important measures that I will describe in the next few minutes.

Last week, President Obama announced a comprehensive regulatory reform proposal for the financial industry. The proposal is an important step toward much-needed reform of financial industry regulation. The reform proposal addressed OTC derivatives in a manner consistent with the proposals announced on May 13 by Treasury Secretary Geithner. ISDA and the industry welcomed in particular the recognition of industry measures to safeguard smooth functioning of our markets and the emphasis on the con-

tinuing need for the companies to use customized derivatives tailored to their specific needs.

The Administration proposes to require that all derivative dealers and other systemically important firms be subject to prudential supervision and regulation. ISDA supports the appropriate regulation of financial and other institutions that have such a large presence in the financial system that their failure could cause systemic concerns.

Most of the other issues raised in the Administration's proposal have been addressed in a letter from ISDA that ISDA and various market participants delivered to the Federal Reserve Bank of New York earlier this month. As you may know, a Fed-industry dialogue was initiated under Secretary Geithner's stewardship of the New York Fed nearly 4 years ago. Much has been achieved and much more has been committed to, all with the goal of risk reduction, transparency, and liquidity. These initiatives include increased standardization of trading terms, improvements in the trade settlement process, greater clarity in the settlement of defaults, significant positive momentum central counterparty clearing, enhanced transparency, and a more open industry governance structure.

In our letter to the New York Fed this month, ISDA and the industry expressed our firm commitment to strengthen the resilience and robustness of the OTC derivatives markets. As we stated, we are determined to implement changes to risk management, processing, and transparency that will significantly transform the risk profile of these important financial markets. We outlined a number of steps toward that end, specifically in the areas of information transparency and central counterparty clearing.

ISDA and the OTC derivatives industry are committed to engaging with supervisors globally to expand upon the substantial improvements that have been made in our business since 2005. We know that further action is required and we pledge our support in these efforts. It is our belief that much additional progress can be made within a relatively short period of time. Our clearing and transparency initiatives, for example, are well underway with specific commitments aired publicly and provided to policy makers.

As we move forward, we believe the effectiveness of future policy initiatives will be determined by how well they answer a few fundamental questions. First, will these policy initiatives recognize that OTC derivatives play an important role in the U.S. economy? Second, will these policy initiatives enable firms of all types to improve how they manage risk? Third, will these policy initiatives reflect an understanding of how the OTC derivatives markets function and their true role in the financial crisis? Finally, will these policy initiatives ensure the availability and affordability of these essential risk management tools to a wide range of end users?

Mr. Chairman and Committee Members, the OTC derivatives industry is an important part of the financial services business in this country and the services we provide help companies of all shapes and sizes. We are committed to assisting this Committee and other policy makers in its considerations of these very important policy initiatives. I look forward to your questions. Thank you.

Chairman REED. Thank you very much, Mr. Pickel.

Mr. Whalen, please.

**STATEMENT OF CHRISTOPHER WHALEN, MANAGING
DIRECTOR, INSTITUTIONAL RISK ANALYTICS**

Mr. WHALEN. Mr. Chairman, Senator Bunning, thank you for inviting me to be with you today. I am going to summarize a couple of the key points in my remarks, which are part of the record. I would also like to ask that an interview we published today in the *Institutional Risk Analyst* with Ann Rutledge, who is a great colleague of mine and an expert on derivatives and structured finance, be included in the record, as well. I will be happy to submit that.

Chairman REED. Just submit it to us, please, Mr. Whalen.

Mr. WHALEN. I agree with many of the things that have been said in previous testimony and I am very encouraged by what I hear. I hope you will take this as an initial fact finding session today because I think it is important that the Congress build a complete public record on this issue and that will take some time.

You have heard a lot about centralized clearing. I don't think anybody is opposed to that. It makes sense. It is part of the evolution of markets. Whenever financial markets start, the first few people who figure out an opportunity never want standardization. They don't want too many people to know what they are doing because they are harvesting the biggest returns that you will ever see in that new market. And over time, as the crowd gets bigger, they all agree that standardization and a certain degree of consistency is important for the participants. This is the way all of our markets have evolved in this country over the last century or more.

But I would tell you that I think that clearing is a bit of a canard. I don't think it really is the problem. I think it is part of the problem. It was manifest in many ways over the last few years. I also think that a lot has been said today about information, about a lack of transparency. And again, who disagrees with transparency? It is like motherhood and apple pie. Everybody is for it.

But I think in working with our clients and talking through these issues—and my views on these issues have changed over the last 20 years, I will be the first to admit, that is part of the learning process—but I think that everything we deal with today, the systemic risk, the concern that is felt by buy-side investors today who are basically on strike—hinges on valuation. Investors don't want to know about any of these toxic products until the sell side of the street meets their concerns about transparency and price discovery—I particularly appreciate Ken's comments from Citadel. I totally agree with what they are saying. But to me, the basic problem is not with most of the over-the-counter derivatives for currencies or interest rates. These are all fine. They have a visible cash-basis market that everybody can see, the buyer and the seller. Both parties can validate the derivative contract price immediately.

Where I think we have a big problem that may not be surmountable is when you allow the investment community to create derivatives where there is no visible cash market. In other words, we are creating the derivative of something that can only be validated with a model. And as we all know, all models are always wrong. They are right at a certain point in time, but if they are not dynamic, the next day, the next week, the next month, it is off base.

So I think the key question we have to ask, and this goes back to the basic principles that underlie all of the futures and forward OTC markets in our country, is if you can't see a real price, a cash price and a price that reflects volume, reflects a large community of interest so that that price means something, how do you validate a derivative that is supposedly based on that asset?

Classic example, single name credit default swaps. These products essentially let you create a hedge for a corporate bond that is illiquid, or even a completely illiquid loan for that corporation. Now, CDS is a wonderful thing. Everybody in the market agrees, this is a great facility to have, to be able to hedge an exposure with a short position that I can't create in a cash market. I can't borrow that bond to deliver it against a short position. It is illiquid. So we have decided that instead of that price that we don't see, that we can't observe, we are going to use models instead. I think that is a very tenuous, speculative basis for a derivatives market. Now, there may be a certain class of market participants who can participate in such activities, but I think for federally insured banks, for pension funds, for State and local agencies, that is probably a bridge too far.

I am a simple guy. I started off in the early, early days of asset swaps and currency swaps working in the London office of Bear Stearns in the mid-1980s. But the beautiful thing about that time is that you never had any question what the swaps were worth. And frankly, I don't even worry about customization. If I have a visible cash basis, I don't mind if someone wants to customize a contract. I don't see what the problem is there.

But the problem I do see is that when you allow sophisticated organizations that are a lot smaller than most of us to create vehicles that cannot be validated in the cash marketplace, we have created risk that I think is very, very difficult to address, and particularly for the vast majority of companies and individuals who really are not competent to make investment decisions without professional advice.

I have worked as a supervisor of investment bankers, traders, and researchers, and things like suitability and "know your customer" mean something to me. I worked for two firms that have very large retail branch networks and we always had to ask ourselves the question when we priced a deal, were we serving the banking customer and were we serving the retail investors that we were going to release securities to when we did a deal. We had a duty to both sides of the trade. And it is that basic element of fairness, not just transparency, not just functionality and risk management, but fairness that I think this Committee has to think about.

I look forward to your questions.

Chairman REED. Well, thank you very much, gentlemen, for excellent testimony and focusing on a range of issues.

Let me start off with asking each one of you, there appears to be a commonality between both the SEC and the CFTC about the need to register dealers as one of the basic starting points for at least partial reform of the system, and we all recognize that this is a long road and a challenging one. So starting with Professor Hu, your sense of the dealer registration. How central is it? Is that one of the top legislative items we should pursue?

Mr. HU. Yes. I think—

Chairman REED. If you could put your microphone on, Professor.

Mr. HU. Yes, I think the prudential supervision of dealers is extremely important. I think that the experience with AIG and the decision-making errors that AIG had while acting as a CDS dealer tend to illustrate how it is important for the Federal Government to get involved as to how these decision-making errors can occur. As another example, the government should also consider the payoff structures, including highly asymmetric compensation structures sometimes seen within derivatives units. Sometimes, the rocket scientist gets a big payoff if some product works while, at most, may lose his job if it does not work.

One might also ask about the financial literacy of the people who are supposed to be supervising the rocket scientists developing these products? Moreover, when do the risks arise? As we all know, in terms of the derivatives personnel, there tends to be high turnover. The risks may not arise until they are three banks away.

So that as part of this process in terms of prudential supervision, I think that we really need to look very carefully in terms of how these errors can arise at “sophisticated” derivatives dealers. In fact, there are error issues as well—and this came up earlier—in connection with end users. In terms of end users, there has been a pattern throughout the history of OTC derivatives of very unsophisticated entities basically gambling and losing. We do not need to even look at the examples of some of today’s municipalities getting into trouble as to complex products. There are some famous examples from the late 1980s involving English local councils such as Hammersmith and Fulham. These councils basically decided that the way to keep taxes down is by speculating on interest rates through interest rate swaps.

So that I think in terms of this area, certainly one of the things that we ought to look at is the prudential supervision of derivatives dealers and suitability and related sales practice matters. But we also ought to look at the end-user side, including as to the adequacy of end-user disclosures of their derivatives activities and the like. Substantive questions can also arise. What was Procter & Gamble or what was Gibson Greetings doing engaged in LIBOR-squared interest rate swaps?

So I think that there are issues all around in this area.

Chairman REED. Thank you, Dr. Hu.

Mr. Griffin, please, your comment.

Mr. GRIFFIN. Thank you. So on the topic of—sorry about that. I would take a step back on the question and ask, “How do I simplify the regulatory oversight problem as much as possible?” And central clearinghouses create a tremendous opportunity to reduce the size and scope of the regulatory oversight problem.

First of all, the notionals in existence today dramatically overstate the amount of economic risk being transferred, but do not overstate both the operational risk and credit risk inherent in the system. Central clearinghouses will dramatically reduce, because of their inherent netting, the amount of notional risk in the marketplace, and that reduces both operational risk and materially reduces counterparty risk.

The market's understanding of cleared products is dramatically higher than the market's understanding of the paper contracts that define the market today. As ISDA pointed out, we have worked on reducing settlement problems in the system today, but we need to go back only a few years to when dealers had weeks and weeks of backlogs of unconfirmed and unprocessed trades—trades that could total into the hundreds of billions of dollars. Trades for which no one had taken the time to ensure were properly recorded on the books and records of the institution.

Central clearinghouses with straight through processing eliminate that dramatic operational risk. This will then allow the regulators to focus their efforts around the customized derivatives that do have a role in the dealers' portfolios. It will allow the regulators to spend their time focusing on the handful of contracts for which no standardized solution is appropriate. I believe that our regulators will have the ability and will acquire the abilities over time to find the people to understand the risk in the customized portfolios.

To the extent they cannot, those products are not appropriate for regulated institutions to deal in. You cannot call an institution that is regulated "well regulated" if no one actually understands the risks inherent in their portfolio other than the 20-some-year-old traders that run the trading floors.

Chairman REED. Mr. Pickel and then Mr. Whalen.

Mr. PICKEL. Yes, I think what I would focus on in terms of the priority is systemic risk issues, and specifically how do we prevent another AIG type situation? And while regulation of dealers could be helpful in that, I think most importantly is having some window for regulators into risk, and that will be achieved partly by these trade information warehouses that have been talked about, getting the information there where, frankly, all regulators could have access to that, not just a systemic risk regulator but all regulators. And, second, what happened with AIG is many of the counterparties were dealers, and many of them were banks and overseen by banking regulators. They were each building up risk, but nobody was there to connect all the different dots, like a systemic risk regulator could, if established by the Congress, to give that window into risk and to put on the brakes or make changes when they see that risk building up in the system.

Chairman REED. Thank you.

And, Mr. Whalen, your comment?

Mr. WHALEN. I think it is an effective practical question. The chief purpose of regulation should be to focus on things like suitability and the customer-focused issues. Obviously, systems and controls, risk management, all that are very important within a dealer, there is no question. But as I was saying before, there are certain classes of instruments that you really cannot risk manage. You were talking before about an airline that wants to put together a complex, customized swap for fuel. There is no problem with that. Everybody knows what the price of fuel is today. And you do the work, you calculate the optionality in the complex structure, and you can figure out what it is worth.

The trouble comes if you look at the subprime complex structured asset market of a couple years ago, that we had everybody

in agreement, much like playing Liar's Poker. The model became the definition of value for this class of instruments. But one day a number of people on the buy side started to question that assumption of "mark-to-model." They started backing away from these securities. So did the dealers.

So at some point—it is hard to say when—the consensus about value for that class of asset broke down. And that is where we are today. The buy-side customer still does not want to know about securities that have no visible cash market basis and effectively rely upon "mark-to-model" for price discovery.

So I question really how effective risk management can be in those cases where we do not have a completely separate, independent reference point for value such as a liquid, cash market.

Chairman REED. Thank you.

Senator Bunning.

Senator BUNNING. Yes. Messrs. Griffin, Whalen, and Pickel, should parties to derivative contracts be required to post cash collateral? Or is other collateral acceptable? And is there any reason not to require segregation of customer collateral?

Mr. GRIFFIN. Senator, I believe that one of the hallmarks of mature markets is a well-functioning margin paradigm where customer assets are segregated. If we look at the futures markets, we have had great success. The CME, for example, in over 100 years, through wars, through the Great Depression, has never had a loss that needed to be mutualized because of their appropriate margin requirements.

Now, what should be postable as collateral? At the CME, for example, you can post cash, you can post treasuries, you can post a variety of liquid, well-understood assets as collateral, and that is the right paradigm, in my opinion.

Senator BUNNING. Mr. Pickel.

Mr. PICKEL. Yes, as far as the types of collateral, I think similarly cash and liquid instruments would be appropriate. There have been discussions about other types of securities that might be taken as collateral, but you would have to have significant haircuts apply to those to even consider them, you know, 50 percent or something, in order to take them in.

I think as far as segregation of customer collateral, in the OTC—and I am talking about the customized piece of the business—the use of margin is extensive in that business, and I think that one of the reasons it is used so effectively is that there is an ability to, as I say, rehypothecate or pass on collateral and use it for your own positions. But I think there is certainly room for greater exploration of segregation of collateral so that customers can have the confidence that when something like a Lehman Brothers situation should happen, they can get a hole of their collateral. So I think there is a lot of focus on that going forward.

Senator BUNNING. Mr. Whalen.

Mr. WHALEN. I agree with the other speakers. Segregation of collateral is one of those evolutions we badly need. But I think the other issue that we ought to touch on briefly. The dealers amongst themselves tend to rely on overarching credit agreements and treaties to deal with all manner of collateral and exposure back and forth; whereas, if you move to an exchange type model, everyone

is treated the same and everyone must independently post collateral with the exchange. Whether you are a dealer or a customer, you have different tiers of collateral requirements, but the point is there is a third party who holds the money. You do not have the dealer holding the collateral. You actually have the clearinghouse or a trust company that is separate from the dealer. And I think that is an important distinction.

Senator BUNNING. This is for anybody. What economic value outweighs the social cost of allowing someone to buy insurance in the form of swaps for assets they do not own? Turn it on, please.

Mr. HU. Ranking Member Bunning, this issue is really very interesting. In terms of credit default swaps, some State insurance regulators have argued that you should not be able to buy credit default swaps unless you have an insurable interest. Well, interestingly, the problems may actually be more complex if you do have an insurable interest than if you did not. Let me explain.

When you think about owning a bond or owning a loan and you are a creditor, you traditionally have economic rights, principal and interest; you have various control rights, the various affirmative covenants and negative covenants into a loan agreement or bond indenture; and you have various rights given to you under bankruptcy law, securities law, and other laws. And sometimes you have obligations, too. This is the package of rights that you classically get as a creditor.

Now, traditionally and in market practice, you typically assume that it is a single-bundled package. So a borrower is willing to give to the creditor these control rights because he thinks the creditor would like to see it survive to pay back the creditor.

Well, in today's world, what if the creditor has lent, say, \$100 million and, to conjure up a really extreme example, buys \$200 million notional of credit default swaps? This would be an extreme version what in 2007 I called an "empty creditor." This is a really extreme version. It probably does not happen often. But in this extreme example, you would have a creditor who, rather than wanting to work with the borrower for the borrower to avoid bankruptcy, might want to grease the skids to make sure that the person goes into bankruptcy.

Now, even if you do not have that extreme situation, problems can arise with an empty creditor. That creditor has much weaker incentives to work with the borrower to avoid bankruptcy. And certainly if a troubled borrower is not aware that the creditor has bought credit default swaps he may not understand the true incentives of the creditor with whom he is negotiating. And if the borrower actually goes into bankruptcy, there are all kinds of complications, disclosure and substantive, that arise within bankruptcy proceedings.

Do "empty creditor" situations actually happen in the real world? As some of you know, I wrote an op-ed in the April 10 *Wall Street Journal* about the possible relationship of Goldman Sachs to AIG. There was a really curious incident that—an incident that became curious in retrospect.

In September, as you will recall, Lehman had collapsed. AIG was teetering. The Fed felt compelled to intervene to prevent AIG from

collapsing. That September 16th, Goldman Sachs said its exposure to AIG was “not material.”

But come the middle of March, it turns out that of the initial \$85 billion of Federal bailout money that AIG received, about \$7 billion went to Goldman.

Well, how do you reconcile that? That is, Goldman receiving \$7 billion, and yet, hey, it had no material exposure to AIG.

It turns out, and I suggest in the op-ed, Goldman may well have been an empty creditor. That is, Goldman had bought credit default swaps on AIG from “large financial institutions.” As a result it did not care as much about what happened to AIG as it would have in the absence of such swaps. Indeed Goldman was vigorous in terms of calling for collateral from AIG.

However, I am not saying Goldman did anything improper.

Senator BUNNING. No, but it did not work.

Mr. HU. What was interesting was the swaps did work for Goldman, but this situation helps suggest some of the social dimensions of credit default swaps. Do we really want—

Senator BUNNING. Well, we are still—as you know, Professor, we are still wondering where the bottom is on AIG.

Mr. HU. I am only using this situation to illustrate matters related to the concerns you have; that is, you know, do we really—as a public policy matter—

Senator BUNNING. That is right.

Mr. HU. —shouldn’t we be concerned about these creditors who used to really care about ensuring that their borrowers stay out of bankruptcy, that they can sometimes have much less of an incentive to do that, and that in today’s world—

Senator BUNNING. We had better correct that.

Mr. HU. We might want to consider correcting that, yes, sir.

Senator BUNNING. Thank you very much, Mr. Chairman.

Chairman REED. Senator Johanns.

Mr. GRIFFIN. Actually, I would like to add to that answer, if that is OK, for a moment.

Senator BUNNING. Go right ahead. I am over my time.

[Laughter.]

Mr. GRIFFIN. It is important that we think about all the different reasons why a company might want to use credit default swaps—or a bank, for that matter. I, for example, could be in the supply chain of an industry and worried that the company to whom I have supplied goods or services may not actually perform. They may go into default. The ability to buy credit default swaps against that company makes it much more economically attractive for me, for example, to enter into a long-term sales agreement to provide goods and services to that company. I do not own the bonds, but I do have a position over time as being a creditor of that company as a supplier to them.

Another example—and this one strikes home at Citadel because we lend money to a variety of companies around the world, in the United States from small companies up to the biggest, the Fortune 500. There is often no market for credit default swaps for mid-sized companies. If I want to be a significant lender to a portion of the economy where I absorb a substantial industry risk, for example, to the airlines, let us say I wanted to lend money to a regional car-

rier, I cannot buy a credit default swap on that regional carrier, but I can buy a credit default swap on the majors—American Airlines, Delta, and others. It will help me to manage the industry-specific risk that I have and that, most importantly, reduces the cost of capital for the mid-size company *vis-a-vis* the large company. So credit default swaps play a very important role in allowing banks, pension plans, and other lenders to mid-sized companies in America, to allow them to reduce their industry-specific risk and to reduce the cost of capital of the companies in America that have created the most jobs over the last 30 years.

Chairman REED. Mr. Pickel, I think everyone wants to ask more questions, and Senator Bunning deserve a good answer from everyone. But as briefly as possible.

Mr. PICKEL. All right. I would say that in the derivatives space—and this has been around for 25 years—a lot of the developments were on market risk—interest rates, currencies, equities, commodities, where you are managing a market risk. Credit risk is a new, a relatively new derivative, and I would say that we are still understanding some of the implications of that. And I think that Professor Hu's work has been very interesting in that regard.

I would say that, regarding that empty creditor issue, the fact is that every time somebody is going to into the market and buying protection, which is he suggested somebody is doing, they are sending signals to that company: Your business plan is not working; your business plan is not working. The yellow light is getting brighter and brighter and brighter. And so when it comes to the end and somebody says, "Time is up; I am not going to continue to lend to you," I think that is a natural evolution of this market, but let us certainly understand that.

I would also just mention that credit default swap spreads are becoming embedded in various ways. They are being used for pricing loans. It was done with the rollback of Scotland extension of credit by the U.K. Government, and just today in the *Wall Street Journal*, it was mentioned that S&P has developed an additional means of providing information on credit exposure to the marketplace that incorporates a credit default swap spread. So we see continuing evolution here, and I think it ought to be encouraged, but, understood, certainly.

Chairman REED. I am going to recognize Mr. Whalen very quickly. Senator Johanns deserves his round. And then at the end if we have time, we will—

Mr. WHALEN. I am not ever worried about two people on one side or another of a market. So if somebody wants to buy and sell, you know, you have heard some very good examples of the utility of credit default swaps. The concern I have is that, again, the small airline, the small company, does not have a traded market and its debt that we can use the price these contracts.

So we have, again, the Liar's Poker scenario, which is you have got a trader in one firm and a trader in another, and they have decided that the implied spread on the debt of this company is a good way to price a default contract. OK?

The trouble is most people on Wall Street trade these instruments like bond options. They use them for delta hedging various exposures in debt or even equity markets, and, again, these are

wonderful examples. They have great utility. But the problem is I suspect the pricing is wrong. In other words, CDS is not priced like default insurance. So when that contract goes into default and the provider of protection has to come up with the money, you have got to ask yourself, going back to the question about the supervision of dealers, is that person doing the work so that they are actually cognizant of what the cost of default is versus the spread on a bond?

Lehman Brothers—you could have bought protection on Lehman Brothers a week before it failed at 7 percent. The next week you had to come up with 97 percent worth of cash per dollar of exposure to Lehman.

So, you know, it is the pricing issue that I think is at the core here. It is not whether there is utility in CDS. There is obvious utility in all of these strategies.

Chairman REED. Thank you.

Senator JOHANNNS.

Senator JOHANNNS. I am hoping somebody can answer this question. Of this whole bank of business, kind of an inartful term, but of this entire business arena, what percentage would be of that classification that is not easily valued?

Mr. WHALEN. Oh, I think most over-the-counter contracts do not have a problem in that regard. If you are talking about energy, currency, whatever it is, if there is a rigorous traded cash market, it is easy to come up with a derivative, even if it is a very complex derivative. But when you are talking about illiquid corporate bonds or even loans to corporations, if you are talking about a complex structured asset that is, let us say, two or three levels of packaging away from the reference asset that it is supposed to be “derived” from, that creates complexity in terms of pricing that I think is rather daunting. And I will tell you now, there are very few firms on the street that have the people, the resources, and the money to do that work. Let me give you an example—

Senator JOHANNNS. Mr. Whalen, doesn’t that get us to the point that I was raising in previous questioning? You know, you have now got a whole regulatory scheme. You have got somebody that is going to regulate it. They are hired and paid—

Mr. WHALEN. That is right, and—

Senator JOHANNNS. —probably not very much money. And they are probably going to take the safe route here and say, “Boy, I am not sure I understand this. I am not sure it can be valued. It is a \$100 million contract. We want capital.”

Mr. WHALEN. And that is appropriate.

Senator JOHANNNS. Yes. OK, so isn’t that just another way just another way of getting to the—I mean, how will capital be posted in a circumstance like this?

Mr. WHALEN. Indeed.

Senator JOHANNNS. If you had the capital, you would probably either loan it or not loan it. If it is a bad deal, you would not loan it.

But, anyway, what I am getting to is this: Doesn’t that basically put that segment of this arena out of business?

Mr. WHALEN. It may, and I am not sure that would not be inappropriate, and I am sure my colleagues will disagree with me. But

let me just put it to you this way: I do not think at the end of the day that most people on Wall Street are competent to be a rating agency. And if you are talking about calculating the probability of default of a company or a security, that is not a trivial exercise. It takes a lot of work. And I do not think most people on Wall Street do it. They look at the Bloomberg terminal and by consensus they have all agreed that the spread on the Bloomberg terminal, when you put it in this model, is the price you are going to deal on, whether it is right or not.

Senator JOHANNNS. You know, and I would say to you, Mr. Whalen, listening to your testimony just from a sterile standpoint and saying, "Well, you know, if it is that kind of risk maybe it should be out of business," that is probably OK unless that is the only regional airline in town. And when that one goes away, guess what? Air transportation for half of western Nebraska goes away.

Mr. WHALEN. Well, I do not know any airlines that cannot hedge their fuel costs in the standard forward market.

Senator JOHANNNS. Well, I am not talking about fuel costs. But you know what I am getting at here. There are always unintended consequences, and I just want to understand them. If we are going to put a lot of little guys out of business, tell me that, somebody.

Mr. WHALEN. Well, here is the thing. I want your little guy to have the same facility of pricing a contract as the dealer.

Senator JOHANNNS. How do we do that?

Mr. WHALEN. Ahh, that goes to transparency, but you know what? If I have transparency of an instrument that is still opaque, even after I have legislated transparency, then I have a problem.

Senator JOHANNNS. And the tool we have been given, I think in the end is going to be the capital requirement. That is the ultimate protection. And boy, when you talk about what we require, you are talking about cash, Treasuries. It sounds to me like you are really talking about cash. You are probably not going to take something very risky here, right?

Mr. WHALEN. I think the standardized market could bring those costs down, though, over time. I really do.

Senator JOHANNNS. Yes, Mr. Pickel?

Mr. PICKEL. Senator, yes. In the credit default swap area, we have introduced a very high degree of standardization, to I think your first point about which of these contracts would be most standardized. And I think that in the credit default swaps base, we do have contracts that will be very easy to move into a cleared environment, perhaps more so into an electronically traded or even exchange-traded environment. So those things are in place. And yes, I mean, people look to the Bloomberg screens, but it is the collective view of the marketplace, I mean, that arrives on Wall Street. We have got very active dealers around the world who are expressing views on these contracts and it is that collective reflection of the market judgment that indicates the spread at any particular point in time.

Mr. GRIFFIN. I think the question that you were posing about capital and will the regulation of this market increase the amount of capital required in the marketplace, the answer to that question is not as clear-cut as one might imagine. The reason for it is because of today's silly market structure. If I buy credit protection

from Goldman Sachs, I am likely to eliminate my economic risk but not my counterparty risk by closing that contract out with Morgan Stanley. I will still be posting margin as a customer to both of those firms. It is incredibly inefficient.

If I had a central clearinghouse, I would open the contract with Goldman, clear it through a clearinghouse, close it with Morgan Stanley, clear it through a clearinghouse, and I would have no capital as a customer out the door any longer. I would actually have capital that comes back to me net-net. I think it is a very important concept to understand when we think of clearinghouses, this will not in any way necessarily increase the amount of capital demanded of the system as a whole because of the tremendous efficiency inherent in netting.

The other key concept that we should keep in mind is that price transparency will most favor the smaller, less frequent users of derivatives. Citadel, is one of the world's largest alternative asset managers. We can price all of the derivatives that we commonly trade with a great degree of precision, but we have a tremendous investment in infrastructure to do so. For smaller companies, that is outside their range of capability. But on an exchange, a visible exchange traded price gives the CFO of a small company confidence that he is getting a fair deal, and part of what we want our capital markets to do is to create confidence in all Americans that our markets are fair, they are transparent, and they are just, because that reduces the cost of capital for every company in America.

Senator JOHANNNS. You know, Mr. Griffin—and I will wrap up with this, Mr. Chairman, I appreciate your patience—nobody is going to disagree with your last speech. Boy, that is about as motherhood and apple pie as we can possibly get. Nobody disagrees with that. It is like I said. I just want to know if this is where we are headed, what impact is it going to have on the marketplace from the very small to the very large? My experience is the very large survive and they get bigger.

Mr. GRIFFIN. Actually, you would be surprised where our analysis on this ends up. Today, the largest dealers have a *de facto* monopoly in the business. It is because of their credit rating and privileged position as credit intermediaries to almost every contract, they earn extraordinary economic profits. Where there is a clearinghouse, for example in the options market, the U.S. options market, the OCC acts as a clearinghouse for all listed transactions, you find that there is a vibrant, an incredibly vibrant market of smaller trading firms that add a tremendous amount of liquidity to the marketplace.

Citadel, for example, is the single largest options market maker in the United States. We started out from scratch 7 years ago with zero market presence. Our ability to get to number one was because of a lack of barriers to entry. We were allowed to compete on a level playing field with other incumbents. In the credit default swap or interest rate markets, the barriers to entry are enormous. Who would want to take as a counterparty anyone but, quote-unquote, the firms viewed today as systemically important or too big to fail?

Senator JOHANNNS. Here is—again, to wrap up the second time—here is what I would ask. If there are that many small firms out

there that are going to benefit from this, my address is online. My phone number is online. Mr. Pickel, you probably represent some big and small people. Boy, I hope they overwhelm me with letters over the next 72 hours or e-mails saying, Mike, this is great, we want this to happen, because I am worried and concerned and I don't want this in the end to create a situation where literally by our regulatory effort we have damaged and created the very phenomena that this hearing is for, and that is the big just got bigger, to the point where literally we are all scratching our head about too big to fail. I think if we look back in 20 years and found out that is where we ended up here, that would be a tragedy.

Thanks for your patience. I really appreciate it.

Chairman REED. Thank you, Mr. Chairman. I want to thank you all, gentlemen. If there are additional questions by our colleagues—I think also that Dr. Hu has been trying to get recognized. Can I give you a minute?

Mr. HU. I will go under a minute.

Chairman REED. All right. Put on your microphone and go ahead.

Mr. HU. I think that these clearinghouse arrangements that we are moving to will reduce systemic risk. They will also reduce the profits now available to derivatives dealers. It will be cheaper for everybody in terms of standardized products.

I think that one of the very interesting issues to think about in connection with these clearinghouse arrangements relates to the data that we are now going to be requiring of all derivatives. In terms of customized derivatives, for instance, one of the real questions is how this requirement might be used to help to reduce this informational asymmetry between the regulators and the regulated.

So, for instance, in terms of this general movement to more information being provided to regulators, to what extent should regulators actually ask for model information? Regulators can't understand how to value some of these products, unlike Citadel. To what extent should they actually require this kind of proprietary information? And if we require this kind of proprietary information, how do we maintain safeguards in terms of respecting its proprietary nature? So I think that this is the start of a very long process.

Chairman REED. Well, thank you. Have the last word this evening, but not the last word because it is a long process. But this testimony has been excellent.

Some of my colleagues might have written questions which they will forward to you. We would ask you within 2 weeks to please respond.

All of your written testimony is part of the record and I thank you all for excellent testimony and for your presence this afternoon and I will adjourn the hearing.

[Whereupon, at 5:23 p.m., the hearing was adjourned.]

[Prepared statements, responses to written questions, and additional material supplied for the record follow:]

PREPARED STATEMENT OF SENATOR MIKE CRAPO

Recent events in the credit markets have highlighted the need for greater attention to risk management practices and the counterparty risk in particular. The creation of clearinghouses and increased information to trade information warehouses are positive steps to strengthen the infrastructure for clearing and settling credit default swaps. While the central counterparty clearing and exchange trading of simple, standardized contracts has the potential to reduce risk and increase market efficiency, market participants must be permitted to continue to negotiate customized bilateral contracts in over-the-counter markets.

Many businesses use over-the-counter derivatives to minimize the impact of commodity price, interest rate, and exchange rate volatility in order to maintain stability in earnings and predictability in operations. If Congress overreaches and bans or generates significant uncertainty regarding the legitimacy of decisions to customize individual OTC derivatives transactions there will be enormous negative implications on how companies manage risk.

At this time I would like to highlight a few examples from end users about what are the possible effects of severely restricting access to customized over-the-counter derivatives on companies' ability to manage risk and on the prices they charge customers.v

David Dines, President of Cargill Risk Management: "While margining and other credit support mechanisms are in place and utilized every day in the OTC markets, there is flexibility in the credit terms, credit thresholds and types of collateral that can be applied. This flexibility is a significant benefit for end users of OTC derivatives such as Cargill in managing working capital. Losing this flexibility is particularly concerning because mandatory margining will divert working capital from investments that can grow our business and idle it in margin accounts. While it depends on market conditions, the diversion of working capital from Cargill from margining could be in excess of \$1 billion. Multiply this across all companies in the U.S. and ramifications are enormous, especially at a time when credit is critically tight."

Kevin Colgan, Corporate Treasurer of Caterpillar: "Our understanding of currently pending regulation in this area is that it would require a clearing function which would standardize terms like duration and amount. Any standardization of this type would prohibit us from matching exactly the terms of the underlying exposure we are attempting to hedge. This, in turn, would expose us to uncovered risk and introduce needless volatility into our financial crisis."

Mark Grier, Vice Chairman of Prudential Financial: "Without customized OTC derivatives, Prudential would be incapable of closely managing the risks created in selling life insurance, offering commercial loans, and proving annuities for retirement."

John Rosenthal, Chief Hedging Officer of MetLife: "Standardized derivatives cannot be used effectively to hedge all types of financial risk. Any increased risks would result in higher costs to offer and maintain these products. In either situation the increased costs of an inefficient derivatives market would be reflected in the pricing to our customers. To the extent the costs and/or risks associated with an inability to appropriately hedge these products became prohibitive; these products could be no longer available to customers."

Janet Yeomans, Vice President and Treasurer of 3M: "Not all OTC derivatives have put the financial system at risk and they should not all be treated the same. The OTC foreign exchange, commodity, and interest rate markets have operated uninterrupted throughout the economy's financial difficulties. We urge policy makers to focus on the areas of highest concern."

At this time, I would like to submit into the record the complete letters. It is possible that I will receive additional letters in the next few days and I would also like to enter those letters in the record.

While the derivatives market may seem far removed from the interests and concerns of consumers and jobs that is clearly not the case. Legislative proposals to alter the regulatory framework of over-the-counter derivatives is a very technical subject matter and the potential for legislation to have unintended consequences of legitimate transactions is considerable.

We need to better understand the following questions:

- How do businesses use customized OTC derivatives to help stabilize prices and mitigate risk?
- What are the possible effects of severely restricting access to customized OTC derivatives on businesses ability to manage risk and on the prices they charge customers?

- What safeguards are in place to ensure that derivatives portfolios are a tool for hedging risk, rather than a source of risk?
- What does standardized mean, and how much of the OTC markets can and should be shifted on exchanges?

PREPARED STATEMENT OF MARY L. SCHAPIRO

CHAIRMAN,
SECURITIES AND EXCHANGE COMMISSION

JUNE 22, 2009

Introduction

Chairman Reed, Ranking Member Bunning, and Members of the Subcommittee: I am pleased to have this opportunity to testify on behalf of the Securities and Exchange Commission concerning the regulation of over-the-counter (OTC) derivatives. The severe financial crisis that has unfolded over the last 2 years has revealed serious weaknesses in the structure of U.S. financial regulation. One of these is the gap in regulation of OTC derivatives, which under current law are largely excluded or exempted from regulation. The SEC is committed to working closely with this Committee, the Congress, the Administration, and fellow regulatory agencies to close this gap and restore a sound structure for U.S. financial regulation.

My testimony today on the regulation of OTC derivatives will reflect the SEC's perspective as the country's capital markets regulator. First, I will give an overview of the OTC derivatives markets, with particular focus on those derivatives products that are directly related to or based on securities or issuers of securities and therefore directly connected with the SEC's statutory mandate. Second, I will outline an approach that would address the existing gaps in regulatory oversight of these securities-related OTC derivatives.

I must tell you right at the start that, given the current limited regulation of OTC derivatives, no regulatory authority can give you a complete picture of OTC derivatives and how they have affected the regulated securities markets. One reason that we need legislation is that our sources of information about securities-related OTC derivatives products, participants, and trading are limited, particularly when contrasted with the tools we have to monitor the markets for other securities products subject to the Federal securities laws.

The good news, however, is that the U.S. regulatory authorities have reached a broad consensus on the pressing need for a comprehensive regulatory framework for OTC derivatives. As reflected in Treasury Secretary Geithner's letter to the Congressional leadership on May 13, 2009, this consensus covers all of the basics of sound financial regulation in the 21st century, including record keeping and reporting requirements, appropriate capital and margin requirements, transparent and efficient markets, clearing and settlement systems that monitor and manage risk, business conduct and disclosure standards to protect the interests of market participants, and vigorous enforcement against fraud and other wrongdoing.

One important aspect of a new regulatory framework will be well-regulated central counterparties (CCPs). CCPs address concerns about counterparty risk by substituting the creditworthiness and liquidity of the CCP for the creditworthiness and liquidity of counterparties. For this reason, CCPs contribute generally to the goal of market stability. Through uniform margining and other risk controls, including controls on market-wide concentrations that cannot be implemented effectively when counterparty risk management is decentralized, CCPs help protect the broader financial system. It is important to note that achieving standardization, a prerequisite for centralized clearing, may present significant challenges.

U.S. regulators agree on the objectives of a new regulatory framework for OTC derivatives that will protect the public interest, manage systemic risk, and promote capital formation and general economic welfare. Any new regulatory framework, however, should take into consideration the purposes that appropriately regulated derivatives can serve, including affording market participants the ability to hedge positions and effectively manage risk. My goal today is to assist the Congress as best I can in its efforts to craft legislation that empowers the respective regulatory authorities to do their jobs effectively in any new framework. I am confident that, working together, we will meet the challenge that is so important to the financial well-being of individual Americans.

Overview of Securities-Related OTC Derivatives

A derivative is a financial instrument whose value is based on the value of an underlying “reference” (e.g., an asset such as a commodity, bond, equity, or currency, or an index of such assets, or an event). For example, in exchange for \$100 today, financial institution “A” will pay counterparty “B” \$150 if “something” happens (something can be almost anything: Z company defaults on its debt payments; the S&P 500 falls 10 percent; the Dow rises 5 percent). A derivative is “OTC” when it is not traded on a regulated exchange. An OTC derivative is “securities-related” when the reference is to an entity that is an issuer of securities (such as a public company), to a security itself (or a related event such as a dividend payment), to a group or index of securities or issuers, or based on related aspects of a security or group or index of securities or issuers, such as price, yield, volatility, dividend payments, or value.

An OTC derivative is an incredibly flexible product that can, essentially, be engineered to achieve almost any financial purpose between two parties. Indeed, as I will discuss later, an OTC derivative can enable market participants to replicate the economics of either a purchase or sale of securities without purchasing or selling the securities themselves. Transactions occurring in the OTC derivatives markets can serve important economic purposes such as allowing market participants to hedge exposure and manage risk. When market participants engage in these types of transactions in the OTC derivatives markets, the transactions, which are substantially similar to traditional securities transactions, and the parties engaged in them, would fall outside the current reach of key provisions of the Federal securities laws.

OTC derivatives are largely excluded from the securities regulatory framework by the Commodity Futures Modernization Act of 2000.¹ In a recent study on a type of securities-related OTC derivative known as a credit default swap, or CDS, the Government Accountability Office found that “comprehensive and consistent data on the overall market have not been readily available,” that “authoritative information about the actual size of the CDS market is generally not available,” and that regulators currently are unable “to monitor activities across the market.”²

One source of information on OTC derivatives volume is the data collected by the Bank for International Settlements (BIS). BIS data cover the OTC derivatives exposure of major banks and dealers in the G10 countries. For all OTC derivatives in December 2008, BIS reported a notional amount outstanding of \$592 trillion and a gross market value outstanding of \$34 trillion. Interest rate contracts and foreign exchange contracts are the two largest sources of OTC derivatives volume. For those types of products that appear to be securities-related credit derivatives and equity derivatives in December 2008, BIS reported a notional amount outstanding of \$48.4 trillion and a gross market value outstanding of \$6.8 trillion. A notional amount of \$70 trillion and a gross market value of \$5 trillion are “unallocated” for December 2008. Clearly, this volume of largely unregulated financial activity is enormous, even when just considering the relatively small volume component that is securities-related.

Who are the major participants in the securities-related OTC derivatives markets? First, the markets are concentrated and appear to be almost exclusively “dealerintermediated”—that is, one of a small number of major dealers is a party to almost all transactions, whether as a buyer or a seller. The customers of the dealers appear to be almost exclusively institutions. Many of these may be highly sophisticated, such as large hedge funds and other pooled short-term trading vehicles. As you know, many hedge funds have not been subject to direct regulation by the SEC and, accordingly, we have very little ability to obtain information concerning their trading activity at this point.

Other customers in the securities-related OTC derivatives markets have been institutions for which derivatives products may not be a suitable investment. In this regard, there is consensus among U.S. regulators reflected in Secretary Geithner’s letter is to ensure that OTC derivatives are not marketed inappropriately to unsophisticated parties. The SEC and CFTC staff, together with other financial regu-

¹ Section 2A of the Securities Act, Section 3A of the Exchange Act, and related provisions prohibit the SEC from: (1) promulgating, interpreting, or enforcing rules in a manner that imposes or specifies reporting or record keeping requirements, procedures, or standards as prophylactic measures against fraud or manipulation with respect to any security-based swap agreement; and (2) registering or requiring the registration of any security-based swap agreement. As noted below, some OTC derivatives products, such as certain equity-linked notes, always have been considered securities and currently are covered by the securities regulatory regime.

² Government Accountability Office, “Systemic Risk: Regulatory Oversight and Recent Initiatives to Address Risk Posed by Credit Default Swaps,” GAO-09-397T (March 2009), at 2, 5, 27.

lators, currently are considering a tiered approach to regulation, with scaling that could be based in the first instance on indicia of sophistication and financial thresholds, with requirements for additional disclosure and standards of care with respect to the marketing of derivatives to less sophisticated counterparties. Implementation of such a regulatory approach would depend on a Congressional grant of authority in this area.

Finally, what are the purposes for which securities-related OTC derivatives may be used? One example of a useful purpose for securities-related OTC derivatives is to manage the risk associated with a particular securities position. An investor with a large position in the debt of a company may seek to reduce or hedge some of the risk associated with that investment by purchasing credit protection in the CDS market. In addition, market participants also may use a securities-related OTC derivative to establish a short position with respect to the debt of a specific company. In particular, a market participant that does not own a bond or other debt instrument of a company may purchase a CDS as a way to short that company's debt.

Market participants take positions in a wide range of exchange-traded and OTC instruments. It is a market participant's overall (or net) economic exposure that plays a role in determining the risks to which it is exposed. Because OTC derivatives can be customized, a market participant could take a long position in an index—such as the S&P 100 index—through a securities-related OTC derivative and a short position through another OTC derivative on a subset of the securities in the S&P 100 index. The flexibility to tailor OTC derivative contracts allows a participant to create an economic exposure to as large or small a portion of the market it chooses through one or a combination of contracts. This flexibility allowed by OTC derivatives is one of these contracts' strengths. Because of the link to regulated securities market, however, it is important that the SEC have the tools to see all related activity so that it is in the best position possible to detect and deter market abuses that can disrupt the integrity of the market.

Filling Regulatory Gaps in Oversight of Securities-Related OTC Derivatives

Secretary Geithner's May 13 letter to the Congressional leadership outlined the Administration's plan for establishing a comprehensive framework for regulating OTC derivatives. The framework is designed to achieve four broad objectives: (1) preventing activities in the OTC derivatives markets from posing risk to the financial system; (2) promoting efficiency and transparency of those markets; (3) preventing market manipulation, fraud, and other market abuses; and (4) ensuring that OTC derivatives are not marketed inappropriately to unsophisticated parties.

Secretary Geithner recognized that multiple Federal regulatory agencies would play critical roles in implementing the proposed framework, including the SEC and the CFTC. He emphasized that the securities and commodities laws should be amended to ensure that the SEC and CFTC, consistent with their respective missions, have the necessary authority to achieve—together with the efforts of other regulators—the four policy objectives for OTC derivatives regulation.

The final part of my testimony today is intended to follow up on Secretary Geithner's letter by recommending a straightforward and principled approach for achieving these policy objectives. Stated briefly, primary responsibility for "securities related" OTC derivatives would be retained by the SEC, which is also responsible for oversight of markets affected by this subset of OTC derivatives. Primary responsibility for all other OTC derivatives, including derivatives related to interest rates, foreign exchange, commodities, energy, and metals would rest with the CFTC.

Under this functional and sensible approach to regulation, OTC derivatives markets that are interconnected with the regulated securities markets would be incorporated within a unified securities regulatory regime. The direct link between securities-related OTC derivatives and securities is such that SEC regulation of the former is essential to the effectiveness of the SEC's statutory mission with respect to the securities markets. The securities regulatory regime is specifically designed to promote the Congressional objectives for capital markets, which include investor protection, the maintenance of fair and orderly markets, and the facilitation of capital formation. It is important that securities-related OTC derivatives be subject to the Federal securities laws so that the risk of arbitrage and manipulation of interconnected markets is minimized.

Over the years, Congress has fashioned a broad and flexible regulatory regime for securities that long has accommodated a wide range of products and trading venues. The products include equities, debt, other fixed income securities, options on securities, exchange-traded funds and other investment companies, and many other types of derivative contracts on securities. Some of these securities products are among the most actively traded financial products in the world, with exchange-listed U.S. equities currently trading approximately 11 billion shares per day. Many other secu-

curities products trade rarely, if at all. In addition, securities products trade in many different ways in a wide variety of venues, depending on the particular features of the product. These venues include 11 national securities exchanges with self-regulatory responsibilities, more than 70 alternative trading systems that execute OTC transactions, and hundreds of broker-dealers that execute OTC transactions. Finally, securities products are cleared and settled in a variety of ways depending on the particular characteristics of the product.

The current securities laws are broad and flexible enough to regulate appropriately all of these varied securities products and trading venues. The regulatory requirements are specifically tailored to reflect the particular nature of products and venues and to promote the Congressional objectives for capital markets. Accordingly, securities-related OTC derivatives could be brought under the same umbrella of oversight as the related, underlying securities markets in a relatively straightforward manner with little need to “reinvent the wheel.” Specifically, Congress could make a limited number of discrete amendments to the statutory definition of a security to cover securities-related OTC derivatives. With these definitional changes, securities-related OTC derivatives could be incorporated within an existing regulatory framework that is appropriate for these products.

The rest of my testimony will elaborate on this basic approach. I first will discuss the close relationship between the regulated securities markets and the markets for securities-related OTC derivatives and then sketch an overview of how oversight of such instruments could be integrated with the SEC’s existing oversight of the securities markets.

Relationship Between the Securities Markets and Securities-Related OTC Derivatives

In fashioning a regulatory framework for OTC derivatives, it is crucial to recognize the close relationship between the regulated securities markets and the now mostly unregulated markets for securities-related OTC derivatives. Securities-related OTC derivatives can be used to establish either a synthetic “long” exposure to an underlying security or group of securities, or a synthetic “short” exposure to an underlying security or group of securities. In this way, market participants can replicate the economics of either a purchase or sale of securities without purchasing or selling the securities themselves.

For example, an equity swap on a single equity security or on an index, such as one of the Dow stocks or the Dow itself, would give the holder of the “long” position all of the economic exposure of owning the stock or index, without actual ownership of the stock or index. This would include exposure to price movements of the stock or index, as well as any dividends or other distributions. Similarly, credit default swaps (CDS) can be used as synthetic substitutes for the debt securities of one or more companies. Indeed, any exchange of cash for a security can be structured as an OTC derivatives contract.

Because market participants can readily use securities-related OTC derivatives to serve as synthetic substitutes for securities, the markets for these OTC derivatives directly and powerfully implicate the policy objectives for capital markets that Congress has set forth in the Federal securities laws. These objectives include investor protection, the maintenance of fair and orderly markets, and the facilitation of capital formation.

Investor Protection

The current regulatory framework has permitted certain opaque securities-related OTC derivatives markets to develop outside of investor protection provisions of the securities laws. These provisions include requiring the disclosure of significant ownership provisions and record keeping and reporting (including those that serve as prophylactic measures against fraud, manipulation, or insider trading) that helps to promote enforcement of the securities laws.

The exclusion of certain securities-related OTC derivatives from most of the securities regulatory regime has detracted from the SEC’s ability to uphold its investor protection mandate. For example, in investigating possible market manipulation during the financial crisis, the SEC has used its antifraud authority over security-based swaps to gather information about transactions in OTC derivatives as well as in the underlying securities. Yet investigations of these OTC derivative transactions have been far more difficult and time-consuming than those involving cash equities and options. Audit trail data on OTC derivative transactions is not readily available and must be reconstructed manually, in contrast to the data available in the equity markets. The SEC’s enforcement efforts have been seriously complicated by the lack of a mechanism for promptly obtaining critical information—who traded, how much, and when—that is complete and accurate.

In addition, the SEC believes that it is important in the OTC derivatives market, as in the market for securities generally, that parties to transactions have access to financial information and other disclosures so they can evaluate the risks relating to a particular investment to make more informed investment decisions and can value and evaluate their OTC derivatives and their counterparty exposures. For example, this information assists market participants in performing adequate due diligence on their investments and in valuing their OTC derivatives and their other risks.

A basic tenet of functional regulation of securities markets is to have a regulatory regime under which similar products and activities should be subject to similar regulations and oversight. Currently, securities are subject to transparency, active enforcement, and appropriate regulation of business conduct. Whereas securities-related OTC derivatives, which are interconnected with the securities markets (and in some cases are economic substitutes for securities) are not subject to most of these investor protection requirements. The securities laws are uniquely designed to address these issues and should be extended to OTC derivatives.

Fair and Orderly Markets

Trading in securities-related OTC derivatives can directly affect trading in the securities markets. From an economic viewpoint, the interchangeability of securities and securities-related OTC derivatives means that they are driven by the same economic forces and are linked by common participants, trading strategies, and hedging activities.

For example, credit default swap, or CDS trading is closely related to trading in the underlying securities that compose the capital structure of the companies on which protection is written. Trading practices in the CDS market, whether legitimate or abusive, can affect the securities markets. The CDS market, however, lacks the level of transparency and other protections that characterize the regulated securities markets. As a result, the SEC has been unable to monitor effectively for trading abuses and whether purchasers of CDS protection on an issuer's debt have sold short the equity securities of that company as a trading strategy, effectively linking activities and changes in the CDS market with those in the cash equity market. These activities in the CDS market could adversely impact the regulated securities markets. Any regulatory reform that maintained distinct regulatory regimes for securities markets and markets for securities-related OTC derivatives would suffer from this same limitation.

The SEC is considering whether reporting under the Exchange Act should apply to security-based OTC derivatives so that the ownership of and transactions in security-based derivatives would be considered ownership of and transactions in the underlying equity security. We are further evaluating whether persons using equity derivatives, such as an equity swap, should be subject to the beneficial ownership reporting provisions of the Exchange Act when accumulating substantial share positions in connection with change of control transactions.

Capital Formation

Facilitating capital formation depends on the existence of fair and efficient secondary markets for investors. Purchasers in the primary offering of a company are attracted by secondary markets that enable them to liquidate their positions readily. Less efficient markets can cause potential investors in companies either to find other uses for their funds or to demand a higher rate of return to compensate them for a less efficient secondary market. If a disparity in the regulatory requirements for securities and securities-related OTC derivatives cause securities markets to operate less efficiently, it will harm those companies that depend on the U.S. securities markets to access the capital that is essential for innovation and growth, as well as harming investors and the capital markets as a whole.

Because many securities-related OTC derivatives are allowed to trade outside of the securities regulatory regime, the SEC generally is unable to promote transparency in the trading of these products and efficiency in pricing. As noted above, companies whose securities are affected by the excluded products could suffer from the absence of transparency and efficiency. Moreover, manipulative activities in the markets for securities-related OTC derivatives can affect U.S. issuers in the underlying equity market, thereby damaging the public perception of those companies and raising their cost of capital. To protect the integrity of the markets, trading in all securities-related OTC derivatives should be fully subject to the U.S. regulatory regime designed to facilitate capital formation. Nevertheless, it is important to remember that derivatives transactions, including OTC derivatives transactions, allow parties to hedge and manage risk, which itself can promote capital formation. To

the extent the ability to manage risk is inappropriately limited, it can discourage market participation, including by investors.

Regulatory Oversight of Securities-Related OTC Derivatives

To provide a unified, consistent framework for securities regulation, Congress should subject securities-related OTC derivatives to the Federal securities laws. This result can be achieved simply by clarifying the definition of “security” to expressly include securities-related OTC derivatives, and removing the current express exclusion of swaps from that definition. The SEC then would have authority to regulate securities-related OTC derivatives regardless of how the products are traded, whether on an exchange or OTC, and regardless of how the products are cleared.

Definition of Securities-Related OTC Derivatives

OTC derivatives can be categorized generally as securities-related or nonsecurities-related, based on the different types of underlying assets, events, or interests to which they are related. Securities-related OTC derivatives would include equity derivatives and credit and other fixed income derivatives. Nonsecurities-related derivatives would include interest rate derivatives, foreign currency derivatives, and all nonfinancial derivatives. By including securities-related OTC derivatives under the umbrella of the Federal securities laws, the SEC would have responsibility over the portion of the OTC derivatives market that is vital to promote its mission of investor protection, the maintenance of fair and orderly markets, and the facilitation of capital formation.

In addition, the SEC would continue to regulate those types of OTC derivatives that always have been considered securities, such as OTC security options, certain OTC notes (including equity-linked notes), and forward contracts on securities. These particular types of OTC derivatives always have been included in the definition of security and current law recognizes this fact by excluding these derivatives from the definition of “swap agreement” in Section 206A of the Gramm-Leach-Bliley Act.

Regulation of OTC Derivatives Dealers and Major OTC Participants

Under our recommended approach, major participants in the OTC derivatives markets would be subject to oversight and supervision to ensure there are no gaps. To reduce duplication, OTC derivatives dealers that are banks would be subject to prudential supervision by their Federal banking regulator. All other OTC derivatives dealers in securities-related OTC derivatives would be subject to supervision and regulation by the SEC. The SEC would have authority to set appropriate capital requirements for these OTC derivatives dealers. This approach would permit existing OTC derivatives dealers that are banks to continue to engage in OTC derivatives activities without being subject to the full panoply of broker-dealer regulation, while ensuring that all currently unregulated OTC derivatives dealers in securities-related OTC derivatives are subject to appropriate supervision and regulation. Should Congress establish a new systemic risk regulator or systemic risk council, that entity also could help monitor institutions that might present systemic risk.

In addition, the SEC would have authority to establish business conduct standards and record keeping and reporting requirements (including an audit trail) for all securities-related OTC derivatives dealers and other firms with large counterparty exposures in securities-related OTC derivatives (Major OTC Participants). This “umbrella” authority would help ensure that the SEC has the tools it needs to oversee the entire market for securities-related OTC derivatives. Major OTC Participants also would be required to meet appropriate standards for the segregation of customer funds and securities.

Trading Markets and Clearing Agencies

Trading markets and clearing organizations for securities-related OTC derivatives would be subject to registration requirements as exchanges and clearing agencies. Importantly, however, the conditional exemption from exchange registration the SEC provided under Regulation ATS would be available to trading systems for securities-related OTC derivatives. Among other things, Regulation ATS lowers barriers to entry for trading systems in securities because the systems need not assume the full self-regulatory responsibilities associated with being a national securities exchange. Both registered exchanges and ATSs are subject to important transparency requirements. Consequently, expanding the SEC’s authority over securities-related OTC derivatives would promote improved efficiency and transparency in the markets for securities-related OTC derivatives.

Similarly, the regulatory regime for securities clearing agencies would ensure that CCPs for securities-related OTC derivatives impose appropriate margin require-

ments and other necessary risk controls. The SEC's historic regulation of clearing agencies under Section 17A of the Exchange Act has resulted in the most efficient, lowest cost clearing in the world. Indeed, the solid performance of securities clearing systems during the financial crisis bears out that they have the resilience to withstand difficult economic conditions. In addition, the regulation of securities clearance and settlement would directly affect market structure and competition in the trading markets for securities-related OTC derivatives. For example, the SEC's statutory mandate governing clearing agencies prohibits clearing agencies from engaging in anticompetitive practices, such as imposing unreasonable limitations on access to services. Clearing agencies cannot exclude participants merely for executing their trades in a cleared product in a particular venue. This fair access requirement allows for multiple, competing markets, including OTC trading systems and OTC dealers, to trade the same securities and clear through a single clearing organization. The securities clearing system would support both the goal of having the greatest number of OTC derivatives centrally cleared, while retaining flexibility to allow variation in trading venues to meet the trading needs of different instruments and participants.

The SEC already has taken a number of actions to help further the centralized clearing for OTC derivatives, including exempting three CCPs from the requirement to register as securities clearing agencies. These exemptions were issued to speed the operation of central clearing for CDS. They are temporary and subject to conditions designed to ensure that important elements of Commission oversight apply, such as record keeping and Commission staff access to examine clearing facilities. In addition, to further the goal of transparency, each clearing agency is required to make publicly available on fair, reasonable, and not unreasonably discriminatory terms end-of-day settlement prices and any other pricing or valuation information that it publishes or distributes.

One important issue is how to deal with those OTC derivative contracts that may be ineligible for central clearing. OTC derivatives may be ineligible for clearing for a variety of reasons, including customized terms and an inability of CCPs to effectively manage the risks. In many cases, there are legitimate economic reasons to engage in customized transactions. Participants in individual transactions, however, should not be permitted to externalize the costs of their decisions, such as by creating additional systemic risk. Regulatory requirements often have costs, but they are costs incurred to protect the public interest and the general economic welfare. One way for regulators to help ensure market participants incorporate all the risks in the terms of a transaction would be to impose appropriate margin and capital requirements on the participants in customized transactions to reflect the risks they pose to market systems generally. This is an area in which the various functional regulators for particular entities could consult closely with any systemic risk agency that Congress might establish.

In addressing all of these issues with respect to OTC derivatives, moreover, the U.S. must coordinate its efforts with those of regulatory authorities abroad as they seek to address similar issues. The global financial crisis is a potent reminder of the extent to which economies around the world are linked by financial practices and market participants. A sound regulatory approach for managing the systemic risk of such practices and participants benefits from the implementation of complementary measures on an international basis.

Conclusion

Bringing securities-related OTC derivatives under the umbrella of the Federal securities laws would be based on sound principles of functional regulation, would be relatively straightforward to implement, and would promote Congressional policy objectives for the capital markets. A clear delineation of primary regulatory responsibility for OTC derivatives also would help avoid regulatory gaps from arising in the future. Finally, integrating oversight of securities-related OTC derivatives with oversight of the related, underlying securities markets would minimize the extent of dislocation with respect to existing participants and current practices in the OTC derivatives markets, while still achieving the objectives for OTC derivatives regulation set forth in Secretary Geithner's letter to the Congressional leadership.

Thank you for the opportunity to address issues of such importance for the strength and stability of the U.S. financial system, and the integrity of the U.S. capital markets. I would be pleased to answer your questions.

PREPARED STATEMENT OF GARY GENSLER

CHAIRMAN,
COMMODITY FUTURES TRADING COMMISSION

JUNE 22, 2009

Good morning Chairman Reed, Ranking Member Bunning, and Members of the Committee. I am here today testifying on behalf of the Commission.

The topic of today's hearing, how to best modernize oversight of the over-the-counter derivatives markets, is of utmost importance during this crucial time for our economy. As President Obama laid out last week, we must urgently enact broad reforms in our financial regulatory structure in order to rebuild and restore confidence in our overall financial system.

Such reforms must comprehensively regulate both derivative dealers and the markets in which derivatives trade. I look forward to working with the Congress to ensure that the OTC derivatives markets are transparent and free from fraud, manipulation and other abuses.

This effort will require close coordination between the SEC and the CFTC to ensure the most appropriate regulation. I'm fortunate to have as a partner in this effort, SEC Chair Mary Schapiro. She brings invaluable expertise in both the security and commodity futures area, which gives me great confidence that we will be able to provide the Congress with a sound recommendation for comprehensive oversight of the OTC derivatives market. We also will work collaboratively on recommendations on how to best harmonize regulatory efforts between agencies as requested by President Obama.

Comprehensive Regulatory Framework

A comprehensive regulatory framework governing OTC derivative dealers and OTC derivative markets should apply to all dealers and all derivatives, no matter what type of derivative is traded or marketed. It should include interest rate swaps, currency swaps, commodity swaps, credit default swaps, and equity swaps. Further, it should apply to the dealers and derivatives no matter what type of swaps or other derivatives may be invented in the future. This framework should apply regardless of whether the derivatives are standardized or customized.

A new regulatory framework for OTC derivatives markets should be designed to achieve four key objectives:

- Lower systemic risks;
- Promote the transparency and efficiency of markets;
- Promote market integrity by preventing fraud, manipulation, and other market abuses, and by setting position limits; and
- Protect the public from improper marketing practices.

To best achieve these objectives, two complementary regulatory regimes must be implemented: one focused on the dealers that make the markets in derivatives and one focused on the markets themselves—including regulated exchanges, electronic trading systems and clearinghouses. Only with these two complementary regimes will we ensure that Federal regulators have full authority to bring transparency to the OTC derivatives world and to prevent fraud, manipulation, and other types of market abuses. These two regimes should apply no matter which type of firm, method of trading or type of derivative or swap is involved.

Regulating Derivatives Dealers

I believe that institutions that deal in derivatives must be explicitly regulated. In addition, regulations should cover any other firms whose activities in these markets can create large exposures to counterparties.

The current financial crisis has taught us that the derivatives trading activities of a single firm can threaten the entire financial system and that all such firms should be subject to robust Federal regulation. The AIG subsidiary that dealt in derivatives—AIG Financial Products—for example, was not subject to any effective regulation. The derivatives dealers affiliated with Lehman Brothers, Bear Stearns, and other investment banks were not subject to mandatory regulation either.

By fully regulating the institutions that trade or hold themselves out to the public as derivative dealers we can oversee and regulate the entire derivatives market. I believe that the our laws should be amended to provide for the registration and regulation of all derivative dealers.

The full, mandatory regulation of all derivatives dealers would represent a dramatic change from the current system in which some dealers can operate with limited or no effective oversight. Specifically, all derivative dealers should be subject

to capital requirements, initial margining requirements, business conduct rules and reporting and record keeping requirements. Standards that already apply to some dealers, such as banking entities, should be strengthened and made consistent, regardless of the legal entity where the trading takes place.

Capital and Margin Requirements. The Congress should explicitly require regulators to promulgate capital requirements for all derivatives dealers. Imposing prudent and conservative capital requirements, and initial margin requirements, on all transactions by these dealers will help prevent the types of systemic risks that AIG created. No longer would derivatives dealers or counterparties be able to amass large or highly leveraged risks outside the oversight and prudential safeguards of regulators.

Business Conduct and Transparency Requirements. Business conduct standards should include measures to both protect the integrity of the market and lower the risk (both counterparty and operating) from OTC derivatives transactions.

To promote market integrity, the business conduct standards should include prohibitions on fraud, manipulation and other abusive practices. For OTC derivatives that come under CFTC jurisdiction, these standards should require adherence to position limits when they perform or affect a significant price discovery function with respect to regulated markets.

Business conduct standards should ensure the timely and accurate confirmation, processing, netting, documentation, and valuation of all transactions. These standards for “back office” functions will help reduce risks by ensuring derivative dealers, their trading counterparties and regulators have complete, accurate and current knowledge of their outstanding risks.

Derivatives dealers also should be subject to record keeping and reporting requirements for all of their OTC derivatives positions and transactions. These requirements should include retaining a complete audit trail and mandated reporting of any trades that are not centrally cleared to a regulated trade repository. Trade repositories complement central clearing by providing a location where trades that are not centrally cleared can be recorded in a manner that allows the positions, transactions, and risks associated with those trades to be reported to regulators. To provide transparency of the entire OTC derivatives market, this information should be available to all relevant Federal financial regulators. Additionally, there should be clear authority for regulating and setting standards for trade repositories and clearinghouses to ensure that the information recorded meets regulatory needs and that the repositories have strong business conduct practices.

The application of these business conduct standards and the transparency requirements will enable regulators to have timely and accurate knowledge of the risks and positions created by the dealers. It will provide authorities with the information and evidentiary record needed to take any appropriate action to address such risks and to protect and police market integrity. In this regard, the CFTC and SEC should have clear, unimpeded oversight and enforcement authority to prevent and punish fraud, manipulation and other market abuses.

Market transparency should be further enhanced by requiring that aggregated information on positions and trades be made available to the public. No longer should the public be in the dark about the extensive positions and trading in these markets. This public information will improve the price discovery process and market efficiency.

Regulating Derivatives Markets

In addition to the significant benefits to be gained from broad regulation of derivatives dealers, I believe that additional safety and transparency must be afforded by regulating the derivative market functions as well. All derivatives that can be moved into central clearing should be required to be cleared through regulated central clearinghouses and brought onto regulated exchanges or regulated transparent electronic trading systems.

Requiring clearing and trading on exchanges or through regulated electronic trading systems will promote transparency and market integrity and lower systemic risks. To fully achieve these objectives, both of these complementary regimes must be enacted. Regulating both the traders and the trades will ensure that both the actors and the actions that may create significant risks are covered.

Exchange-trading and central clearing are the two key and related components of well-functioning markets. Ever since President Roosevelt called for the regulation of the commodities and securities markets in the early 1930s, the CFTC (and its predecessor) and the SEC have each regulated the clearing functions for the exchanges under their respective jurisdiction. The practice of having the agency which regulates an exchange or trade execution facility also regulate the clearinghouses

for that market has worked well and should continue as we extend regulations to cover the OTC derivatives market.

Central Clearing. Central clearing should help reduce systemic risks in addition to the benefits derived from comprehensive regulation of derivatives dealers.

Clearing reduces risks by facilitating the netting of transactions and by mutualizing credit risks. Currently, most of the contracts entered into in the OTC derivatives market are not cleared, and remain as bilateral contracts between individual buyers and sellers. In contrast, when a contract between a buyer and seller is submitted to a clearinghouse for clearing, the contract is “novated” to the clearinghouse. This means that the clearinghouse is substituted as the counterparty to the contract and then stands between the buyer and the seller.

Clearinghouses then guarantee the performance of each trade that is submitted for clearing. Clearinghouses use a variety of risk management practices to assure the fulfillment of this guarantee function. Foremost, derivatives clearinghouses would lower risk through the daily discipline of marking to market the value of each transaction. They also require the daily posting of margin to cover the daily changes in the value of positions and collect initial margin as extra protection against potential market changes that are not covered by the daily mark-to-market.

The regulations applicable to clearing should require that clearinghouses establish and maintain robust margin standards and other necessary risk controls and measures. It is important that we incorporate the lessons from the current crisis as well as the best practices reflected in international standards. Working with Congress, we should consider possible amendments to the CEA to expand and deepen the core principles that registered derivatives clearing organizations must meet to achieve these goals to both strengthen these systems and to reduce the possibility of regulatory arbitrage. Clearinghouses should have transparent governance arrangements that incorporate a broad range of viewpoints from members and other market participants.

Central counterparties should also be required to have fair and open access criteria that allow any firm that meets objective, prudent standards to participate regardless of whether it is a dealer or a trading firm. Additionally, central clearinghouses should implement rules that allow indirect participation in central clearing. By novating contracts to a central clearinghouse coupled with effective risk management practices, the failure of a single trader, like AIG, would no longer jeopardize all of the counterparties to its trades.

One of the lessons that emerged from this recent crisis was that institutions were not just “too big to fail,” but rather too interconnected as well. By mandating the use of central clearinghouses, institutions would become much less interconnected, mitigating risk and increasing transparency. Throughout this entire financial crisis, trades that were carried out through regulated exchanges and clearinghouses continued to be cleared and settled.

In implementing these responsibilities, it will be appropriate to consider possible additional oversight requirements that may be imposed by any systemic risk regulator that Congress may establish.

Under the Administration’s approach, the systemic regulator, would be charged with ensuring consistent and robust standards for all systemically important clearing, settlement and payment systems. For clearinghouses overseen comprehensively by the CFTC and SEC, the CFTC or SEC would remain the primary regulatory, but the systemic regulator would be able to request information from the primary regulator, participate in examinations led by the primary regulator, make recommendations on strengthening standards to the primary regulator and ultimately, after consulting with the primary regulator and the new Financial Services Oversight Council, use emergency authority to compel a clearinghouse to take actions to address financial risks.

Exchange-Trading. Beyond the significant transparency afforded the regulators and the public through the record keeping and reporting requirements of derivatives dealers, market transparency and efficiency would be further improved by moving the standardized part of the OTC markets onto regulated exchanges and regulated transparent electronic trading systems. I believe that this should be required of all standardized contracts. Furthermore, a system for the timely reporting of trades and prompt dissemination of prices and other trade information to the public should be required. Both regulated exchanges and regulated transparent trading systems should allow market participants to see all of the bids and offers. A complete audit trail of all transactions on the exchanges or trade execution systems should be available to the regulators. Through a trade reporting system there should be timely public posting of the price, volume and key terms of completed transactions. The Trade Reporting and Compliance Engine (TRACE) system currently required for timely reporting in the OTC corporate bond market may provide a model.

The CFTC and SEC also should have authority to impose record keeping and reporting requirements and to police the operations of all exchanges and electronic trading systems to prevent fraud, manipulation and other abuses.

In contrast to long established on-exchange futures and securities markets, there is a need to encourage the further development of exchanges and electronic trading systems for OTC derivatives. In order to promote this goal and achieve market efficiency through competition, there should be sufficient product standardization so OTC derivative trades and open positions are fungible and can be transferred between one exchange or electronic trading system to another.

Position Limits. Position limits must be applied consistently across all markets, across all trading platforms, and exemptions to them must be limited and well defined. The CFTC should have the ability to impose position limits, including aggregate limits, on all persons trading OTC derivatives that perform or affect a significant price discovery function with respect to regulated markets that the CFTC oversees. Such position limit authority should clearly empower the CFTC to establish aggregate position limits across markets in order to ensure that traders are not able to avoid position limits in a market by moving to a related exchange or market, including international markets.

Standardized and Customized Derivatives

It is important that tailored or customized swaps that are not able to be cleared or traded on an exchange be sufficiently regulated. Regulations should also ensure that customized derivatives are not used solely as a means to avoid the clearing and exchange requirements. This could be accomplished in two ways. First, regulators should be given full authority to prevent fraud, manipulation and other abuses and to impose record keeping and transparency requirements with respect to the trading of all swaps, including customized swaps. Second, we must ensure that dealers and traders cannot change just a few minor terms of a standardized swap to avoid clearing and the added transparency of exchanges and electronic trading systems.

One way to ensure this would be to establish objective criteria for regulators to determine whether, in fact, a swap is standardized. For example, there should be a presumption that if an instrument is accepted for clearing by a fully regulated clearinghouse, then it should be required to be cleared. Additional potential criteria for consideration in determining whether a contract should be considered to be a standardized swap contract could include:

- The volume of transactions in the contract;
- The similarity of the terms in the contract to terms in standardized contracts;
- Whether any differences in terms from a standardized contract are of economic significance; and
- The extent to which any of the terms in the contract, including price, are disseminated to third parties.

Criteria such as these could be helpful in ensuring that parties are not able to avoid the requirements applicable to standardized contracts by tweaking the terms of such contracts and then labeling them “customized.”

Regardless of whether an instrument is standardized or customized, or traded on an exchange or on a transparent electronic trade execution system, regulators should have clear, unimpeded authority to impose record keeping and reporting requirements, impose margin requirements, and prevent and punish fraud, manipulation and other market abuses. No matter how the instrument is traded, the CFTC and SEC as appropriate also should have clear, unimpeded authority to impose position limits, including aggregate limits, to prevent excessive speculation. A full audit trail should be available to the CFTC, SEC and other Federal regulators.

Authority

To achieve these goals, the Commodity Exchange Act and security laws should be amended to provide the CFTC and SEC with clear authority to regulate OTC derivatives. The term “OTC derivative” should be defined, and clear authority should be given over all such instruments regardless of the regulatory agency. To the extent that specific types of OTC derivatives might overlap agencies’ existing jurisdiction, care must be taken to avoid unnecessary duplication.

As we enact new laws and regulations, we should be careful not to call into question the enforceability of existing OTC derivatives contracts. New legislation and regulations should not provide excuses for traders to avoid performance under pre-existing, valid agreements or to nullify preexisting contractual obligations.

Achieving the Four Key Objectives

Overall, I believe the complimentary regimes of dealer and market regulation would best achieve the four objectives outlined earlier. As a summary, let me review how this would accomplish the measures applied to both the derivative dealers and the derivative markets.

Lower Systemic Risk. This dual regime would lower systemic risk through the following four measures:

- Setting capital requirements for derivative dealers;
- Creating initial margin requirements for derivative dealers (whether dealing in standardized or customized swaps);
- Requiring centralized clearing of standardized swaps; and
- Requiring business conduct standards for dealers.

Promote Market Transparency and Efficiency. This complementary regime would promote market transparency and efficiency by:

- Requiring that all OTC transactions, both standardized and customized, be reported to a regulated trade repository or central clearinghouses;
- Requiring clearinghouses and trade repositories to make aggregate data on open positions and trading volumes available to the public;
- Requiring clearinghouses and trade repositories to make data on any individual counterparty's trades and positions available on a confidential basis to regulators;
- Requiring centralized clearing of standardized swaps;
- Moving standardized products onto regulated exchanges and regulated, transparent trade execution systems; and
- Requiring the timely reporting of trades and prompt dissemination of prices and other trade information;

Promote Market Integrity. It would promote market integrity by:

- Providing regulators with clear, unimpeded authority to impose reporting requirements and to prevent fraud, manipulation and other types of market abuses;
- Providing regulators with authority to set position limits, including aggregate position limits;
- Moving standardized products onto regulated exchanges and regulated, transparent trade execution systems; and
- Requiring business conduct standards for dealers.

Protect Against Improper Marketing Practices. It would ensure protection of the public from improper marketing practices by:

- Business conduct standards applied to derivatives dealers regardless of the type of instrument involved; and
- Amending the limitations on participating in the OTC derivatives market in current law to tighten them or to impose additional disclosure requirements, or standards of care (*e.g.*, suitability or know your customer requirements) with respect to marketing of derivatives to institutions that infrequently trade in derivatives, such as small municipalities.

Conclusion

The need for reform of our financial system today has many similarities to the situation facing the country in the 1930s. In 1934, President Roosevelt boldly proposed to the Congress "the enactment of legislation providing for the regulation by the Federal Government of the operation of exchanges dealing in securities and commodities for the protection of investors, for the safeguarding of values, and so far as it may be possible, for the elimination of unnecessary, unwise, and destructive speculation." The Congress swiftly responded to the clear need for reform by enacting the Securities Exchange Act of 1934. Two years later it passed the Commodity Exchange Act of 1936.

It is clear that we need the same type of comprehensive regulatory reform today. Today's regulatory reform package should cover all types of OTC derivatives dealers and markets. It should provide regulators with full authority regarding OTC derivatives to lower risk; promote transparency, efficiency, and market integrity and to protect the American public.

Today's complex financial markets are global and irreversibly interlinked. We must work with our partners in regulating markets around the world to promote consistent rigor in enforcing standards that we demand of our markets to prevent regulatory arbitrage.

These policies are consistent with what I laid out to this Committee in February and the Administration's objectives. I look forward to working with this Committee, and others in Congress, to accomplish these goals.

Mr. Chairman, thank you for the opportunity to appear before the Committee today. I look forward to answering any of your questions.

PREPARED STATEMENT OF PATRICIA WHITE

ASSOCIATE DIRECTOR, DIVISION OF RESEARCH AND STATISTICS,
BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

JUNE 22, 2009

Chairman Reed, Ranking Member Bunning, and other Members of the Subcommittee, I appreciate this opportunity to provide the Federal Reserve Board's views on the development of a new regulatory structure for the over-the-counter (OTC) derivatives market. The Board brings to this policy debate both its interest in ensuring financial stability and its role as a supervisor of banking institutions. Today, I will describe the broad objectives that the Board believes should guide policy makers as they devise the new structure and identify key elements that will support those objectives. Supervision of derivative dealers is a fundamental element of the oversight of OTC derivative markets, and I also will discuss the steps necessary to ensure these firms employ adequate risk management.

Policy Objectives

Mitigation of Systemic Risk

The events of the last 2 years have demonstrated the potential for difficulties in one part of the financial system to create problems in other sectors and in the macroeconomy more broadly. OTC derivatives appear to have amplified or transmitted shocks. An important objective of regulatory initiatives related to OTC derivatives is to ensure that improvements to the infrastructure supporting these products reduce the likelihood of such transmissions and make the financial system as a whole more resilient to future shocks.

Centralized clearing of standardized OTC products is a key component of efforts to mitigate such systemic risk. One method of achieving centralized clearing is to establish central counterparties, or CCPs, for OTC products. Market participants have already established several CCPs to provide clearing services for some OTC interest rate, energy, and credit derivative contracts. Regulators both in the United States and abroad are seeking to speed the development of new CCPs and to broaden the product line of existing CCPs.

The Board believes that moving toward centralized clearing for most or all standardized OTC products would have significant benefits. If properly designed, managed, and overseen, CCPs offer an important tool for managing counterparty credit risk, and thus they can reduce risk to market participants and to the financial system. The benefits from centralized clearing will be greatest if CCPs are structured so as to allow participation by end users within a framework that ensures protection of their positions and collateral.

Infrastructure changes in OTC markets will be required to move most standardized OTC contracts into centralized clearing systems in a way that ensures the risk-reducing benefits of clearing are realized. Such changes include agreement on the key terms that constitute "standardization" and the development of electronic systems for feeding trade data to CCPs—in other words, building better pipes to the CCPs. For their part, CCPs must have in place systems to manage the risk from this new business. Of particular importance are procedures to handle defaults in OTC products that are cleared, because these products are likely to be less liquid than the exchange-traded products that CCPs most commonly handle.

Although implementation challenges no doubt lie ahead, the Board will work to ensure that these challenges are addressed quickly and constructively. Major dealers have committed to making improvements in back-office processes such as increased electronic processing of trades and speedier confirmation of trades for equity, interest rate, commodity, foreign exchange, and credit products. These back-office improvements are important prerequisites for centralized clearing, and efforts by supervisors to require dealers to improve these practices have helped lay the

groundwork for developing clearing more quickly. Dealers also have committed to clearing standardized OTC products, and they will be expected to demonstrate progress on this commitment even as the broader regulatory reform debate evolves. Clearly there is much to be done, and we are committed to ensuring that the industry moves promptly. An important role of policy makers may be establishing priorities so that efforts are directed first at the areas that offer the greatest risk-reduction potential.

Some market observers feel strongly that all OTC derivative contracts—not just the standardized contracts—should be cleared. Requiring CCPs to clear nonstandard instruments that pose valuation and risk-management challenges may not reduce risk for the system as a whole. If, for example, the CCPs have difficulty designing margin and default procedures for such products, they will not be able to effectively manage their own counterparty credit risk to clearing members. In addition, there are legitimate economic reasons why standardized contracts may not meet the risk-management needs of some users of these instruments. A flexible approach that addresses systemic risk with respect to standardized and nonstandardized OTC derivatives, albeit in different ways, is most likely to preserve the benefits of these products for businesses and investors.

That said, however, it is particularly important that the counterparties to non-standardized contracts have robust risk-management procedures for this activity. Nonstandard products pose significant risk-management challenges because they can be complex, opaque, illiquid, and difficult to value. Supervisors must ensure that their own policies with respect to risk management and capital for firms active in nonstandardized products fully reflect the risks such products create. If supervisors are not comfortable with their ability to set and enforce appropriate standards, then the activity should be discouraged. I will return to a broader discussion of supervision and risk management later.

Improving the Transparency and Preventing the Manipulation of Markets

Throughout the debates about reform of the OTC derivatives market, a persistent theme has been concern that the market is opaque. Discussions of market transparency generally recognize the multiple audiences that seek information about a market—market participants, the public, and authorities—and the multiple dimensions of transparency itself—prices, volumes, and positions. Participants, the public, and authorities seek different information for different purposes. Transparency is a tool for addressing their needs and, in the process, fostering multiple policy objectives. Transparency to market participants supports investor protection as well as the exercise of market discipline, which has sometimes clearly been lacking. Transparency to the public helps to demystify these markets and to build support for sound public policies. Transparency to authorities supports efforts to pursue market manipulation, to address systemic risk through ongoing monitoring, and, when necessary, to manage crises.

Substantial progress in improving the transparency of volumes and positions in the credit default swap (CDS) market occurred with the creation of the Depository Trust Clearing Corporation's Trade Information Warehouse, a contract repository that contains an electronic record of a large and growing share of CDS trades. Participation in that repository is voluntary, however, and its present coverage is limited to credit products. Nevertheless, major dealers, who are counterparties to the vast majority of CDS trades, have recently committed to supervisors that they will record all their CDS trades in the warehouse by mid-July.

The Board supports creating contract repositories for all asset classes and requiring a record of all OTC derivative contracts that are not centrally cleared to be stored in these repositories. The Trade Information Warehouse currently makes aggregate data on CDS contracts public. Aggregate data on volumes and open interest should be made public by other repositories that are created, and more detailed data should be made available to authorities to support policy objectives related to the prevention of manipulation and systemic risk.

Enhancing price transparency to the broader public through post-trade reporting of transaction details is also an important goal. Even where contracts are not traded on exchanges or on regulated electronic trading systems, the prompt dissemination of information can provide significant benefits to market participants on a range of valuation and risk-management issues. The Board believes that policy makers should pursue the goal of prompt dissemination of prices and other trade information for standardized contracts, regardless of the trading venue.

Supervision and Risk Management

Although the creation of CCPs will provide an important new tool for managing counterparty credit risk, enhancements to the risk-management policies and proce-

dures for individual market participants will continue to be a high priority for supervisors. If the reforms outlined here are implemented, the firms currently most active in bilateral OTC markets will become the firms most active as clearing members of CCPs. As such, the quality of their internal risk management is important to the CCP because sound risk management by all clearing members is critical if centralized clearing is to deliver risk-reducing benefits. Supervisors have recognized that financial institutions must make changes in their risk-management practices for OTC derivatives by improving internal processes and controls and by ensuring that traditional credit risk-management disciplines are in place for complex products, regardless of the form they take. Efforts already under way include improving collateralization practices to limit counterparty credit risk exposures and examining whether the current capital regime can be improved to increase incentives for sound risk management.

An important parallel process involves ensuring that firms that are large and complex enough to pose risks to the broader system are subject to appropriate oversight and resolution authority, even if they operate outside the traditional regulated banking system. The Board believes that all systemically critical firms should have a consolidated supervisor, as well as be subject to the oversight of any systemic regulator that might be created. The scope of a firm's activities in the OTC derivatives market will likely be an important factor in making that assessment.

Conclusion

Policy issues associated with OTC derivatives are not limited to the United States. The markets are global. Past work to strengthen OTC derivatives markets has often involved a large measure of international coordination, and the current policy issues are unlikely to be fully and effectively addressed without broad-based input.

Despite the problems that have been associated with OTC derivatives during the financial crisis, these instruments remain integral to the smooth functioning of today's financial markets. Much work must be done to strengthen the market further. But with effective oversight by supervisors, prudent risk management by end users and dealers, and appropriate changes in the regulatory structure, the systemic risks stemming from OTC derivatives can be reduced, and derivatives can continue to provide significant benefits to the businesses and investors who use them to manage financial market risks.

PREPARED STATEMENT OF HENRY T. C. HU

ALLAN SHIVERS CHAIR IN THE LAW OF BANKING AND FINANCE,
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JUNE 22, 2009

THE MODERN PROCESS OF FINANCIAL INNOVATION AND THE REGULATION OF
OTC DERIVATIVES*

Introduction

Mr. Chairman and Members of the Subcommittee, thank you for the invitation of June 15 to testify. 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. In the interest of full disclosure, I recently agreed to begin working soon at the Securities and Exchange Commission. I emphasize that I am currently a full-time academic, have been so for more than two decades, and, after this forthcoming government service, will return to my normal academic duties. My testimony reflects solely my preliminary personal views and does not reflect the views of the SEC or any other entity. The below testimony has not been discussed with, or reviewed by, the SEC or any other entity. I ask that this written testimony also be included in the record.

This is a seminal time as to the regulation of credit default swaps and other over-the-counter derivatives.¹ Speaking on March 26, Treasury Secretary Timothy

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¹As Subcommittee Members are already aware, a "derivative," at least in the classical sense, is an agreement that allows or obligates at least one of the parties to buy or sell an asset. Fluctuations in the asset's value would affect the agreement's value: the agreement's value derives from the asset's value, whether the asset is a stock, commodity, or something else. Many derivatives trade on organized exchanges; people using such "exchange-traded derivatives" generally need not worry about who is on the other side of the transaction. The exchange's "clearinghouse" is effectively the buyer to every seller and the seller to every buyer. These products typically

Geithner stated that the markets for OTC derivatives will be regulated “for the first time.” Last Wednesday, as a key element in a “new foundation for sustained economic growth,” President Barack Obama proposed the “comprehensive regulation of credit default swaps and other derivatives that have threatened the entire financial system.” All OTC derivatives dealers and other firms whose activities create large exposures would be subject to “robust” prudential supervision. “Standardized” OTC derivatives would be required to be cleared through regulated central counterparties. Record keeping and reporting requirements would apply to both “standardized” and “customized” OTC derivatives. New steps to better ensure that OTC derivatives are not marketed inappropriately to unsophisticated parties would be adopted. Regulated financial institutions would be encouraged to make greater use of regulated exchange-traded derivatives.

Key government officials central to developing the President’s proposal are testifying today. It is my understanding that the Subcommittee thought that, rather than similarly discussing the specific components of the proposal, I might offer a more general perspective on the regulation of OTC derivatives, based on some of my past writings. In this context, perhaps the four questions set forth in the Subcommittee’s June 15 invitation revolve around a basic issue: what’s special about regulating OTC derivatives, in terms of transparency, risk, international coordination, or other matters?

In this respect, I am reminded of something that Woody Allen once said: “I took a speed reading course and read War and Peace in twenty minutes. It involves Russia.”

OTC derivatives are no less complex than Napoleonic Russia. In the next few minutes, I will try to offer some thoughts on how to frame the regulatory task that lies ahead. Because I have had to review the Administration proposal and prepare this testimony in the space of only a few days, these thoughts are preliminary and incomplete.

I suggest that it would be useful to consider not just the characteristics of individual OTC derivatives, but also the underlying process of modern financial innovation through which products are invented, introduced to the marketplace, and diffused. This process perspective may further the identification of some issues that are important as a regulatory matter.

I start with two contrasting visions that have animated regulatory attitudes ever since the emergence of the modern financial innovation process in the late 1970s. (Part II) This may help ensure that, as the Administration’s proposal is reviewed or fine-tuned with respect to such matters as “encouraging” a migration to exchange-traded derivatives and distinguishing “standardized” from “customized” OTC derivatives, consideration is given not only to the private and social costs of OTC derivatives, but to their private and social benefits as well.

I will then turn to how the financial innovation process results in decision-making errors, even at the biggest financial institutions. (Part III.A) In a *Yale Law Journal* article published in 1993, I suggested that, because of compensation structure, cognitive bias, human capital, “inappropriability,” and other factors characteristic of that innovation process, “sophisticated” financial institutions can misunderstand—or act as if they misunderstand—the risks of derivatives and other complex financial products.² Analyzing how these errors occur may be helpful as the Administration

have standardized contractual terms and exchange-traded derivatives markets have been active in the U.S. since the 19th century.

In contrast, the market for “OTC derivatives” arose in the late 1970s. These agreements are individually negotiated, such as between financial institutions or between financial institutions and their corporate, hedge fund, or other institutional customers. In the 1970s, a conceptual revolution in finance helped financial institutions to price derivatives, hedge associated risks, and develop new products. At least in the past, there were generally no clearinghouse arrangements. Each participant relies on the creditworthiness (and sometimes the collateral) of the party it deals with.

“Credit default swaps” are one kind of OTC derivative. At their simplest, they involve bets between two parties on the fortunes of a third party. A protection buyer might, for instance, have lent money to the third party and be concerned about repayment. For a fee (or stream of fees), the protection seller will pay the protection buyer cash upon a specified misfortune befalling the third party. A derivatives dealer enters into such bets with its customers, as well as with other dealers.

For more background, see, e.g., Henry T. C. Hu, “Swaps, the Modern Process of Financial Innovation and the Vulnerability of a Regulatory Paradigm”, 138 *University of Pennsylvania Law Review* 333 (1989) [hereinafter Hu, “Modern Process”]; Henry T. C. Hu, “Misunderstood Derivatives: The Causes of Informational Failure and the Promise of Regulatory Incrementalism”, 102 *Yale Law Journal* 1457 (1993) [hereinafter Hu, “Misunderstood Derivatives”].

² Hu, “Misunderstood Derivatives”, *supra* note 1.

seeks to undertake, for instance, the prudential supervision of derivatives dealers and reforms relating to compensation disclosures and practices, internal controls, and other corporate governance matters, at such dealers and perhaps at publicly held corporations generally.

The innovation process also leads to informational complexities well beyond the usual “transparency” issues, and to related difficulties.³ (Part III.B) Regulator-dealer informational asymmetries can be extraordinary—*e.g.*, regulators may not even be aware of the existence of certain derivatives, much less how they are modeled or used. These asymmetries are especially troubling because of the ease with which the financial innovation process allows for the gaming of traditional classification-based legal rules (*e.g.*, “cubbyholes”). Responding to these complexities is difficult. As an example, beginning in 1993, I have argued for the establishment of a centralized, continuously maintained, informational clearinghouse as to all OTC derivatives activities and outlined some of the key questions that must be answered in creating such an informational clearinghouse. Especially in the wake of the disasters in 2008, regulators have begun working vigorously with derivatives dealers and others to establish data-gathering systems with respect to credit default swaps and other OTC derivatives.

Finally, I turn briefly to a particular example of the financial innovation process, one that can help shape governmental responses to credit default swaps (CDS) and securitized products, another financial innovation that is sometimes also considered a derivative. (Part IV) The process of what can be called “decoupling” or, more specifically, its “debt decoupling” form, can undermine the ability of individual corporations to stay out of bankruptcy and can contribute to systemic risk. I discuss “empty creditor” and “hidden noninterest” issues. I will leave aside “empty voter” and “hidden (morphable) ownership” issues on the “equity decoupling” side.⁴

Two Contrasting Visions of the Financial Innovation Process

From the beginning of the explosive growth of the derivatives market in the early 1980s, two visions have animated the debate over the regulation of derivatives and new financial products generally.

The first vision is that of science run amok, of a financial Jurassic Park. In the face of relentless competition and capital market disintermediation, big financial institutions have hired financial scientists to develop new financial products. Typically operating in an international wholesale market open only to major corporate and sovereign entities—a loosely regulated paradise hidden from public view—these scientists push the frontier, relying on powerful computers and an array of esoteric models laden with incomprehensible Greek letters.

But danger lurks. As financial creatures are invented, introduced, and then evolve and mutate, exotic risks and uncertainties arise. In its most fevered imagining, not only do the trillions of mutant creatures destroy their creators in the wholesale capital market, but they escape and wreak havoc in the retail market and in economies worldwide.

This first vision, that of Jurassic Park, focuses on the chaos that is presumed to result from financial science. This chaos is at the level of the entire financial system—think of the motivation for Federal Reserve’s intervention as to Long-Term Capital Management (perhaps inappropriately named) in 1998 or as to American International Group in 2008—or at the level of individual participants—the bankruptcy of Orange County in 1994 or the derivatives losses at Procter & Gamble (perhaps appropriately named) in 1994.

The second vision is the converse of the first vision. The focus is on the order—the sanctuary from an otherwise chaotic universe—made possible by financial science. The notion is this: corporations are subject to volatile financial and commodities markets. Derivatives, by offering hedges against almost any kind of price risk, allow corporations to operate in a more ordered world. As the innovation proc-

³As to the issues outlined in this paragraph, see Hu, “Modern Process”, *supra* note 1; Hu, “Misunderstood Derivatives”, *supra* note 2; *cf.* Matthew Leising, “Wall Street to Clear Client Credit Swaps by Dec. 15”, *Bloomberg*, June 2, 2009 (on recent interactions between the Federal Reserve Bank of New York and financial institutions).

⁴As to the issues outlined in this paragraph, see, *e.g.*, Henry T. C. Hu & Jay Westbrook, “Abolition of the Corporate Duty to Creditors”, 107 *Columbia Law Review* 1321, 1402 (2007); Henry T. C. Hu & Bernard Black, “Equity and Debt Decoupling and Empty Voting II: Importance and Extensions”, 156 *University of Pennsylvania Law Review* 625, 728-735 (2008); Henry T. C. Hu & Bernard Black, “Debt, Equity and Hybrid Decoupling: Governance and Systemic Risk Implications”, 14 *European Financial Management* 663, 663-66, 679-94 (2008), draft available at <http://ssrn.com/abstract=1084075>; Henry T. C. Hu, “Empty Creditors’ and the Crisis”, *Wall Street Journal*, April 10, 2009, at A13; “CDSs and Bankruptcy—No Empty Threat”, *The Economist*, June 18, 2009.

ess goes on, the “derivative reality” that corporations can buy becomes ever richer in detail.

If the first vision is that of a Jurassic Park gone awry, the second vision is of the soothing, perfect hedges found in a formal English or Oriental garden. There are certainly private and social costs associated with derivatives besides the chaos derivatives sometimes bring. Similarly, there are private and social benefits beyond the risk management possibilities of derivatives.⁵

I make a basic point here. In a financial crisis, especially one with deep derivatives roots, it is too easy to focus solely on the dark side of OTC derivatives. Directly encouraging regulated financial institutions to migrate to exchange-traded derivatives has benefits as well as costs. Similarly, the differing regulatory regimes for “standardized” and “customized” OTC derivatives will trigger differing burdens. As to these and other decisions, careful consideration of the net impact of regulatory efforts will be necessary.

The Financial Innovation Process: Decision-Making Errors and Informational Complexities

Decision-Making Errors

Financial institutions focused solely on shareholder interests would generally take on more risk than would be socially optimal. At least in the past, governments typically constrained risk-taking at financial institutions, but not elsewhere. But as for financial institution decision making with respect to derivatives, much more than a gap between shareholder- and social-optimality is involved. There is a repeated pattern of outright mistakes, harmful to shareholders and societies alike, even at “sophisticated” entities.

Why? In the 1993 “Misunderstood Derivatives” article, I argued that several of the factors stemmed from the underlying process of modern financial innovation. These factors may cause even the best financial institutions and rocket scientists to misunderstand (or behave as if they misunderstand) derivatives. I also offered some possible responses, both in terms of disclosure (including enhanced compensation disclosure) and in terms of substantive measures (including measures to encourage proper consideration of legal risks).

One factor is cognitive bias in the derivatives modeling process. Humans often rely on cognitive shortcuts to solve complex problems; sometimes these shortcuts are irrational.

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. I also showed how this tendency, along with other cognitive biases, may cause risks of a legal nature to be ignored.

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.⁶

Then again, perhaps he was right. AIG didn’t lose one dollar; it lost billions.

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

⁵As to some of the other benefits of derivatives, see Darrell Duffie and Henry T. C. Hu, “Competing for a Share of Global Derivatives Markets: Trends and Policy Choices for the United States,” preliminary June 8, 2008, draft available at <http://ssrn.com/abstract=1140869> (the views in said draft are solely those of the authors and do not reflect those of anyone else).

Similarly, beyond OTC derivatives and looking at the regulation of capital markets and institutions overall, the minimization of systemic risk, short- or long-term, should not be the sole touchstone for regulatory policy. In the interests of the proper allocation of resources and long-term American economic growth, care must be taken that our capital markets not only remain firmly rooted in full and fair disclosure, but are perceived to be so rooted by investors worldwide.

⁶Gretchen Morgenson, “Behind Insurer’s Crisis, Blind Eye to a Web of Risks,” *N.Y. Times*, Sept. 28, 2008, at A1.

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.

Another factor flows from the inability of financial institutions to capture—to “appropriate”—all the benefits of their financial research and development. This “inappropriability” can lead to the failure to devote enough resources to fully understand the risks and returns of these products. (This has implications for responding to securitization that have not been considered. As to asset-backed securities, inappropriability may well have contributed to the sacrificing of due diligence in favor of excessive reliance on ratings agencies.)

One of the other factors flows from the incentive structures in the innovation process. 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 since the superiors may sometimes not be as financially sophisticated (and loathe to admit this). 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.

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 8 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—at least, if memory serves, until a pertinent Congressional hearing came along.

The foregoing factors characteristic of the modern financial innovation process should be considered with respect to regulatory reforms. This applies not only with respect to how the Administration should engage in the prudential supervision of derivatives dealers but perhaps as well to such matters as the Federal role as to compensation disclosure and practices at publicly held corporations generally. These issues are quite complex, perhaps especially with respect to substantive (as opposed to disclosure) aspects of compensation: questions abound for any particular dealer or corporation, as well as for the proper role of the Federal Government in respect to those questions. How and when should “profits” on trades be calculated? What are the proper models for valuing complex derivatives and determining profits? How are risks and returns on particular types of instruments to be quantified? How should compensation be risk-adjusted?

Informational Complexities and the Creation of an Informational Clearinghouse

As noted earlier, a variety of informational complexities stem from the financial innovation process. One of the complexities stems from the fact that, historically, neither the introduction of new OTC derivative products nor individual OTC derivative transactions were required to be disclosed to any regulator. The informational predicate for effective regulation is absent.

In “Misunderstood Derivatives,” I suggested the creation of an informational clearinghouse involving the centralized and continuous gathering of product information and outlined some of the key questions as to nature and scope that would need to be answered in actual implementation. Market participants would provide specified transaction-specific data in computerized form. Although providing actual market prices (transactional terms) may be sensitive, providing theoretical pricing models are sometimes likely to be far more so. The models the derivatives dealers use can be complex and proprietary. And market prices may depart substantially from valuations predicted by models.

Especially after the CDS-related AIG debacle in September 2008, regulators have been moving aggressively to work with derivatives dealers and others to improve OTC derivatives data-gathering, particularly as to CDS. Perhaps there is a possibility of a fully centralized informational clearinghouse. This would necessitate international coordination well beyond the U.S.–U.K.-centric process that culminated in the pioneering 1988 Basel Accord for capital adequacy. A properly designed centralized informational clearinghouse must consider the extent to which

proprietary information should really be required and, if or when required, reflect extensive safeguards. Moreover, complicated decisions lie ahead as to what information provided to regulators should be made available to the public.

The “Decoupling” Process

I now turn briefly to a particular example of the financial innovation process, consideration of which should help guide policy decisions with respect to CDS, securitized products, and other derivatives. Certain issues relating to CDS and to securitizations have become quite familiar. For example, everyone is by now aware of how American International Group’s CDS activities helped cause AIG’s near-collapse in September 2008. And, especially with President Obama’s Wednesday speech and its reference to the need for “skin in the game,” most of us are familiar with the moral hazard, ratings agency, principal-agent, and other issues which cause securitized products to be mispriced or missold. And, in Part III.A, I have discussed how “inappropriability” issues in the financial R&D process should begin to be considered with respect to such matters as the inadequate due diligence done (and excessive reliance on ratings agencies) in connection with securitizations.

Instead, I will focus here on the process that can be called “debt decoupling.” In August 2007, I began suggesting that the separation of control rights and economic interest with respect to corporate debt through swaps can cause a variety of substantive and disclosure problems, problems that become especially troublesome when economic times are bad. This debt decoupling analysis has been further developed and I rely on this analysis to illustrate these issues.

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 usually still conveys control rights under the debt agreement and legal rights under bankruptcy and other laws.

There could, for instance, be a situation involving what, in 2007, I termed 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 weakened incentives to work with a troubled corporation for the latter to avoid bankruptcy. And if this empty creditor status is undisclosed, the troubled corporation will not know the true incentives of its creditor as the corporation attempts to seek relief in order to avoid bankruptcy. Indeed, if a creditor holds enough credit default swaps, it may simultaneously have control rights and a negative economic exposure. With such an extreme version of the empty creditor situation, the creditor would actually have incentives to cause the firm’s value to fall. Debt decoupling could also cause substantive (empty creditor) and disclosure (hidden noninterest and hidden interest) complications for bankruptcy proceedings.

Have CDS-based empty creditor situations actually happened in the real world? Yes. On September 16, 2008, as AIG was being bailed out, Goldman Sachs said its exposure to AIG was “not material.” But on March 15, 2009, AIG disclosed it had turned over to Goldman \$7 billion of the Federal bailout funds AIG received.

Perhaps this could be referred to as “The Curious Incident of the Bank That Didn’t Bark.” As I suggested in an op-ed in the April 10 *Wall Street Journal*, one reason Goldman Sachs did not express alarm in September is that it was an empty creditor. Having hedged its economic exposure to AIG with credit default swaps from “large financial institutions,” Goldman had lessened concerns over the fate of AIG. Yet Goldman had the control rights associated with the contracts that it had entered into with AIG (including rights to demand collateral). Perhaps not surprisingly, Goldman was apparently aggressive in calling for collateral from AIG. (I do not in any way suggest that Goldman did anything improper. Moreover, Goldman had obligations to its own shareholders.)

Debt decoupling issues relating to multiple borrowers can also affect the economy. In the securitization context, servicing agents have little or no economic interest in the debt (and limited rights to agree to loan modifications) while senior tranche holders typically have most of the control rights (but, in contrast to junior tranche holders, little incentive to agree to modifications). As a result, the relationships be-

tween debtors and creditors tend to be “frozen”: difficulties in modifying the debtor-creditor relationship can contribute to systemic risk. Front page headlines suggest the importance of loan modification difficulties in the securitization context; analyzing how debt decoupling contributes to these difficulties may be helpful in considering governmental policies as to asset-backed securities.

The foregoing involves “debt decoupling.” “Equity decoupling” also occurs. Ownership of shares traditionally conveys a package (economic, voting, and other rights) and obligations (including disclosure). Law and contracting practice assumed that the elements of this equity package are generally bundled together. But outside investors and others can now decouple this link between voting (as well as other) rights on shares and economic interest in those shares. Financial innovations like equity derivatives and familiar tools like share borrowing used for decoupling purposes have affected core substantive and disclosure mechanisms of corporate governance. But today, I will leave aside analysis of “empty voting,” “hidden (morphable) ownership,” and related matters.

Conclusion

The President’s proposal appears to offer a good starting point for review, with respect to OTC derivatives and otherwise. I make a modest claim: considering the special nature of the modern process of financial innovation can be helpful in the road ahead.

Thank you.

PREPARED STATEMENT OF KENNETH C. GRIFFIN
FOUNDER, PRESIDENT, AND CHIEF EXECUTIVE OFFICER,
CITADEL INVESTMENT GROUP, L.L.C.

JUNE 22, 2009

Chairman Reed, Senator Bunning, Members of the Committee, I am Kenneth Griffin, President and CEO of Citadel Investment Group. I appreciate the opportunity to testify and share our views regarding effective oversight of the over-the-counter derivatives market.

Citadel’s nearly two decades of experience in the OTC marketplace, as well as its role as a leading liquidity provider in the equity markets and the options market in the United States, give us insights into the benefits of appropriate market structure. Sadly, it now also gives us insights into the wreckage that can be wrought by opaque and unregulated markets.

As one of the largest alternative asset managers, Citadel has a vested interest in the safety and soundness of our financial markets and in fostering fair, orderly and transparent markets. As an American taxpayer, I have a vested interest in ensuring that the financial crisis that we have experienced never happens again.

To be clear, Citadel also has an economic interest in the outcome of this issue as a partner with CME Group in the development of a neutral, open access, central counterparty clearing solution for credit default swaps. CME is also supported by other institutional investors and alternative asset managers in this initiative.

For many years, Citadel has advocated for central counterparty clearing. I am confident that if OTC derivatives were cleared through a properly structured and transparent central counterparty, the impact of AIG and Lehman Brothers would have been much different. Without a central counterparty clearing framework in place, their failures have contributed to the loss of hundreds of thousands of jobs and the use of hundreds of billions of dollars of taxpayer money.

Citadel is committed to maintaining the benefits of credit default swaps products while reducing the systemic risk they present to the market, to the economy as a whole and to American taxpayers. We wholeheartedly support a comprehensive framework for over-the-counter derivatives and the realignment of capital incentives as an immediate, tangible undertaking to realize these goals. We stand ready to help this Committee meet these goals.

Derivatives and Their Benefits

Credit default swaps and other derivatives play a crucial role in helping American businesses prudently manage their balance sheets as well as their interest rate and credit exposure. When used and overseen properly, credit default swaps and other derivatives play a vital role in helping our economy function smoothly and grow.

Examples of the benefits of derivatives abound.

- Institutional investors, such as pension funds, 401k managers, foundations and endowments make frequent use of derivatives to achieve their portfolio objectives and to manage risk.
- A regional bank may use credit default swaps to buy credit protection on its loan portfolio. By transferring credit risk, the bank can free up capital and make more loans at a time of contracting credit availability.
- Manufacturers use these instruments to hedge the risk that their key suppliers might go bankrupt and not fulfill outstanding obligations. Suppliers may protect against the risk that their customers might fail to pay.

The imprudent use of these instruments, however, when coupled with (1) an antiquated and opaque market structure, (2) the lack of comprehensive margin and capital requirements, and (3) the absence of a central counterparty clearing framework can have devastating consequences. This is an issue of profound importance to our capital markets and the American people.

Reform Measures Essential to the Market

The derivatives market has grown because of its utility. Between 2003 and 2008, it is estimated the market for credit default swaps grew from \$3.8 trillion to nearly \$40 trillion, and has become highly liquid and standardized. At the end of 2008, it was estimated there were approximately \$325 trillion in gross notional value of interest rate swaps outstanding. Yet the derivatives market today largely functions as it did three decades ago.

The current market structure is characterized by the notable absence of certain structural safeguards that are the hallmark of mature and efficient markets: a central counterparty, segregation of margin deposits and positions, price transparency, and appropriate capital requirements for all market participants, including dealers and highly rated counterparties. In the current market structure:

- Dealers are generally not obligated to post margin to initiate a trade.
- Customers are often required to post initial margin to their dealer counterparties to initiate a trade. These funds are held by the dealers in accounts that are commingled with the dealers' own funds. Because customer margin is not segregated, customer funds could be lost in a dealer default. In times of stress, customers will rush to close out positions to recover their margin. This can intensify a liquidity crisis, and may precipitate bankruptcy, as we saw with Lehman Brothers.
- Market data, such as transaction prices, is closely held and not published. As a result, many market participants cannot accurately value their portfolios nor prudently manage their investments. Had there been objective and real time price transparency and a uniform margin methodology available last fall, the AIG fiasco may never have happened.

The Right Incentives

Today, the vast majority of credit default and interest rate swap contracts have standard terms similar to equity options, and trade in large daily volumes. The same parties that trade credit default and interest rate swap contracts participate in other markets that benefit from central clearing, transparent and consistent margins, and account segregation.

In the absence of one or more central clearinghouses available to all market participants, a tremendous amount of risk is concentrated with a handful of financial institutions. These financial institutions earn extraordinary profits from the lack of transparency in the marketplace and from the privileged role they play as credit intermediaries in almost all transactions. Unfortunately, we have seen the cost borne by our broader economy when one of these highly interconnected institutions fails.

Capital requirements on the trading of over-the-counter derivatives should reflect the significant systemic risk they create. We should also consider the imposition of a requirement for financial institutions to use clearinghouses for the most commonly traded over-the-counter derivatives.

This problem has an international dimension. We must work to coordinate our actions with foreign regulators. Otherwise, we face the risk of cross-border capital and regulatory arbitrage.

We are hopeful that once appropriate capital requirements are established, trading of over-the-counter derivatives will naturally flow to regulated clearinghouses with mutualized risk and natural netting capabilities. And with it, price transparency, reduction of systemic risk, and continued evolution of the core market will follow.

The *status quo* cannot be allowed to continue. We must work together to drive market structure reform that fosters orderly and transparent markets, facilitates the growth and strength of the American economy and protects taxpayers from losses such as those we have witnessed in the last year.

Thank you for the opportunity to testify today. I would be happy to answer your questions.

PREPARED STATEMENT OF ROBERT G. PICKEL
EXECUTIVE DIRECTOR AND CHIEF EXECUTIVE OFFICER,
INTERNATIONAL SWAPS AND DERIVATIVES ASSOCIATION, INC.

JUNE 22, 2009

Mr. Chairman and Members of the Subcommittee: Thank you very much for inviting ISDA to testify today. We are grateful for the opportunity to discuss public policy issues regarding the privately negotiated, or OTC, derivatives business. Our business provides essential risk management and cost reduction tools for a broad swath of users. Additionally, it is an important source of employment, value creation and innovation for our financial system—it is one that employs tens of thousands of individuals in the United States and benefits thousands of American companies across a broad range of industries.

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 830 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, investment managers 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.

In my remarks today, I would briefly like to underscore ISDA's and the industry's strong commitment to identifying and reducing risk in the privately negotiated derivatives business:

- We believe that OTC derivatives offer significant value to the customers who use them, to the dealers who provide them, and to the financial system in general by enabling the transfer of risk between counterparties.
- We recognize, however, that the industry today faces significant challenges, and we are urgently moving forward with new solutions rather than remaining stuck in the *status quo*.
- We have delivered and are delivering on a series of reforms in order to promote greater standardization and resilience in the derivatives markets.
- These developments have been closely overseen and encouraged by regulators, who recognize that optimal solutions to market issues are usually achieved through the participation of market participants.
- As ISDA and the industry work to reduce risk, we believe it is essential to preserve flexibility to tailor solutions to meet the needs of customers. Efforts to mandate that privately negotiated derivatives business trade only on an exchange would effectively stop any such business from being conducted. Requiring exchange trading of all derivatives would harm the ability of American companies to manage their individual, unique financial risks and ultimately, harm the economy.

Mr. Chairman, let me assure you that ISDA and our member firms clearly understand the need to act quickly and decisively to implement the important measures that I will describe in the next few minutes.

About OTC Derivatives

OTC derivatives exist to serve the risk management and investment needs of end users. These end users form the backbone of our economy. They include over 90 percent of the Fortune 500, 50 percent of mid-sized companies and thousands of other smaller American companies. OTC derivatives allow these businesses, which employ millions of Americans, to effectively manage risks that are not central to their lines of business.

It is important to understand that an OTC derivative—whether it's an interest rate swap or a credit default swap—does not in and of itself create risk. It shifts risk from one firm, or counterparty, to another, thereby dispersing that risk in the marketplace.

The development of OTC derivatives has followed the development of the American economy. For centuries, foreign exchange transactions have facilitated trade and helped American businesses expand; they were one of the original banking powers recognized in the National Bank Act of 1863.

The first OTC derivative linked to interest rates was transacted in the early 1980s between IBM and the World Bank, helping IBM raise funds on more favorable terms.

Credit derivatives first appeared in the mid-1990s as a tool to help banks diversify the credit risk in their loan portfolio. Since then, they have grown into a vital risk management and diversification tool.

In each case, the need for these privately negotiated derivatives products was driven by the needs of end users. Their growth was a direct function of their utility to end users. If end users like 3M, Boeing, Cargill and hundreds of others did not want these products, they would not exist.

Understanding Notional Amounts

Before I discuss current regulatory and industry initiatives, there is one aspect of the OTC derivatives markets that bears some explanation.

As you may know, the industry's size is usually measured in notional amounts outstanding. The reason for using notional amounts is that it is relatively simple to identify and gather. In addition, it is consistent over time; that is, the notional amount for a deal does not change except in limited cases.

While it is a useful measurement tool, notional amount overstates the level of activity in the OTC derivatives markets. More problematic, however, is the dramatic misinterpretation of notional amount as a measure of risk. In fact, notional amounts are only loosely related to risk.

In the OTC derivatives markets, a firm will often enter into one contract to offset exposure from another contract. As it does so, it doubles the level of notional outstanding. But it does not increase the level of risk in the system.

Statistics compiled by the Depository Trust and Clearing Corporation's Trade Information Warehouse illustrate this point. The Trade Information Warehouse is a global repository and post-trade processing infrastructure for over-the-counter (OTC) credit derivatives. According to data that it makes publicly available, there is currently about \$5.6 billion of credit default swap protection on Johnson & Johnson. However, after stripping away all offsetting positions that firms may have, the net notional value of CDS on the company is \$900 million.

Looking at the CDS business in aggregate, there is currently about \$28 trillion in gross notional outstanding. However, on a net basis, according to DTCC, the level of exposure is \$2.5 trillion, or less than 10 percent of the notional.

Obviously, this \$2.5 trillion is still a large number, but please keep in mind what it represents: every reference entity on which every CDS contract is based would have to default for payouts to be that high and recovery rates on underlying debt would have to be zero.

Current Regulatory and Industry Initiatives

Last week, President Obama announced a comprehensive regulatory reform proposal for the financial industry. The proposal is an important step toward much-needed reform of financial industry regulation. The reform proposal addressed OTC derivatives in a manner consistent with the proposals announced on May 13 by Treasury Secretary Geithner. ISDA and the industry welcomed in particular the recognition of industry measures to safeguard smooth functioning of our markets.

The Administration proposes to require that all derivatives dealers and other systemically important firms be subject to prudential supervision and regulation. ISDA supports the appropriate regulation of financial institutions that have such a large presence in the financial system that their failure could cause systemic concerns.

Most of the other issues raised in the Administration's proposal have been addressed in a letter that ISDA and industry participants delivered to the Federal Reserve Bank of New York earlier this month.

As you may know, a Fed-industry dialogue was initiated under Secretary Geithner's stewardship of the New York Fed some 4 years ago. Much has been achieved and much more has been committed to, all with the goal of risk reduction, transparency, and liquidity. These initiatives include:

- Increased standardization of trading terms;
- Improvements in the trade settlement process;
- Greater clarity in the settlement of defaults;
- Significant positive momentum toward central counterparty clearing;
- Enhanced transparency; and
- A more open industry governance structure.

In our letter to the New York Fed this month, ISDA and the industry expressed our "firm commitment to strengthen the resilience and robustness of the OTC derivatives markets." As we stated, "We are determined to implement changes to risk management, processing and transparency that will significantly transform the risk profile of these important financial markets"

We outlined a number of steps toward that end, specifically in the areas of information transparency and central counterparty clearing.

Central Counterparty Clearing

In terms of clearing, the industry recognizes that it is an important public policy consideration—and that it can provide many benefits to the market, including helping to identify systemic risk.

Today, the industry clears the majority of inter-dealer interest rate swaps. Plans have recently been announced to expand the risk management benefits of the clearing to the buy-side as well.

For credit default swaps, the industry has committed to migrating standardized contracts onto a clearing platform, as per the Administration's proposal. It is also the industry's goal to achieve buy-side access to CDS clearing (through either direct CCP membership or customer clearing) no later than the end of this year.

While there is widespread recognition of the benefits of clearing, there is also widespread acknowledgement, including in the Administration's proposal, that there is a continued need for customized OTC derivatives. Due to their inherent nature—as flexible risk management tools designed specifically to meet particular needs—not all OTC products can be cleared.

Nor, for this same reason, can all OTC products trade on an exchange. Here's why: stocks, bonds, commodities—when you buy or sell them, most of the trade terms are fixed. All you really need to do is indicate the name and quantity that you want to buy, and you can execute the trade. But with customized OTC derivatives, the trade terms are determined by the end customer and the dealer to fit a specific need. IBM's financial situation and needs are different from GE's, and GE's are different from John Deere's. There is simply no way to standardize this end customer demand.

In fact, mandating that interest rate swaps or credit default swaps be traded on an exchange is likely to result only higher costs and increased risks to the manufacturers, technology firms, retailers, energy producers, utilities, service companies and others who use OTC derivatives in the normal course of business. It will put American businesses at a significant disadvantage to their competitors around the world.

Information Transparency

I would next like to discuss the issue of information transparency.

The Administration's proposal is designed to ensure that regulators would have comprehensive and timely information about the positions of each and every participant in all OTC derivatives markets.

This new framework calls for trades to be cleared or, if not cleared, to be reported to a trade repository. ISDA and the industry support this framework, as it would provide policy makers with access to the information they need to carry out their authorities under the law.

Data repositories will be established for noncleared transactions in the OTC derivatives markets. When combined with the information available from clearinghouses, this should—as the Administration's proposal noted—enable the industry to meet its record keeping and reporting obligations and enhance transparency to regulators and to the general public.

Any efforts taken beyond these measures would appear to be duplicative and may add to the cost of doing business. As a result, any such proposals should be carefully scrutinized to see whether and how they add value beyond the provisions of the Administration's proposal and the industry's commitment to the New York Fed.

One additional issue that has been raised in the recent policy debate is whether standardized contracts that can be cleared should also be traded on an exchange. The industry's view on this is two-fold.

First, we believe that the public policy goals of greater transparency as discussed above will be met in a clearinghouse/noncleared trade repository environment. In this sense, requiring standardized contracts to be exchange traded would not produce any additional information for or benefits to policy makers.

It could, however, increase the costs of doing business for industry participants. That is why we have long believed that market forces are best positioned to determine the most efficient and effective way to trade OTC contracts. It's possible that there are some contracts that would prove to be very successful if they traded on an exchange. It's also possible that electronic execution systems may increase in popularity due to the benefits they offer. These, however, are properly choices for market participants.

Summary and Conclusion

ISDA and the OTC derivatives industry are committed to engaging with supervisors, globally, to expand upon the substantial improvements that have been made in our business since 2005.

We know that further action is required, and we pledge our support in these efforts. It is our belief that much additional progress can be made within a relatively short period of time. Our clearing and transparency initiatives, for example, are well underway, with specific commitments aired publicly and provided to policy makers.

As we move forward, we believe the effectiveness of future policy initiatives will be determined by how well they answer a few fundamental questions:

- First, will these policy initiatives recognize that OTC derivatives play an important role in the U.S. economy?
- Second, will these policy initiatives enable firms of all types to improve how they manage risk?
- Third, will these policy initiatives reflect an understanding of how the OTC derivatives markets function and their true role in the financial crisis?
- Finally, will these policy initiatives ensure the availability and affordability of these essential risk management tools to a wide range of end users?

Mr. Chairman and Committee Members, the OTC derivatives industry is an important part of the financial services business in this country and the services we provide help companies of all shapes and sizes.

PREPARED STATEMENT OF CHRISTOPHER WHALEN

MANAGING DIRECTOR,
INSTITUTIONAL RISK ANALYTICS

JUNE 22, 2009

Chairman Reed, Senator Bunning, Members of the Committee: Thank you for requesting my testimony today regarding the operation and regulation of over-the-counter or "OTC" derivatives markets. My name is Christopher Whalen and I live in the State of New York.¹ I work in the financial community as an analyst and a principal of a firm that rates the performance of commercial banks. I previously appeared before the full Committee in March of this year to discuss regulatory reform.

First let me make a couple of points for the Committee on how to think about OTC derivatives. Then I will answer your questions in summary form. Finally, I provide some additional sources and references to help you in your deliberations.

Defining OTC Asset Classes

When you think about OTC derivatives, you must include both conventional interest rate and currency swap contracts, single name credit default swap or "CDS" con-

¹Mr. Whalen is a cofounder of Institutional Risk Analytics, a Los Angeles unit of Lord, Whalen LLC that publishes risk ratings and provides customized financial analysis and valuation tools.

tracts, and the panoply of specialized, customized gaming contracts for everything and anything else that can be described, from the weather to sports events to shifting specific types of risk exposure from one unit of AIG to another. You must also include the family of complex structured financial instruments such as mortgage securitizations and collateralized debt obligations or “CDOs,” for these too are OTC “derivatives” that purport to derive their “value” from another asset or instrument.

Bank Business Models and OTC

Perhaps the most important issue for the Committee to understand is that the structure of the OTC derivatives market today is a function of the flaws in the business models of the largest dealer banks, including JPMorgan Chase (NYSE:JPM), Bank of America (NYSE:BAC) and Goldman Sachs (NYSE:GS). These flaws are structural, have been many decades in the making, and have been concealed from the Congress by the Fed and other financial regulators.

The fact that today OTC derivatives trading is the leading source of profits and also risk for many large dealer banks should tell the Congress all that it needs to know about the areas of the markets requiring immediate reform. Many cash and other capital markets operations in these banks are marginal in terms of return on invested capital, suggesting that banks beyond a certain size are not only too risky to manage—but are net destroyers of value for shareholders and society even while pretending to be profitable.²

Simply stated, the supranormal returns paid to the dealers in the closed OTC derivatives market are effectively a tax on other market participants, especially investors who trade on open, public exchanges and markets. The deliberate inefficiency of the OTC derivatives market results in a dedicated tax or subsidy meant to benefit one class of financial institutions, namely the largest OTC dealer banks, at the expense of other market participants. Every investor in the global markets pay the OTC tax via wider bid-offer spreads for OTC derivatives contracts than would apply on an organized exchange.³

The taxpayers in the industrial nations also pay a tax through periodic losses to the system caused by the failure of the victims of OTC derivatives and complex structured assets such as AIGs and Citigroup (NYSE:C). And most important, the regulators who are supposed to protect the taxpayer from the costs of cleaning up these periodic loss events are so captive by the very industry they are charged by law to regulate as to be entirely ineffective. As the Committee proceeds in its deliberations about reforming OTC derivatives, the views of the existing financial regulatory agencies and particularly the Federal Reserve Board and Treasury, should get no consideration from the Committee since the views of these agencies are largely duplicative of the views of JPM and the large OTC dealers.

Basis Risk and Derivatives

The entire family of OTC derivatives must be divided into types of contracts for which there is a clear, visible cash market and those contracts for which the basis is obscure or nonexistent. A currency or interest rate or natural gas swap OTC contract are clearly linked to the underlying cash markets or the “basis” of these derivative contracts, thus both buyers and sellers have reasonable access to price information and the transaction meets the basic test of fairness that has traditionally governed American financial regulation and consumer protection.

With CDS and more obscure types of CDOs and other complex mortgage and loan securitizations, however, the basis of the derivative is nonexistent or difficult/expensive to observe and calculate, thus the creators of these instruments in the dealer community employ “models” that purport to price these derivatives. The buyer of CDS or CDOs has no access to such models and thus really has no idea whatsoever how the dealer valued the OTC derivative. More, the models employed by the dealers are almost always and uniformly wrong, and are thus completely useless to value the CDS or CDO. The results of this unfair, deceptive market are visible for all to see—and yet the large dealers, including JPM, BAC, and GS continue to lobby the Congress to preserve the CDS and CDO markets in their current speculative form.⁴

² See “Talking About RAROC: Is ‘Financial Innovation’ Good for Bank Profitability?”, *The Institutional Risk Analyst*, June 10, 2008 (<http://us1.institutionalriskanalytics.com/pub/IRAstory.asp?tag=286>).

³ See “Credit Default Swaps and Too Big to Fail or Unwind: Interview With Ed Kane”, *The Institutional Risk Analyst*, June 3, 2009 (<http://us1.institutionalriskanalytics.com/pub/IRAstory.asp?tag=364>).

⁴ For an excellent discussion of why OTC derivatives and complex structured assets are essentially a fraud, see the presentation by Ann Rutledge, “What’s Great about the ETP Model?”,

In my view, CDS contracts and complex structured assets are deceptive by design and beg the question as to whether a certain level of complexity is so speculative and reckless as to violate U.S. securities and antifraud laws. That is, if an OTC derivative contract lacks a clear cash basis and cannot be valued by both parties to the transaction with the same degree of facility and transparency as cash market instruments, then the OTC contract should be treated as fraudulent and banned as a matter of law and regulation. Most CDS contracts and complex structured financial instruments fall into this category of deliberately fraudulent instruments for which no cash basis exists.

What should offend the Congress about the CDS market is not just that it is deceptive by design, which it is; not just that it is a deliberate evasion of established norms of transparency and safety and soundness, norms proven in practice by the great bilateral cash and futures exchanges over decades; not that CDS is a retrograde development in terms of the public supervision and regulation of financial markets, something that gets too little notice; and not that CDS is a manifestation of the sickly business models inside the largest zombie money center banks, business values which consume investor value in multibillion dollar chunks. No, what should bother the Congress and all Americans about the CDS market is that it violates the basic American principle of fairness and fair dealing.

Jefferson said that, “commerce between master and slave is barbarism.” All of the founders were Greek scholars. They knew what made nations great and what pulled them down into ruins. And they knew that, above all else, how we treat ourselves, as individuals, customers, neighbors, traders and fellow citizens, matters more than just making a living. If we as a Nation tolerate unfairness in our financial markets in the form of the current market for CDS and other complex derivatives, then how can we expect our financial institutions and markets to be safe and sound?

For our Nation’s founders, equal representation under the law went hand in hand with proportional requital, meaning that a good deal was a fair deal, not merely in terms of price but in making sure that both parties extracted value from the bargain. A situation in which one person extracts value and another, through trickery, does not, traditionally has been rejected by Americans as a fraud. Whether through laws requiring disclosure of material facts to investors, antitrust laws or the laws and regulations that once required virtually all securities transactions to be conducted across open, public markets, not within the private confines of a dealer-controlled monopoly, Americans have historically stood against efforts to reduce transparency and make markets less efficient—but that is precisely how this Committee should view proposals from the Obama Administration and the Treasury to “reform” the OTC derivatives markets.

To that point, consider the judgment of Benjamin M. Friedman, writing in *The New York Review of Books* on May 28, 2009, “The Failure of the Economy & the Economists.” He describes the CDS market in a very concise way and in layman’s terms. I reprint his comments with the permission of *NYRB*:

The most telling example, and the most important in accounting for today’s financial crisis, is the market for credit default swaps. A CDS is, in effect, a bet on whether a specific company will default on its debt. This may sound like a form of insurance that also helps spread actual losses of wealth. If a business goes bankrupt, the loss of what used to be its value as a going concern is borne not just by its stockholders but by its creditors too. If some of those creditors have bought a CDS to protect themselves, the covered portion of their loss is borne by whoever issued the swap.

But what makes credit default swaps like betting on the temperature is that, in the case of many if not most of these contracts, the volume of swaps outstanding far exceeds the amount of debt the specified company owes. Most of these swaps therefore have nothing to do with allocating genuine losses of wealth. Instead, they are creating additional losses for whoever bet incorrectly, exactly matched by gains for the corresponding winners. And, ironically, if those firms that bet incorrectly fail to pay what they owe—as would have happened if the government had not bailed out the insurance company AIG—the consequences might impose billions of dollars’ worth of economic costs that would not have occurred otherwise.

This fundamental distinction, between sharing in losses to the economy and simply being on the losing side of a bet, should surely matter for today’s immediate question of which insolvent institutions to rescue and which to let fail. The same distinction also has implications for how to reform the

regulation of our financial markets once the current crisis is past. For example, there is a clear case for barring institutions that might be eligible for government bailouts—including not just banks but insurance companies like AIG—from making such bets in the future. It is hard to see why they should be able to count on taxpayers' money if they have bet the wrong way. But here as well, no one seems to be paying attention.

CDS and Systemic Risk

While an argument can be made that currency, interest rate and energy swaps are functionally interchangeable with existing forward instruments, the credit derivative market raises a troubling question about whether the activity creates value or helps manage risk on a systemic basis. It is my view and that of many other observers that the CDS market is a type of tax or lottery that actually creates net risk and is thus a drain on the resources of the economic system. Simply stated, CDS and CDO markets currently are parasitic. These market subtract value from the global markets and society by increasing risk and then shifting that bigger risk to the least savvy market participants.

Seen in this context, AIG was the most visible “sucker” identified by Wall Street, an easy mark that was systematically targeted and drained of capital by JPM, GS and other CDS dealers, in a striking example of predatory behavior. Treasury Secretary Geithner, acting in his previous role of President of the FRBNY, concealed the rape of AIG by the major OTC dealers with a bailout totaling into the hundreds of billions in public funds.

Indeed, it is my view that every day the OTC CDS market is allowed to continue in its current form, systemic risk increases because the activity, on net, consumes value from the overall market—like any zero sum, gaming activity. And for every large, overt failure in the CDS markets such as AIG, there are dozens of lesser losses from OTC derivatives buried by the professional managers of funds and financial institutions in the same way that gamblers hide their bad bets. The only beneficiaries of the current OTC market for derivatives are JPM, GS, and the other large OTC dealers.

CDS and Securities Fraud

One of the additional concerns that the Congress must address and which strongly argue in favor of outlawing the use of OTC CDS contracts entirely, is the question of fairness to investors, specifically the use of these instruments for changing the appearance but not the financial substance, of other banks and companies. The AIG collapse illustrates how CDS and similar insurance products may be used to misrepresent the financial statements of public companies and financial institutions.

In the case of AIG, the insurer was effectively renting its credit rating to other firms, and even its own affiliates, in return for making these counterparties look more sound financially than their true financial situation justified.

The use of CDS and finite insurance to window dress the financial statements of public companies is an urgent issue that deserves considerable time from the Congress to build an adequate understanding of this practice and create a public record sufficient to support legislation to ban this practice forever. For further background on the use of CDS and insurance products at AIG to commit securities fraud, see “AIG: Before Credit Default Swaps, There Was Reinsurance,” *The Institutional Risk Analyst*, April 2, 2009 (Copy attached).⁵

⁵ See also *Harris v. American International Group, et al.*, Los Angeles Superior Court, Central District (Case #BC414205)

Q & A

Below are my responses to the Committee's written questions.

1) How can the Congress best modernize oversight of the over-the-counter derivatives markets to increase transparency and reduce risks?

The Congress should think of modernizing the oversight of OTC derivatives in terms of restoring the existing norms of disclosure, transparency, prudential risk controls and fairness that prevail in organized, regulated markets in the US, markets such as the NYSE or CME. The existing structure of OTC derivatives is not "innovative" but rather is retrograde for the reasons suggested in the general points above regarding bank business models and the nature of the credit derivatives markets. Consider the fact, for example, that even today, market participants, regulators and the public still have no access to close-of-day prices for CDS and complex structured assets because the large dealers such as JPM and GS refuse to make this information available to the public.

In order to address this situation, Congress should take action to immediately start to limit the risks posed by the operation of OTC markets. Specifically:

- Congress should subject all OTC contracts to The Commodity Exchange Act (CEA) and instruct the CFTC to begin the systematic review and rule making process to either conform OTC markets to minimum standards of disclosure, collateral and transparency, or require that the contracts be migrated onto organized, bilateral exchanges. It is time for the Congress to right the wrong done over a decade ago to Commissioner Brooksley Born and her colleagues at the CFTC. This wrong was committed in part by the Congress and in part by then-Treasury Secretary Larry Summers, then-Fed Chairman Alan Greenspan, and former Treasury Secretary Robert Rubin, among others, who all

worked together to effectively block action that would have subjected OTC contracts to the full supervision of the CFTC.⁶

- The Congress should admit that it made a mistake in 2000 by blocking CFTC regulation of OTC derivatives. The Congress should take the time to document how and why Greenspan, Rubin and Summers, and others, viciously attacked the reputation and integrity of Chairman Born and other members of the CFTC, and thereby blocked CFTC regulation of OTC derivatives. The actions of Summers, Greenspan and Rubin over a decade ago to block CFTC regulation of OTC derivatives arguably created the circumstances for the collapse of AIG as well as hundreds and hundreds of billions of dollars in losses incurred by financial institutions around the world. The Congress and the people of the United States deserve to hear the explanation of Summers, Greenspan and Rubin for the actions they took and did not take in their capacity as public officials subject to congressional oversight.⁷
- I agree with the statement by Secretary Geithner last week that how and whether to combine the operations of the CFTC and the SEC is a question that needs more time and consideration than the Obama Administration has allocated for the consideration of reform for the OTC markets in 2009. I urge the Congress to move first on subjecting the OTC markets to CEA, then to take further time for hearings and fact finding to consider what other changes should occur in terms of the law and the operational structure of the SEC and CFTC.

2) As the Congress weighs proposals to move more over-the-counter derivatives transactions to central counterparties or exchanges, what key decisions need to be considered?

⁶ See "Brooksley Born 'Vindicated' as Swap Rules Take Shape (Update1)," *Bloomberg News*, November 13, 2009.

⁷ See Dash, Eric and Schwartz, Nelson, "Where Was the Wise Man?," *The New York Times*, April 27, 2008. See also "The Subprime Three -- Rubin, Summers & Greenspan," *The Institutional Risk Analyst*, April 28, 2008.

- It is important for the Committee to understand that the reform proposal from the Obama Administration regarding OTC derivatives is a canard; an attempt by the White House and the Treasury Department to leave in place the de facto monopoly over the OTC markets by the largest dealer banks led by JPM, GS and other institutions. For example, the centralized clearing model proposed by the Treasury has some notable attributes, but still leaves the OTC markets under the complete control of the dealer banks, with little public disclosure of prices, no transparency and no accountability to other dealers and market participants. The proposal, for example, to require centralized clearing still does not address the issues of pricing, basis risk and transparency that I have raised in my comments.
- Why then are the large banks, led by JPM, engaged in such a desperate battle over the reform of the OTC derivatives markets? For the world's largest banks, the OTC derivatives markets are the last remaining source of supra-normal profits -- and also perhaps the single largest source of systemic risk in the global financial markets. Without OTC derivatives, Bear Stearns, Lehman Brothers and AIG would never have failed, but without the excessive rents earned by JPM, GS and the remaining legacy OTC dealers, the largest banks cannot survive and must shrink dramatically.
- No matter how good an operator of commercial banks JPM CEO Jamie Dimon may be, his bank is doomed without its near-monopoly in OTC derivatives -- yet that same OTC business must eventually destroy JPM and the other large dealers. Seen from that perspective, the rescues of Bear Stearns and AIG were meant to protect not investors nor the global markets, but rather to protect JPM, GS and the small group of dealers who benefit from the continuance of their monopoly over the OTC derivatives market.
- As noted above, since many OTC contracts for currencies, interest rates or energy, for example, have observable cash markets upon which to base their pricing, moving these contracts to an exchange-traded format is a relatively easy matter that does not pose significant hurdles for the Congress, investors or regulators. Indeed, most market participants would welcome and benefit from such change.

- When it comes to CDS and complex structured assets, however, it is probably not possible to move these contracts to an exchange or to continue to tolerate them as OTC instruments. Because CDS contracts generally do not have a cash market or basis upon which to draw for the purpose of valuation, as a matter of law and regulation, these instruments are entirely speculative, unsuitable for most banks and investors, and thus should be banned entirely. It is not simply a question, as some observers have suggested, of buyers of CDS having an insurable interest in the underlying basis that is the problem. Rather, because there often times is not observable cash market for say a corporate bond or a CDO, the very act of a dealer offering these instruments to a customer must be viewed as entirely speculative and thus an act of deliberate securities fraud.
- Pretending to price CDS contracts or complex structured securities using “models” is a ridiculous deception that should be rejected by the Congress and by regulators. And members of Congress should remember that federal regulators and the academic economists who populate agencies like the Fed are almost entirely captured by the largest dealer banks. Even today, the Fed and other regulatory agencies raise little or no questions as to the efficacy of OTC derivatives and the absurd quantitative models that Wall Street pretends to use to value these gaming instruments. Why? Because the Fed knows that as the Congress properly regulates OTC derivatives, the largest banks will be forced to shrink their operations, the need for a “systemic risk regulator” will fade and the role of the Fed within the financial regulatory framework will gradually diminish.

3) How would various proposals to enhance oversight of OTC derivatives affect different market participants?

Imposing appropriate prudential and legal limitations on OTC derivatives would have enormous benefits for investors in terms of better pricing, increased transparency regarding market and liquidity risk, and improved surveillance and oversight by regulators. The notion that requiring basic norms of price discovery and disclosure for

OTC markets will hurt “innovation” is an absurd position and only illustrates the grotesque conflict of interest that now infects the dealers and federal regulators.

If one equates “innovation” with fraud and criminality, then yes regulation of OTC derivatives will certainly hurt innovation. But if the Congress does its duty and acts to conform the unregulated, opaque OTC markets to the basic standards of honesty, fairness and openness that have been the minimum requirement for markets in this country for over a century, then there should be no concern about stifling “innovation.”

Let’s make a list of participants and suggest some winners and losers from OTC reform:

Investors in Financial Markets: Big winners. Better pricing, more transparency, less “innovation” and thus reduced market and liquidity risk, fewer opportunities for severe loss and/or public bailouts.

Taxpayers: Big winners. Less systemic risk, less cost for bailouts of financial institutions, and less time spent by the Congress considering problems that should not exist in the first instance.

Consumers: Big winners. By limiting the complexity of financial instruments, the Congress can act to limit predatory behavior by lenders and major Wall Street dealer firms. If you do not allow overly-complex and dishonest financial instruments to exist in the first place, then the Congress will effectively limit systemic risk in financial markets.

Dealers: Winners. Less risk, lower returns, makes dealers more stable and less likely to require a public bailout. The illusory, short-term returns for dealers will fall, and with it the supra-normal compensation for traders and executives of the dealers, but the long-term risk-adjusted returns for large dealers will rise and the shareholders of the dealers will benefit.

4) How does the issue of improved OTC derivatives regulation relate to broader regulatory reform issues such as the creation of a new systemic risk regulator, and to what extent do our efforts require international coordination?

“Systemic risk” is a political concept that does not belong in law or regulation. The perception of “systemic risk,” which is another way of describing the human emotion of fear, is a function of inefficient markets and opaque, illiquid financial instruments such as CDS and complex structured assets. If the Congress acts to impose regulation on the OTC derivatives markets, then the perceived need for a systemic risk regulator will disappear. The phenomenon of “systemic risk” is a function of the fear among investors at least partly caused by the supra-normal returns earned by participants in the OTC markets. Once these markets are brought back within the established norms of fairness and transparency, and the nominal rates of return fall to the same levels as those earned in established public markets, then the problem of “systemic risk” will fade.

The key thing for the public and the Congress to understand is that the "profits" earned from unregulated derivatives markets are illusory and do not cover the true “systemic” risk posed by the continued tolerance of OTC derivative markets. Put another way, on a systemic basis, risk-adjusted profits from OTC derivatives are not positive over time because OTC markets create risk and opportunities for loss that would not otherwise exist. The net loss from the periodic collapse of what is best described as gaming activity gets off-loaded onto the taxpayer, thus OTC derivatives must be seen as any other speculative activity, namely a net loss to the economy and society.

If the Congress has the courage and the vision to act now to regulate and migrate to an exchange model those OTC markets that have a real, observable basis and ban those OTC instruments that do not have such a foundation, then the need for a systemic risk regulator will disappear and the only need for international coordination will be for the governments of the industrial nations to celebrate the end of one of the darkest, most alarming periods of speculative mania seen in many generations. Thank you.

AIG: Before Credit Default Swaps, There Was Reinsurance

The Institutional Risk Analyst

April 2, 2009

"What do many corporate buyers of insurance have in common with American International Group? Perhaps more than they would like to admit. Like AIG, many companies in the past few years have bought finite insurance, which transfers a prescribed amount of risk for a particular liability. What regulators now want to know is, how many companies, like AIG, have used finite insurance to artificially inflate their financial results?"

Infinite Risk?
CFO Magazine
June 1, 2005

"In the regulatory world, a 'side letter' is perhaps the most insidious and destructive weapon in the white-collar criminal's arsenal. With the flick of a pen, underhanded executives can cook the books in enormous amounts and render a regulator helpless."

Fraud Magazine
July/August 2006

For some time now, we have been trying to reconcile the apparent paradox of American International Group (NYSE:AIG) walking away from the highly profitable, double-digit RAROC business of underwriting property and casualty (P&C) risk and diving into the rancid cesspool of credit default swaps ("CDS") contracts and other types of "high beta" risks, business lines that are highly correlated with the financial markets.

In our interview with Robert Arvanitis last year, "'Bailout: It's About Capital, Not Liquidity; Seeking Beta: Interview with Robert Arvanitis', September 29, 2008," we discussed the difference between high and low beta. We also learned from Arvanitis, who worked for AIG during much of the relevant period, that the decision by Hank Greenberg and the AIG board to enter the CDS market was, at best, chasing revenue. No rational examination of the business opportunity, assuming that Greenberg and his directors were acting based on a reasoned analysis, could have resulted in a favorable decision to pursue CDS and other "high beta" risks, at least from our perspective.

In an effort to resolve this conundrum, over the past several months The IRA has interviewed a number of forensic experts, insurance regulators and members of the law enforcement community focused on financial fraud. The picture we have assembled is frightening and suggests that, far from just AIG, much of the insurance industry has been drawn into the world of financial engineering and has thus become part of the problem. Below we present our preliminary findings and invite your comments.

One of the first things we learned about the insurance world is that the concept of "shifting risk" for a variety of business and regulatory reasons has been ongoing in the insurance world for decades. Finite insurance and other scams have been at least visible to the investment community for years and have been documented in the media, but what is less understood is that firms like AIG took the risk shifting shell game to a whole new level long before the firm's entry into the CDS market.

In fact, our investigation suggests that by the time AIG had entered the CDS fray in a serious way more than five years ago, the firm was already doomed. No longer able to prop up its earnings using reinsurance because of growing scrutiny from state insurance regulators and federal law enforcement agencies, AIG's foray into CDS was really the grand finale. AIG was a Ponzi scheme plain and simple, yet the Obama Administration still thinks of AIG as a real company that simply took excessive risks. No, to us what the fraud Bernard Madoff is to individual investors, AIG is to the global financial community.

As with the phony reinsurance contracts that AIG and other insurers wrote for decades, when AIG wrote hundreds of billions of dollars in CDS contracts, neither AIG nor the counterparties believed that the CDS would ever be paid. Indeed, one source with personal knowledge of the matter suggests that there may be emails and actual side letters between AIG and its counterparties that could prove conclusively that AIG never intended to pay out on any of its CDS contracts.

The significance of this for the US bailout of AIG is profound. If our surmise is correct, the position of Fed Chairman Ben Bernanke and Treasury Secretary Tim Geithner that the AIG credit default contracts are "valid legal contracts" is ridiculous and reveals a level of ignorance by the Fed and Treasury about the true goings on inside AIG and the reinsurance industry that is truly staggering.

Does Reinsurance + Side Letters = CDS?

One of the most widespread means of risk shifting is reinsurance, the act of paying an insurer to offset the risk on the books of a second insurer. This may sound pretty routine and plain vanilla, but what most people don't know is that often times when insurers would write reinsurance contracts with one another, they would enter into "side letters" whereby the parties would agree that the reinsurance contract was essentially a canard, a form of window dressing to make a company, bank or another insurer look better on paper, but where the seller of protection had no intention of ever paying out on the contract.

Let's say that an insurer needs to enhance its capital surplus by \$100 million in order to meet regulatory capital requirements. They can enter into what appears to be a completely legitimate form of reinsurance contract, an agreement that appears to transfer the liability to the reinsurer. By doing so, the "ceding company" - an insurance company that transfers a risk to a reinsurance company - gets to drop that \$100 million in liability and its regulatory surplus increases by \$100 million.

The reinsurer assuming the risk does actually put up the \$100 million in liability, but with the knowledge that they will never have to actually pay out on the contract. This is good for the reinsurer because they are paid a fee for this transaction, but it is bad for the ceding company, the insurer with the capital shortfall, because the transaction is actually a sham, a fraud meant to deceive regulators, counterparties and investors into thinking that the insurer has adequate capital. Typically the fee is 6% per year or what is called a "loan fee" in the insurance industry.

When it operates in this fashion, the whole reinsurance industry could be described as a "surplus rental" proposition, whereby an insurer literally loans another insurer capital in the form of risk cover, but with a secret understanding in the form of a side letter that the loan will be reversed without any recourse to the seller of protection. You give me \$6 million in cash today, and I will give you a promise that we both know I will never honor.

Does this sound familiar? What our contacts in the insurance industry describe is almost a precise description of the CDS market, albeit one that evolved in the reinsurance industry literally decades ago and has been the cause of numerous insurance insolvencies and losses to insured parties. Or to put it another way, maybe the inspiration for the CDS market - at least within AIG and other insurers -- evolved from the reinsurance market over the past two decades.

As best as we can tell, the questionable practice of using side letters to mask the economic and business reality of reinsurance transactions started in the mid-1980s and continued until the middle of the current decade. This timeline just happens to track the creation and evolution of the OTC derivatives markets. In particular, the move by AIG into the CDS market coincides with the increased awareness of and attention to the use of side letters by insurance regulators and members of the state and federal law enforcement community.

Keep in mind that what we are talking about here are not questionable risk management policies but acts of deliberate and criminal fraud, acts that often result in jail time for those involved. As one senior forensic accountant who has practiced in the insurance sector for three decades told The IRA:

"In every major criminal fraud case in which I have worked, at the center of the investigation were these side letters. It was always very strange to me that on-site investigators and law enforcement officials consistently found that these side letters were being used to mask the true financial condition of an insurer, and yet none of the state regulators, the National Association of Insurance Commissioners (NAIC), nor federal law enforcement authorities ever publicly mentioned the practice. They certainly did not act like the use of side letters was a commonplace thing, but it was widespread in the industry."

It is important to understand that a side letter is a secret agreement, a document that is often hidden from internal and external auditors, regulators and even senior management

of insurers and reinsurers. We doubt, for example, that Warren Buffet or Hank Greenberg knew the details of side letters, but they should have. Just as a rogue CDS trader at a large bank like Societe General (NYSE:SGE) might seek to hide losing trades, the underwriters of insurers would use sham transactions and side letters to enhance the revenue of the insurer, but without disclosing the true nature of the transaction.

There are two basic problems with side letters. First, they are a criminal act, a fraud that usually carries the full weight of an "A" felony in many jurisdictions. Second, once the side letter is discovered by a persistent auditor or regulator examining the buyer of protection, the transaction becomes worthless. You paid \$6 million to AIG to shift risk via the reinsurance, but the side letter makes clear that the transaction is a fraud and you lose any benefit that the apparent risk shifting might have provided.

As the use of these secret side letters began to become more and more prevalent in the insurance industry, and these secret side deals were literally being stacked on top of one another at firms like AIG, the SEC began to investigate. And they began to find instances of fraud and to crack down on the practice. One of the first cases to come to the surface involved AIG helping Brightpoint (NASDAQ:CELL) commit accounting fraud, a case that eventually led the SEC to fine AIG \$10 million in 2003.

Wayne M. Carlin, Regional Director of the SEC's Northeast Regional Office, said of the settlements: "In this case, AIG worked hand in hand with CELL personnel to custom-design a purported insurance policy that allowed CELL to overstate its earnings by a staggering 61 percent. This transaction was simply a 'round-trip' of cash from CELL to AIG and back to CELL. By disguising the money as 'insurance,' AIG enabled CELL to spread over several years a loss that should have been recognized immediately."

Another case involved PNC Financial (NYSE:PNC), which used various contracts with AIG to hide certain assets from regulators, even though the transaction amounted to the "rental" of capital and not a true risk transfer.

As the SEC noted in a 2004 statement: "The Commission's action arises out of the conduct of Defendant AIG, primarily through its wholly owned subsidiary AIG Financial Products Corp. ("AIG-FP"), (collectively referred to as "AIG") in developing, marketing, and entering into transactions that purported to enable a public company to remove certain assets from its balance sheet." [Click here to see the SEC statement regarding the AIG transactions with PNC.](#)

The SEC statement reads in part: "In its Complaint, filed in the United States District Court for the District of Columbia, the Commission alleged that from at least March 2001 through January 2002, Defendant AIG, primarily through AIG-FP, developed a product called a Contributed Guaranteed Alternative Investment Trust Security ("C-GAITS"), marketed that product to several public companies, and ultimately entered into three C-GAITS transactions with one such company, The PNC Financial Services Group, Inc. ("PNC"). For a fee, AIG offered to establish a special purpose entity ("SPE") to which the counter-party would transfer troubled or other potentially volatile assets. AIG represented

that, under generally accepted accounting principles ("GAAP"), the SPE would not be consolidated on the counter-party's financial statements. The counter-party thus would be able to avoid charges to its income statement resulting from declines in the value of the assets transferred to the SPE. The transaction that AIG developed and marketed, however, did not satisfy the requirements of GAAP for nonconsolidation of SPEs."

In both cases, AIG was engaged in transactions that were meant not to reduce risk, but to hide the true nature of the risk in these companies from investors, regulators and the consumers who rely on these institutions for services. Keep in mind that while the SEC did act to address these issues, the parties involved received light punishments when you consider that these are all felonies that arguably would call for criminal prosecution for fraud, securities fraud, conspiracy and racketeering, among other things. Indeed, this is one of those rare cases where we believe AIG itself, as a corporate person, should be subject to criminal prosecution and liquidation.

Birds of a Feather: AIG & GenRe

[Click here](#) to see a June 6, 2005 press release from the SEC detailing criminal charges against John Houldsworth, a former senior executive of General Re Corporation ("GenRe"), a subsidiary of Berkshire Hathaway (NYSE:BRKA), for his role in aiding and abetting American International Group, Inc. in committing securities fraud.

The SEC noted: "In its complaint filed today in federal court in Manhattan, the Commission alleged that Houldsworth and others helped AIG structure two sham reinsurance transactions that had as their only purpose to allow AIG to add a total of \$500 million in phony loss reserves to its balance sheet in the fourth quarter of 2000 and the first quarter of 2001. The transactions were initiated by AIG to quell criticism by analysts concerning a reduction in the company's loss reserves in the third quarter of 2000."

But the involvement of the BRKA unit GenRe in the AIG mess was not the first time that GenRe had been involved in the questionable use of reinsurance contracts and side letters.

[Click here](#) to see an example of a side letter that was made public in a civil litigation in Australia a decade ago. The faxed letter, which bears the ID number from the Australian Court, is from an insurance broker in London to Mr. Ajit Jain, a businessman who currently heads several reinsurance businesses for BRKA, regarding a reinsurance contract for FAI Insurance, an affiliate of HIH Insurance.

Notice that the letter states plainly the intent of the transaction is to bolster the apparent capital of FAI. Notice too that several times in the letter, the statement is made that "no claim will be made before the commutation date," which may be interpreted as being a warranty by the insured that no claims shall be made under the reinsurance policy. By no coincidence, HIH and FAI collapsed in a \$5.3 billion dollar fiasco that ranks as Australia's biggest ever corporate failure.

[Click here](#) to read a March 9, 2009 article from The Age, one of Australia's leading business publications, regarding the collapse of HIH and FAI.

In 2003, an insurer named Reciprocal of America ("ROA") was seized by regulators and law enforcement officials. An investigation ensued for 3 years. According to civil lawsuits filed in the matter, GenRe provided finite insurance to ROA in order to make the troubled insurer look more solvent than it was in reality. Several regulators and law enforcement officials involved in that case tell The IRA that the ROA failure forced insurers like AIG and Gen Re to start looking for new ways to "cook the books" because the long-time practice of side letters was starting to come under real scrutiny.

"These reinsurance deals made ROA look better than it really was," one investigator with direct knowledge of the ROA matter tells The IRA. "They went into the ROA home office in VA with the state insurance regulators and law enforcement, and directed the employees away from the computers and records. During that three-year investigation, GenRe learned that local regulators and forensic examiners had put everything together and that we now understood the way the game was played. I believe the players in the industry realized that that they had to change the way in which they cooked the books. A sleight-of-hand trick that had worked for 25 years under the radar of regulators and investors was now revealed."

Several senior officials of ROA eventually were prosecuted, convicted of criminal fraud and imprisoned, but DOJ officials under the Bush Administration reportedly blocked prosecution of the actual managers and underwriters of ROA who were involved in these sham transactions, this even though state officials and federal prosecutors in VA were anxious to proceed with additional prosecutions.

AIG: From Reinsurance to CDS

While some reinsurers are large, well-capitalized entities that generally avoid these pitfalls, AIG was already a troubled company when it began to write more and more of these risk-shifting transactions more than a decade ago. It is easy to promise the moon when people think that they can deliver, but because AIG and their clients saw how easy it was to fool regulators and investors, the practice grew and most regulators did absolutely nothing to curtail the practice.

It was easy for AIG to become addicted to the use of side letters. The firm, which had already encountered serious financial problems in 2000-2001, reportedly saw the side letters as a way to mint free money and thereby help the insurer to look stronger than it really was. AIG not only helped banks and other companies distort and obfuscate their financial condition, but AIG was supplementing its income by writing more and more of these reinsurance deals and mitigating their perceived exposure via side letters.

A key figure in AIG's reinsurance schemes, according to several observers, was Joseph Cassano, head of AIG-FP. Whereas the traditional use of side letters was in reinsurance transactions between insurers, in the case of both CELL and PNC neither was an insurer!

And in both cases, AIG used sham deals to make two non-insurers, including a regulated bank holding company, look better by manipulating their financial statements. Falsifying the financial statements of a bank or bank holding company is an felony.

AIG-FP was simply doing for non-insurers what was common practice inside the secretive precincts of the insurance world. The SEC did investigate and they did finally obtain a deferred prosecution agreement with AIG, which was buried in the settlement with then-New York AG Elliott Spitzer.

The key thing to understand is that if you look at many of these reinsurance contracts between ROA and Gen Re, they look perfect. They appear to transfer risk and seem to be completely in order. But, if you don't get to see the secret agreement, the side letter that basically says that the reinsurance contract is a form of window dressing, then you cannot understand the full implications of the transaction, the reinsurance agreement. Not, several experts speculate, can you understand why AIG decided to migrate away from reinsurance and side letters and into CDS as a mechanism for falsifying the balance sheets and earnings of non-insurers.

Several observers believe that at some point in the 2002-2004 period, Cassano and his colleagues at AIG began to realize that state insurance regulators and the FBI were on to the reinsurance/side letter scam. A number of experts had been speaking and writing about the issue within the accounting and fraud communities, and this attention apparently made AIG move most of its shell game into the world of CDS. By no coincidence, at around this time side letters began to disappear in the insurance industry, suggesting to many observers that the industry finally realized that the jig was up.

It appears to us that, seeing the heightened attention from regulators and federal law enforcement agencies such as the FBI on side letters, AIG began to move its shell game to the CDS markets, where it could continue to falsify the balance sheets and income statements of non-insurers all over the world, including banks and other financial institutions.

AIG's Cassano even managed to hide the activity in a bank subsidiary of AIG based in London and under the nominal supervision of the Office of Thrift Supervision in the US, this it is suggested to hide this ongoing activity from US insurance regulators. Even though AIG had been investigated and sanctioned by the SEC, Cassano and his colleagues at AIG apparently were recalcitrant and continued to build the CDS pyramid inside AIG, a financial pyramid that is now collapsing. The rest, as they say is history.

Now you know why the Fed and EU officials are so terrified about an AIG liquidation, because it will result in heavy losses to or even the insolvency of banks and other corporations around the globe. Notice that while German Chancellor Angela Merkel has been posturing and throwing barbs at President Obama, French President Nicolas Sarkozy has been conciliatory toward the US.

But for the bailout of AIG, you see, President Sarkozy would have been forced to bailout SGE for a second time in two years. So long as the Fed and Treasury can subsidize AIG's mounting operating losses, the EU will be spared a financial bloodbath. But this situation is unlikely to remain stable for long with members of the Congress demanding an investigation of the past bailout, a process that can only result in bankruptcy for AIG.

Are the CDS Contracts of AIG Really Valid?

The key point is that neither the public, the Fed nor the Treasury seem to understand is that the CDS contracts written by AIG with these various non-insurers around the world were shams - with no correlation between "fees" paid and the risk assumed. These were not valid contracts as Fed Chairman Ben Bernanke, Treasury Secretary Geithner and Economic policy guru Larry Summers claim, but rather acts of criminal fraud meant to manipulate the capital positions and earnings of financial companies around the world.

Indeed, our sources as well as press reports suggest that the CDS contracts written by AIG may have included side letters, often in the form of emails rather than formal letters, that essentially violated the ISDA agreements and show that the true, economic reality of these contracts was fraud plain and simple. Unfortunately, by not moving to seize AIG immediately last year when the scandal broke, the Fed and Treasury may have given the AIG managers time to destroy much of the evidence of criminal wrongdoing.

Only when we understand how AIG came to be involved in CDS and the fact that this seemingly illegal activity was simply an extension of the reinsurance/side letter shell game scam that AIG, Gen Re and others conducted for many years before will we understand what needs to be done with AIG, namely liquidation. Seen in this context, the payments made to AIG by the Fed and Treasury, which were then passed-through to dealers such as Goldman Sachs (NYSE:GS), can only be viewed as an illegal taking that must be reversed once the US Trustee for the Federal Bankruptcy Court for the Southern District of New York is in control of AIG's operations.

Editor's note: Officials of BRKA and GenRe did not respond to telephonic and email requests by The IRA seeking comment on this article. An official of AIG did respond but was not willing to comment on-the-record for this report. We shall be happy to publish any written comments that BRKA, AIG or GenRe have on this article.

[Click here to see comments on this article posted on TheBigPicture.](#)

Questions? Comments? info@institutionalriskanalytics.com

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http://www.rcwhalen.com/pdf/JSF_Yield_08.pdf

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**RESPONSES TO WRITTEN QUESTIONS OF CHAIRMAN REED
FROM MARY L. SCHAPIRO**

Q.1. What do you see as your agency's possible role under the Administration's proposal in overseeing the OTC derivatives trading activities of dealers or other market participants? Do certain responsibilities for prudential oversight, enforcing record keeping requirements, or others still need to be determined?

A.1. I believe the SEC's role under the Administration's proposal in overseeing OTC derivatives trading activities should be the regulation of all securities-related OTC derivatives, as well as the dealers and other major market participants in the market for securities-related OTC derivatives. Under this approach, OTC derivatives markets that are interconnected with the regulated securities markets would be incorporated within a unified securities regulatory regime. The direct link between securities-related OTC derivatives and securities means that SEC regulation of the former is essential to the effectiveness of the SEC's statutory mission with respect to the securities markets. The securities regulatory regime is specifically designed to promote the Congressional objectives of investor protection, the maintenance of fair and orderly markets, and the facilitation of capital formation. It is important that securities-related OTC derivatives be subject to the Federal securities laws so that the risk of arbitrage and manipulation of interconnected markets is minimized. The securities regulatory regime is broad and flexible enough to accommodate a wide range of products, including securities-related OTC derivatives. If these products were defined as securities, the SEC would be able to apply regulatory requirements that were properly tailored to the nature of a particular product and its trading characteristics.

Under the SEC's recommended approach, securities-related OTC derivatives markets would be subject to oversight and supervision to ensure there are no gaps. To reduce duplication, securities-related OTC derivatives dealers that are banks would be subject to prudential supervision by their Federal banking regulator. All other dealers in securities-related OTC derivatives would be subject to supervision and regulation by the SEC. The SEC would have authority to set appropriate capital requirements for these OTC derivatives dealers. This approach would permit existing OTC derivatives dealers that are banks to continue to engage in OTC derivatives activities without being subject to the full panoply of broker-dealer regulation, while ensuring that all currently unregulated OTC derivatives dealers in securities-related OTC derivatives are subject to appropriate supervision and regulation.

In addition, the SEC would have authority, with respect to securities-related OTC derivatives, to establish business conduct standards, and record keeping and reporting requirements (including an audit trail), for all derivatives dealers and certain other participants. This "umbrella" authority would help ensure that the SEC has the tools it needs to oversee the entire market for securities-related OTC derivatives. The SEC would have the authority to impose certain reporting requirements and other requirements on persons transacting in securities-related OTC derivatives.

Q.2. Are there differences between the SEC and CFTC's approaches for regulating their respective markets and institutions that we should take into consideration when thinking about the regulation of the OTC derivatives markets? What experience does your agency have in addressing fraud and manipulation in the markets that you regulate?

A.2. Congress has designed the Federal securities laws to address issues related to securities. The Federal securities laws provide a comprehensive regulatory framework, otherwise unavailable, for the types of issues unique to securities and securities-related OTC derivatives, such as securities fraud (including insider trading), securities manipulation (including abusive "naked" short selling), and disclosure. In addition, the SEC has a long history of oversight of clearing agencies that permits the development of multiple, competing markets for the same instruments, which encourages innovation and lowers costs to market participants. The expertise of the SEC in administering the securities laws should be carried over to economic substitutes for securities, including all securities-related OTC derivatives. By contrast, CFTC regulation is not designed to address the types of issues unique to securities and securities markets, such as securities fraud, securities manipulation, disclosure, and short-selling abuses.

The SEC has extensive experience addressing fraud and manipulation in securities markets. Congress recognized that expertise in 2000 by extending the SEC's antifraud and antimanipulation authority to all securities-related OTC derivatives. Unfortunately, without the other tools available in the regulated securities markets, such as reporting and record keeping requirements, investigations involving securities-related OTC derivatives have been far more difficult and time-consuming than those involving securities. Regulatory reform should include providing the SEC with the tools necessary to police effectively all securities-related OTC derivatives.

Q.3. A key part of drafting any legislation in this area will be to determine who will have jurisdiction over the OTC derivatives markets. What are the particular areas of jurisdiction that your agencies do not yet see eye-to-eye on?

A.3. The SEC and CFTC are in broad agreement over the regulation of OTC derivatives markets, however, one open issue is the regulation of broad-based securities-related OTC derivatives. The SEC currently has antifraud and antimanipulation authority over these OTC derivatives, and has full regulatory authority over other broad-based OTC derivatives, such as OTC options on broad-based indexes and structured notes tied to broad-based indexes.

Broad-based securities-related OTC derivatives are the functional equivalent of securities, and the direct link between broad-based securities-related OTC derivatives and securities is such that SEC regulation of the former is essential to the effectiveness of the SEC's statutory mission with respect to the securities markets. In addition, fraud and manipulation are less likely to be detected if oversight responsibility is divided for instruments that market participants trade as part of a single strategy. Moreover, differences in the regulation of these products create gaps in the regulatory

fabric that may allow bad actors to go undetected, and create regulatory arbitrage opportunities for others, thus undermining the legitimacy of the regulated securities markets.

Q.4. The Administration’s proposal would require, among other things, clearing of all standardized derivatives through regulated central counterparties (CCPs). What is the best process or approach for defining standardized products? How much regulatory interpretation will be necessary?

A.4. Congress could require regulatory agencies to determine which OTC derivatives meet criteria established by statute to be considered “standardized” and clearing eligible. As there is no simple set of rules that would effectively identify which types of OTC derivatives are sufficiently “standardized” to benefit from the systemic risk reduction possible through CCP clearing, a level of regulatory interpretation may be called for. OTC instruments are diverse and tied to the dynamics and information available about the underlying market.

Q.5. Are there key areas of disagreement between market participants about how central counterparties should operate? For example, what are the different levels of access these central counterparties grant to different market participants? What are the benefits and drawbacks of different ways of structuring these central counterparties?

A.5. Disagreements among market participants about how CCPs should operate include whether an exchange or other trading facility should be permitted to control where a trade is cleared and thereby dictate to the CCP whether trades executed on different exchanges or trading facilities are fungible for netting purposes. If an exchange or trading facility controls the CCP, it can use this control to achieve significant liquidity in the product for which the CCP clears, thereby limiting competition.

The SEC has administered the securities laws by requiring that the exchange on which a trade is executed does not mandate the central counterparty where the trade is cleared. A market participant may purchase a security on one exchange or trading facility, sell it on another exchange or trading facility, and still reap the benefits of the clearing agency for both transactions. This process permits multiple exchanges or trading facilities to offer the same security without discouraging competition for trading services.

In contrast to securities clearing agencies, futures clearinghouses are commonly linked with an affiliated exchange. Typically, exchanges compete over the same new contract initially, but once an exchange achieves significant liquidity in the contract, the other exchange usually exits the market. Some market participants believe that this has permitted exchanges to impose “vertical silo” structures in which an exchange controls the clearinghouse for its products and uses this control to dominate trading in its products. Since the benefit of a CCP is confined to contracts executed on the exchange that is linked to the CCP, there is the potential that such a system may discourage competition for trading services.

The Commission recognizes that different market participants have different trading needs, and the frameworks for trading derivatives should retain flexibility to allow variation to meet those

needs. The Commission believes that any disagreements among industry participants regarding the operations of an OTC derivatives central counterparty should be resolved by competition and market forces, subject to oversight by the Commission and other regulatory authorities.

Q.6. One key topic touched on at the hearing is the extent to which standardized products should be required to be traded on exchanges. What is your understanding of any areas of disagreement about how rigorous new requirements should be in terms of mandating, versus just encouraging, exchange trading of standardized OTC derivatives?

A.6. In building a framework for the regulation of OTC derivatives the goal should be to maximize the extent to which standardized derivatives are traded on exchanges or exchange-like venues. The regulatory framework for trading OTC derivatives should be designed to achieve vital public policy objectives for such instruments, including transparency, efficiency, and prevention of fraud and manipulation. The regulatory framework for standardized derivatives should, however, retain sufficient flexibility to allow market mechanisms to develop that meet varying trading needs for products (such as products that may lack sufficient liquidity to be traded on an exchange), while ensuring all trading markets are subject to a unified regulatory scheme that establishes a framework for fair competition among markets, protects the public interest and is sufficiently transparent to allow for regulatory oversight.

Q.7. Can you share your views on the benefits of customized OTC derivatives products? About how much of the market is truly customized products?

A.7. Customized financial derivatives appear to play an important risk management role for pension plans, insurance companies, and other users that have a need to hedge specific financial risks. An insurance company, for example, may use a customized product in connection with the management of separate account portfolio assets to assure long-term matching of assets and insurance liabilities, while pension plans may use customized hedging/risk management products, including, potentially, equity swaps and CDS to assure funding of pension obligations over time. In addition, offerors, including mutual funds, of guaranteed return products may use customized swaps to hedge their long-term obligations to provide a specified return. Similarly, customized derivatives involving foreign currency, interest rates, and hard commodities appear to play an important risk management role for nonfinancial companies and other end users because customized agreements can be tailored to address a user's specific risks over a particular time period. Requiring the use of standardized agreements to manage risks may introduce a mismatch between the specific risks being hedged and the standardized agreement, thus providing a less effective tool for addressing a user's underlying risk.

It is unclear how much of the market comprises truly customized products. In the OTC derivatives market, there is a continuum of products that are standardized or could be standardized but there is no clear dividing line currently between standardized and customized products. In addition, because most OTC derivatives are

largely excluded from the securities regulatory framework by the Commodity Futures Modernization Act of 2000, the SEC currently does not have ready access to reliable information on the volume of transactions and how it breaks out between standardized and customized products.

Q.8. The Administration’s proposal would subject the OTC derivatives dealers and all other firms whose activities in those markets create large exposures to counterparties to a “robust and appropriate regime of prudential supervision and regulation,” including capital requirements, business conduct standards, and reporting requirements. What legislative changes would be required to create margining and capital requirements for OTC derivative market participants? Who should enforce these requirements for various market participants? What are the key factors that should be considered in setting these requirements?

A.8. All OTC derivatives dealers should be subject to prudential supervision and regulation with respect to capital and margin to ensure there are no gaps. To reduce duplication, dealers in securities-related OTC derivatives that are banks would be subject to prudential supervision (*e.g.*, capital and margin) by their Federal banking regulator. All other dealers in securities-related OTC derivatives could be subject to supervision and regulation with respect to capital and margin by the SEC. Under this approach, OTC derivatives dealers that are banks could continue to engage in OTC derivatives activities without being subject to the full panoply of broker-dealer regulation, while all currently unregulated OTC derivatives dealers in securities-related OTC derivatives would be subject to appropriate prudential supervision and regulation for capital and margin.

Key factors that should be considered in setting margin and capital requirements for OTC derivatives dealers would include: (1) the business of the dealers and its risks other than with respect to OTC derivatives, (2) the liquidity and volatility of the OTC derivative and the quality of the asset on which the OTC derivative is based, and (3) the creditworthiness of the dealer’s counterparties.

In addition, the SEC should have authority, with respect to securities-related OTC derivatives, to establish business conduct standards, and record keeping and reporting requirements (including an audit trail), for all OTC derivatives dealers and certain other participants in the OTC derivatives market. This “umbrella” authority would help ensure that the SEC has the tools it needs to oversee the entire market for securities-related OTC derivatives.

Q.9. One concern that some market participants have expressed is that mandatory margining requirements will drain capital from firms at a time when capital is already highly constrained. Is there a risk that mandatory margining will result in companies choosing not to hedge as much and therefore have the unintended consequence of increasing risk? How can you craft margin requirements to avoid this?

A.9. Appropriate margin requirements serve the purpose of ensuring that registered entities are adequately protected and prevent them from having to set aside excessive amounts of their own capital in order to manage risks. Existing margin methodologies are designed to reflect the risk of a position even during periods of

market stress. Using these methodologies, margin requirements can be designed to appropriately address the risks of underlying instruments without preventing firms from entering into otherwise economically advantageous transactions or creating undue burdens for companies that wish to enter into OTC derivatives transactions.

Q.10. Is there a risk that regulating the OTC derivatives markets will dramatically alter the landscape of market participants or otherwise have unintended consequences we aren't aware of?

A.10. There is always a risk that regulation may alter the landscape of market participants or otherwise have unintended consequences. However, the risk of not regulating OTC derivatives markets is likely to be far larger, as demonstrated by recent market events. In this regard, it is important to curtail the potential that one of the unintended consequences will be that markets move offshore seeking lighter regulation. As Secretary Geithner noted in his May 13th letter to Congress, "[w]e also will need to work with authorities abroad to promote implementation of complementary measures in other jurisdictions, so that achievement of our objectives is not undermined by the movement of derivatives activity to jurisdictions without adequate regulatory safeguards or for which it is difficult or impossible for U.S. regulators to reach such participants under existing jurisdictional and international law frameworks."

**RESPONSES TO WRITTEN QUESTIONS OF SENATOR SCHUMER
FROM MARY L. SCHAPIRO**

Q.1. Chairman Schapiro, do you agree that it is possible for derivatives to have a significant impact on prices in securities and equities markets? If so, isn't it critical that these derivative products be subject to the same regulator as the securities and equities themselves in order to ensure market integrity?

A.1. Yes. Securities-related derivatives are economic substitutes for securities. As such, they have a direct and significant impact on securities markets. The direct link between securities-related derivatives and securities means that SEC regulation of the former is essential to the effectiveness of the SEC's statutory mission with respect to the securities markets. For example, purchasers of credit default swaps on an issuer's debt appear to have significant incentives to aggressively sell short the equity securities of that issuer as a trading strategy, effectively linking activities and changes in the credit default swap market with those in the equity market. As a result, manipulative activities in the credit default swap market would affect U.S. issuers in the underlying equity market. A regulatory solution that continued a distinction between securities-related derivatives and securities would perpetuate that problem.

To ensure market integrity, it is thus critical that these derivative products be subject to the same regulator as the securities themselves. Fraud and manipulation are less likely to be detected if oversight responsibility is divided for instruments that market participants trade as part of a single strategy. Moreover, differences in the regulation of these products create gaps in the regulatory fabric that allow bad actors to go undetected and create reg-

ulatory arbitrage opportunities for others, thus undermining the legitimacy of the regulated securities markets.

Congress has already recognized the impact of securities-related derivatives on securities regulated by the SEC when it applied the antifraud and antimanipulation provisions of the securities laws to securities-related derivatives in 2000. Cutting back the SEC's current authority over securities-related derivatives is not a solution to current problems in the derivatives market. Instead, that authority needs to be extended to provide the SEC with better tools to regulate securities-related derivatives.

Q.2. Chairman Schapiro, do you agree that broad-based and narrow-based derivatives products can both have an impact on the underlying markets that they reference?

A.2. Yes. In the case of securities-related derivatives, both broad-based and narrow-based derivatives products can have an impact on the underlying securities market because they are economic substitutes for the underlying securities. Both broad-based and narrow-based securities-related derivatives can be used to establish either a synthetic "long" or "short" exposure to an underlying security or group of securities. In this way, market participants can replicate the economics of either a purchase or sale of securities without purchasing or selling the securities themselves.

For example, an equity swap on a single equity security or on an index, such as one of the Dow stocks or the Dow itself, would give the holder of the "long" position all of the economic exposure of owning the stock or index (including exposure to price movements, as well as any dividends or other distributions), without actual ownership of the stock or index. Similarly, credit default swaps can be used as synthetic substitutes for the debt securities of one or more companies.

Because market participants can readily use both broad-based and narrow-based securities-related derivatives to serve as synthetic substitutes for securities, the markets for these derivatives directly and powerfully implicate the policy objectives for capital markets that Congress has set forth in the Federal securities laws, including investor protection, the maintenance of fair and orderly markets, and the facilitation of capital formation.

Q.3. Chairman Schapiro, I am very concerned by efforts by the European Commission to implement protectionist restrictions on derivatives trading and clearing. A letter signed by many of the world's largest financial institutions earlier this year under significant pressure from European Commission, commits them to clearing any European-referenced credit default swap exclusively in a European clearinghouse. This kind of nationalistic protectionism has no place in the 21st-century financial marketplace. What steps can you and will you take to combat these efforts to limit free trade protect free access to markets? If Europe refuses to alter its position, what steps can be taken to protect the United States' position in the global derivatives markets?

A.3. Because the CDS market is global, regulators in all jurisdictions will have an interest in being able to obtain information about the derivatives trading in or that otherwise may have an impact on their markets. Commission staff has expressed the view

that the focus should be on ensuring that central counterparties (CCPs) operate according to high standards and that all relevant regulators have access to information held by CCPs that they need to carry out their mandates. If this is achieved, the European Commission's concerns would be addressed without interfering with the market's ability to select the best venue for clearing. In the U.S.—European Union Financial Markets Regulatory Dialogue, we have also discussed the fact that the European Union's requirement invites similar retaliatory regulation in other jurisdictions, potentially leading to conflicts of law. This, in turn, could negatively impact both the flow of cross-border business as well as regulatory cooperation. These arguments have not altered the European Commission's policy to date. We will continue to monitor this situation.

As a practical matter, the Commission is participating in international coordination with European regulators to ensure that we can carry out our regulatory duties.

Q.4. Chairman Schapiro, one of many important lessons from the financial panic last fall following the collapse of Lehman Brothers and AIG, it is that regulators need direct and easier access to trade and risk information across the financial markets to be able to effectively monitor how much risk is being held by various market participants, and to be able to credibly reassure the markets in times of panic that the situation is being properly managed. A consolidated trade reporting facility, such as the Trade Information Warehouse run by the Depository Trust and Clearing Corporation for the credit default swaps markets, is the critical link in giving regulators access to the information this kind of information. Currently, there is no consensus on how trade reporting will be accomplished in domestic and international derivatives markets, and it is possible that reporting will be fragmented across standards established by various central counterparties and over-the-counter derivatives dealers. Do you agree that a standardized and centralized trade reporting facility would improve regulators' understanding of the markets, and do you believe that DTCC is currently best equipped to perform this function?

A.4. I agree that a standardized and centralized trade reporting facility is one way to improve regulators' understanding of the financial markets because it would provide regulators the ability to view CDS position data from a central vantage point and would provide a single source of time critical information in the event of a firm failure or other financial crisis. DTCC's move in November 2006 to start warehousing a record of credit derivative trades played a significant role in helping to restore market confidence in the wake of the Lehman failure last year. Last October, DTCC informed the market that, based on its warehouse records, the credit derivative exposure to Lehman was close to a net notional value of approximately \$6 billion. This was done to stem speculation that the credit derivative exposure from Lehman was \$400 billion. Subsequently, when the Lehman's positions closed out, the actual value was \$5.2 billion.¹ In addition, direct access to CDS trade information from clearing agencies and centralized trade reporting facilities is crit-

¹ http://www.dtcc.com/news/newsletters/dtcc/2009/mar/tiw_press_briefing.

ical to the Commission's ability to surveil for and enforce the anti-fraud provisions of the Federal securities laws.

**RESPONSES TO WRITTEN QUESTIONS OF SENATOR BUNNING
FROM MARY L. SCHAPIRO**

Q.1.a. Do you believe the existence of an actively traded cash market is or should be a necessary condition for the creation of a derivative under law and regulation?

A.1.a. The primary function of derivatives is to facilitate the efficient transfer of risk exposure among market participants. Trading of risk exposure through derivatives enables parties who have natural risk exposures as part of their business or investment operations to reduce or eliminate that risk by transferring it to somebody who has a natural offsetting risk, or to somebody else who is more willing to bear that risk. Some sources of fundamental business risk are closely related to the prices of assets that are traded in an active cash market, such as stock or foreign currency. Other risks lack robust cash market pricing sources. Derivatives based on these risks, however, can be important tools for managing these risks.

As with any derivative product, the key challenge for policy makers will be determining when and whether the value of these products for risk management purposes outweighs potential concerns about the products' underlying market integrity.

Q.1.b. If not, what specific, objective means besides a cash basis market could or should be used as the underlying relationship for a derivative?

A.1.b. This issue raises important public policy concerns. Products without an active cash or derivatives market may have less robust price discovery. These products, nevertheless, may be useful to hedge or transfer real economic risks and, therefore can play a beneficial role in facilitating risk management and risk transfer activities. Policy makers should consider whether risk management and distribution purposes outweigh concerns with weak or unreliable pricing sources. Traditionally, the SEC has used disclosure to identify valuation risks associated with securities.

Q.2. Why should the models to price OTC derivatives not be published? If there is no visible cash basis for a derivative, and the model is effectively the basis, why should the models not be public?

A.2. The best way to improve market understanding and "value" determinations for derivatives is to standardize and centrally clear them (to the extent possible) and encourage them to be traded on exchanges. This would provide great transparency. Where standardization or exchange trading is less likely, I believe policy makers should endeavor always to maximize market transparency through reporting or other mechanisms.

The argument for making models public when no cash market exists is an interesting way to provide a valuation check, but there are costs to this approach as well. For example, would investors continue to innovate and alter their models if they were public and available to their competitors? Would models become more similar—decreasing market style diversity and increasing the risk that

major participants engage in the same trades (increasing volatility and risk)?

Q.3. What is the best way to draw the line between legitimate hedges and purely speculative bets? For example, should we require an insurable interest for purchasers of credit protection, require delivery of the reference asset, or something else?

A.3. Drawing a line, based on trading positions, between hedgers and speculators will necessarily be arbitrary because we cannot determine the intent of a trader from their portfolio holdings.

Some market participants will hold derivative positions as part of a well-defined hedge (*e.g.*, they also have large current or anticipated exposure to the prices of securities or debt instruments). Others have no exposure at all and hold a derivatives position strictly to gain exposure, that is to speculate, on price movements. However, drawing a line between the two motives is difficult and may yield unintended consequences. First, there are a number of entities that do not hold large securities or debt holdings, who may, nonetheless have a legitimate risk management purposes: For example, they may want to hedge their “exposure” to a major supplier or customer. Second, even if a reasonable line is drawn, there may be significant market consequences: For example, “speculators” can often provide liquidity for hedgers—so eliminating speculators can raise the cost of risk management and make hedges less effective. In developing a regulatory framework for OTC derivatives these and other complexities will need to be addressed in a manner that seeks to prevent the potential for market abuses while also creating a system that facilitates legitimate transactions.

Q.4. Is the concern that increased regulation of derivatives contracts in the United States will just move the business overseas a real issue? It seems to me that regulating the contracts written in the U.S. and allowing American firms to only buy or sell such regulated contracts would solve the problem. What else would need to be done?

A.4. Clearly we need to move forward with our regulatory framework, even if other jurisdictions do not follow. However, financial markets today are global markets and coordinating with our international counterparts will be critical. Absent a response coordinated with foreign regulators exercising similar authority, the effectiveness of any regulatory limits would be constrained significantly by the international nature of the derivatives market. Because there is the potential for trading business to move to less regulated markets, we are working with our counterparts internationally to ensure that all derivatives dealers and large participants in OTC derivatives market are subject to prudential regulation and supervision.

Q.5. Do over-the-counter or custom derivatives have any favorable accounting or tax treatments versus exchange traded derivatives?

A.5. There is no difference in the financial statement accounting principles applied to exchange traded versus other types of derivatives. With respect to the financial accounting treatment, contracts or other arrangements that meet the accounting definition of a de-

derivative are ordinarily recognized and measured at fair value with changes recognized in income each period whether the derivative is exchange traded or customized. However, accounting rules allow companies to achieve hedge accounting and defer recognizing the impact of changes in value of derivatives used for hedging purposes when changes in the value of a derivative match and offset changes in the value of the hedged item to a sufficient degree. It is possible, in some cases, that a customized derivative may be more likely to economically offset changes in the value of the exposure a company is trying to hedge. Thus for certain applications, customized derivatives may be more likely to offset the exposure and thus may be more likely to meet the requirements for hedge accounting. In all cases where a derivative serves as a highly effective hedge, accounting standards clearly permit the entity to reflect the reduction in risk in the measurement of income.

Q.6. In addition to the Administration's proposed changes to gain on sale accounting for derivatives, what other changes need to be made to accounting and tax rules to reflect the actual risks and benefits of derivatives?

A.6. Even before the credit crisis, financial accounting for derivatives had been identified as deserving additional consideration. In this regard, the Financial Accounting Standards Board (FASB) issued new disclosure requirements in 2008 that provide greater transparency about derivative and hedging activities to investors, including a substantial amount of additional information about credit default swaps.

Derivatives accounting also represents a component of the FASB's current project to reconsider the accounting principles for all financial instruments, recently undertaken in concert with the International Accounting Standards Board. This project was added to the FASB's agenda, in part, as a response to issues identified by the SEC and others during the credit crisis. Many have argued that the hedge accounting rules are overly complex and could be improved to make hedge accounting easier to apply and more understandable to investors. While we are supportive of such simplification, we would expect that because of their volatile nature, derivatives will continue to be measured at fair value each period on the balance sheet, and significant disclosures will continue to be needed for investors to understand the exposures, strategies, and risks of companies that utilize them.

The tax treatment of different types of derivatives is outside of the SEC's area of expertise and may be better addressed by tax professionals and/or the IRS.

Q.7. Should parties to derivative contracts be required to post cash collateral, or is other collateral acceptable? And is there any reason not to require segregation of customer collateral?

A.7. Provided that positions are marked to market and collateral calls are made daily, cash collateral is one prudent type of collateral. In certain circumstances, though, highly liquid securities that tend to move in price consistent with the underlying reference asset may be as desirable for collateral as cash. Guidelines for acceptable forms of collateral will need to reflect the risks and circumstances associated with each type of acceptable collateral, in-

cluding, but not limited to, price volatility and liquidity, and be agreed to by both parties to the transaction. Accordingly, under certain circumstances, noncash collateral may be acceptable.

A priority of a regulatory framework for OTC derivatives should be ensuring a process that allows for the prompt return of customer collateral. Properly constructed regulations governing the segregation of customer collateral can provide customer protection while still promoting the operation of efficient OTC derivatives markets.

Q.8. Is there any reason standardized derivatives should not be traded on an exchange?

A.8. In building a framework for the regulation of OTC derivatives, the goal should be to encourage all standardized derivatives to be traded on exchange or equivalent exchange-like venues that provide full regulatory and market transparency. The regulatory scheme for trading OTC derivatives should be designed to achieve vital public policy objectives for such instruments, including transparency, efficiency, and prevention of fraud and manipulation. The regulatory scheme for standardized derivatives should, however, retain sufficient flexibility to allow market mechanisms to develop that meet varying trading needs for products (such as products that may lack sufficient liquidity to be traded on an exchange), while ensuring all dealers and trading markets (including for non-standardized products) are subject to a unified regulatory scheme that establishes a framework for fair competition among markets, protects the public interest and is sufficiently transparent to allow for regulatory oversight.

Q.9. It seems that credit default swaps could be used to manipulate stock prices. In a simple example, an investor could short a stock, and then purchase credit default swaps on the company. If the swaps are not heavily traded, the purchase would likely drive up the price of the swaps, indicating higher risk of default by the company, and lead to a decline in the stock price. Is there any evidence that such manipulation has taken place? And more generally, what about other types of manipulation using derivatives?

A.9. The Commission is very concerned about potential manipulation of the equity markets through the use of credit default swaps or other derivative instruments. Because there is no central reporting or audit trail requirement for OTC derivatives, including securities-related OTC derivatives, there is no organized surveillance by any Federal regulatory agency or self-regulatory organization. This regulatory gap substantially inhibits the Commission's examination and enforcement efforts, and the lack of surveillance creates substantial risk to the markets collaterally affected by swap transactions, such as the market for debt and equity securities related to credit default swaps.

The antifraud prohibitions in the Federal securities laws currently apply to all securities-related OTC derivatives, including credit default and other swaps related to securities. The Commission, however, needs better tools to enforce existing prohibitions over all securities-related OTC derivatives, including authority to promulgate reporting and record keeping rules and prophylactic antifraud rules.

Currently, if Commission enforcement or examination staff suspects illegal conduct in the derivatives market, staff must engage in the time-consuming process of manually recreating activity in this unregulated market, which is challenging in a market without uniform documentation, transparent pricing, and time-stamped records. Under these circumstances, it is difficult to identify violations and prove the intent required to support charges under the Federal securities laws. Uniform record keeping and reporting would provide the type of information needed to identify suspicious trading patterns and to investigate or examine misconduct. With uniform audit trail and record keeping requirements, Commission staff could, for example, better pinpoint where manipulative credit derivative trading occurs in tandem with other trading strategies, such as short selling.

Q.10. Credit default swaps look a lot like insurance when there are unbalanced, opportunistic sellers. However, life and property insurance requires an insurable interest for the buyer and reserves for the seller. Why should we not regulate these swaps like traditional insurance?

A.10. Although credit default swaps are frequently described as insurance (buying protection against the risk of default) and may have certain elements similar to traditional insurance, we believe that securities-related credit default swaps are more appropriately considered, and regulated, as securities. The value of the payment in the event of default is determined by reference to a debt security, so that the payment is tied directly to a security. As noted in the CDS example in question #9, securities-related credit default swaps are tied directly to the securities markets and issuers of securities. As a result, manipulative activities in the credit default swap market would affect U.S. issuers in the underlying equity market.

Congress recognized the impact of these instruments on the primary markets that are regulated by the SEC when it applied the antifraud and antimanipulation provisions of the securities laws to securities-related OTC derivatives, such as securities-related credit default swaps, in 2000. That authority needs to be extended to provide the SEC the regulatory tools to regulate these products. Regulating securities-related credit default swaps as insurance would actually undermine the protections provided by the Federal securities laws by creating the potential for arbitrage between two different types of regulation for economically related products.

Q.11. How do we take away the incentive for credit default swap holders to force debtors into bankruptcy to trigger a credit event rather than renegotiate the debt?

A.11. Some commenters have identified a phenomenon they characterize as the “empty creditor” problem. These commenters have noted that credit default swaps, among other products, allow a creditor holding a debt obligation to reduce or eliminate its economic exposure to the debtor while still retaining the rights as a creditor. As a result, creditors who hold significant credit default swap positions may prefer that the debtor enter into bankruptcy because the creditor will receive payments in connection with its

CDSs that exceed any benefit the creditor would get if the debtor restructured its debt.

The Federal securities laws do not establish any duties of a creditor to a lender or to other creditors. The motivation of a creditor to take any action with respect to its debt holdings in a particular company may be guided by many different economic and investment factors that are unique to such creditor, with credit default swaps being just one such factor. For example, a creditor that also is a significant equity holder may have different motivations in making credit decisions as compared to a creditor that holds only debt. Focusing only on a creditor's actions as influenced by its holding of credit default swaps does not take into account these other motivating factors.

Q.12. How do we reduce the disincentive for creditors to perform strong credit research when they can just buy credit protection instead?

A.12. As the financial crisis illustrates, it certainly appears that some major market participants may have used credit protection as an alternative to engaging in more robust traditional credit research and review regarding their credit exposures—leading to hidden/higher credit risk and the risk that the credit protection provider cannot perform. This tension is real. However, this moral hazard that exists in credit protection exists in a number of contexts in the financial arena. For example, this hazard exists when investors rely on a credit rating or an analyst's research report instead of engaging in their own research. Although inherent, this problem is exacerbated by a number of factors in the credit arena—such as when information is limited to a small number of creditors or unavailable to the public; when traditional credit standards are reduced; or when investors and creditors become less vigilant due to perceptions (or misperceptions) of market safety. In the short term, the financial crisis itself has certainly reduced these risks, but it is important that regulators (as well as investors and other market participants) remain vigilant to help avoid the next crisis. To better ensure that vigilance, we believe more accountability and transparency will do a lot to keep investors informed of the flaws of overreliance on credit protection, credit ratings, or a similar third-party validator before making investment or credit decisions.

Q.13. Do net sellers of credit protection carry that exposure on their balance sheet as an asset? If not, why shouldn't they?

A.13. Sellers of credit protection typically carry a liability on their balance sheets for the obligation to compensate the guaranteed party if a credit event occurs on the referenced asset. Some types of credit protection are considered insurance contracts under the accounting rules and the resulting obligation is measured based on insurance accounting principles. Other types of credit protection, such as credit default swaps, meet the accounting definition of a derivative and the resulting liability is marked to market each period.

Unless an insurer or guarantor controls the referenced asset, accounting rules do not permit or require the referenced assets to be recognized on the guarantor's balance sheet. In other words, simply guaranteeing or insuring the value of an asset does not require a

guarantor to record the insured asset on its balance sheet under generally accepted accounting principles. On the other hand, guarantors that control the insured or guaranteed assets will generally be required under new off-balance sheet accounting rules to report on their balance sheets the controlled assets effective for 2010 financial reports.

Q.14. In your testimony you mentioned synthetic exposure. Why is synthetic exposure through derivatives a good idea? Isn't that just another form of leverage?

A.14. Synthetic exposure through derivatives can be a good idea, or a bad idea—depending on the circumstances. While they can be used to increase leverage, they can also be used to reduce transaction costs, achieve tax efficiencies, or manage risk. Synthetic exposure through derivatives is a component of many arbitrage strategies that help align prices of related assets across markets. A key question for policy makers, I believe, will be determining how best to utilize the “good” aspects of derivatives use (*e.g.*, as a risk management tool for individual institutions); while minimizing the “bad” aspects (unclear pricing, hidden leverage, and increased counterparty and systemic risk).

It is also important to keep in mind that when synthetic exposure through securities-related derivatives products is used to replicate the economics of either a purchase or sale of securities without purchasing or selling the securities themselves, the markets for these derivatives directly and powerfully implicate the policy objectives for capital markets that Congress has set forth in the Federal securities laws, including investor protection, the maintenance of fair and orderly markets, and the facilitation of capital formation. Given the impact on the regulated securities markets—and the arbitrage available to financial engineers seeking to avoid oversight and regulation—it is vital that the securities laws apply to securities-based swaps.

Q.15. Regarding synthetic exposure, if there is greater demand for an asset than there are available assets, why shouldn't the economic benefit of that demand—higher value—flow to the creators or owners of that asset instead of allowing a dealer to create and profit from a synthetic version of that asset?

A.15. This is an interesting question. I believe policy makers should consider carefully whether/how the creation of these synthetics affect demand for the underlying securities. Traditionally, the view is that dealers and other financial intermediaries provide liquidity to the market and help make markets more efficient by reducing the extent to which asset prices are subject to excess volatility that may arise from short-term trading imbalances. The ability of liquidity providers to improve market quality is significantly enhanced when they are able to engage in activities that involve synthetic exposure. Constraints on the ability of intermediaries to provide liquidity increase the propensity for asset prices to deviate significantly from fundamental value. These deviations can lead to a misallocation of capital, and can be harmful to the investors. For example, investors are harmed when they buy an asset at a price that is temporarily inflated due to a demand shock.

Q.16. One of the arguments for credit default swaps is that they are more liquid than the reference asset. That may well be true, but if there is greater demand for exposure to the asset than there is supply, and synthetic exposure was not allowed, why wouldn't that demand lead to a greater supply and thus more liquidity?

A.16. On average, large debt issues tend to be more liquid than small ones because they tend to be held by a greater number of investors and there are more units available for trading. This does not mean, however, that an issuer would have the ability to improve the liquidity of its bond issue by issuing more debt. Market liquidity depends mainly on the ability and willingness of financial intermediaries to take on inventory positions in response to demand shocks.

Q.17. Is there any justification for allowing more credit protection to be sold on a reference asset than the value of the asset?

A.17. The primary justifications I have seen for permitting the purchase of credit protection beyond an entity's "exposure" are (1) these participants provide liquidity to those who are themselves hedging; (2) a participant may use credit protection based on one reference asset to hedge risks on other related assets; and (3) investors may wish to take a position expressing a view that the market is underestimating the probability or severity of default.

Q.18. Besides the level of regulation and trading on an exchange, there seems to be little difference in swaps and futures. What is the need for both? In other words, what can swaps do that forward contracts cannot?

A.18. The term "swap" generally refers to over-the-counter derivative instruments, a category that encompasses a wide range of products, including forward contracts, interest rate swaps, total return swaps, equity swaps, currency swaps, credit default swaps and OTC options, including both traditional and digital (or binary) options. In contrast, futures are a specific kind of standardized, exchange-traded derivative. Swaps may be tailored to address specific risks in ways not available with standardized products such as futures. For example, customized swaps involving foreign currency, interest rates, and hard commodities may play an important risk management role for companies and other end users because standardized contracts, in these circumstances, may not address the needs of a company with respect to the specific risks being hedged.

Q.19. One of the arguments for keeping over-the-counter derivatives is the need for customization. What are specific examples of terms that need to be customized because there are no adequate substitutes in the standardized market? Also, what are the actual increased costs of buying those standard contracts?

A.19. Commercial businesses will often individually customize OTC derivatives to meet the company's specific risk management needs. Companies may use OTC derivatives to manage fluctuations in materials prices, equity OTC contracts, commodities, fuel, interest rates and foreign currency. For example, a company that borrows money at a variable interest rate might enter into derivatives contracts to turn the borrowing into fixed-rate debt or as protection against swings in currencies or the price of commodities such as

food and oil. The company can customize the contract to mature on a specific date or for a nonstandard notional amount, creating a more effective hedge. The inability to create perfect hedges can introduce basis risk. Basis risk can also occur when the asset being hedged is different from underlying asset of the derivative that is being used to hedge the exposure. Allowing firms to continue to bilaterally negotiate customized OTC derivatives contracts can help mitigate these risks.

Standardizing OTC derivatives may increase costs in certain instances and decrease costs in others. Standardized derivatives, particularly those that are cleared through central counterparties, require the posting of cash or cash equivalent collateral. This is a cost not faced by financial firms when they enter into OTC derivatives contracts with other large financial firms. Conversely, standardizing OTC derivatives could result in tightening of the bid-ask spread of the instruments due to fewer individual terms that need to be negotiated between counterparties. This could potentially lower costs faced by purchasers and sellers of those contracts. Standardization could also lead to less effective hedges, but would allow a party to trade out of its position as opposed to negotiating a separate termination agreement. These termination agreements can be extremely expensive for the party seeking to exit customized deals.

Q.20. On the second panel, Mr. Whalen suggests that Congress should subject all derivatives to the Commodity Exchange Act, at least as an interim step. Is there any reason we should not do so?

A.20. To the extent that derivatives are securities-related, the securities laws should continue to apply. Without application of the securities laws, the derivatives market could be used to manipulate the securities market by circumventing securities laws protection against insider trading and improper short selling, among other things.

Secretary Geithner recognized that multiple Federal regulatory agencies should play critical roles in implementing the proposed framework, including the SEC and the CFTC. In my testimony, I recommended that primary responsibility for “securities-related” OTC derivatives be retained by the SEC, which is also responsible for oversight of markets affected by this subset of OTC derivatives. Primary responsibility for all other OTC derivatives, including derivatives related to interest rates, foreign exchange, commodities, energy, and metals, could rest with the CFTC.

Q.21. There seems to be agreement that all derivatives trades need to be reported to someone. Who should the trades be reported to, and what information should be reported? And is there any information that should not be made available to the public?

A.21. We agree that all derivatives trades should be reported. Information reported should include the identity of the contract traded, the size of the contract, the price, the parties to the contract (and which party was the buyer and which was the seller), and the time of trade. Additional analysis by appropriate regulators may identify other data elements that should be reported.

Where a trade is reported depends on where it is traded. If a product is traded on a regulated exchange or an exchange-like facil-

ity (such as an alternative trading system), the details of the trade will be captured by the trading system. If a product is traded elsewhere, trades in that product should be reported to another regulated entity, such as a trade repository or self-regulatory organization.

Entities to which trades are reported could disseminate information to the public individually. This approach would likely be the easiest to implement in the near term. However, it would mean that trading and reporting data would be fragmented, and it is unclear how easily or well it could be aggregated by private data vendors. Different entities could adopt different standards for trade reporting and dissemination (such as adopting different identification codes for the same derivatives contracts). Significant regulatory efforts could be necessary to promote uniform standards for these various entities to obtain the full benefits of post-trade reporting and transparency.

One way to address these potential problems would be for the appropriate regulator to designate a central information processor to collect trade input from various sources and to disseminate trade information publicly in a uniform manner and subject to regulatory standards that ensure that access to the trade data is on terms that are fair and reasonable, and not unreasonably discriminatory. The SEC relies on and regulates such central information processors in the markets for cash equities, securities options, corporate debt securities, and municipal securities. We believe that these trade reporting and dissemination systems work very well and deliver a robust information stream in a timely and cost-efficient manner.

As your question notes, some information that is reported may not be appropriate for public dissemination. One such item may be the names of the counterparties. The systems for cash equities, securities options, corporate debt securities, and municipal debt securities that are regulated by the SEC currently do not disseminate such information.

Q.22. Is there anything else you would like to say for the record?

A.22. I appreciate the opportunity to testify on this important topic and I look forward to working with the Committee to fill the gaps in regulation of OTC derivatives. These efforts are critical to furthering the integrity of the U.S. capital markets.

**RESPONSES TO WRITTEN QUESTIONS OF CHAIRMAN REED
FROM GARY GENSLER**

Q.1. What do you see as your agency's possible role under the Administration's proposal in overseeing the OTC derivatives trading activities of dealers or other market participants? Do certain responsibilities for prudential oversight, enforcing record keeping requirements, or others still need to be determined?

A.1. Answer not received by time of publication.

Q.2. Are there differences between the SEC and CFTC's approaches for regulating their respective markets and institutions that we should take into consideration when thinking about the regulation of the OTC derivatives markets? What experience does

your agency have in addressing fraud and manipulation in the markets that your regulate?

A.2. Answer not received by time of publication.

Q.3. A key part of drafting any legislation in this area will be to determine who will have jurisdiction over the OTC derivatives markets. What are the particular areas of jurisdiction that your agencies do not yet see eye-to-eye on?

A.3. Answer not received by time of publication.

Q.4. The Administration's proposal would require, among other things, clearing of all standardized derivatives through regulated central counterparties (CCPs). What is the best process or approach for defining standardized products? How much regulatory interpretation will be necessary?

A.4. Answer not received by time of publication.

Q.5. Are there key areas of disagreement between market participants about how central counterparties should operate? For example, what are the different levels of access these central counterparties grant to different market participants? What are the benefits and drawbacks of different ways of structuring these central counterparties?

A.5. Answer not received by time of publication.

Q.6. One key topic touched on at the hearing is the extent to which standardized products should be required to be traded on exchanges. What is your understanding of any areas of disagreement about how rigorous new requirements should be in terms of mandating, versus just encouraging, exchange trading of standardized OTC derivatives?

A.6. Answer not received by time of publication.

Q.7. Can you share your views on the benefits of customized OTC derivatives products? About how much of the market is truly customized products?

A.7. Answer not received by time of publication.

Q.8. The Administration's proposal would subject the OTC derivatives dealers and all other firms whose activities in those markets create large exposures to counterparties to a "robust and appropriate regime of prudential supervision and regulation," including capital requirements, business conduct standards, and reporting requirements. What legislative changes would be required to create margining and capital requirements for OTC derivative market participants? Who should enforce these requirements for various market participants? What are the key factors that should be considered in setting these requirements?

A.8. Answer not received by time of publication.

Q.9. One concern that some market participants have expressed is that mandatory margining requirements will drain capital from firms at a time when capital is already highly constrained. Is there a risk that mandatory margining will result in companies choosing not to hedge as much and therefore have the unintended consequence of increasing risk? How can you craft margin requirements to avoid this?

A.9. Answer not received by time of publication.

Q.10. Is there a risk that regulating the OTC derivatives markets will dramatically alter the landscape of market participants or otherwise have unintended consequences we aren't aware of?

A.10. Answer not received by time of publication.

**RESPONSES TO WRITTEN QUESTIONS OF SENATOR SCHUMER
FROM GARY GENSLER**

Q.1. Chairman Gensler, isn't the same true regarding the potential impact of derivatives on commodities markets? Shouldn't all derivative products that impact commodities prices be overseen by your agency?

A.1. Answer not received by time of publication.

Q.2. Chairman Gensler, do you agree that broad-based and narrow-based derivatives products can both have an impact on the underlying markets that they reference?

A.2. Answer not received by time of publication.

Q.3. Chairman Gensler, I am very concerned by efforts by the European Commission to implement protectionist restrictions on derivatives trading and clearing. A letter signed by many of the world's largest financial institutions earlier this year under significant pressure from European Commission, commits them to clearing any European-referenced credit default swap exclusively in a European clearinghouse. This kind of nationalistic protectionism has no place in the 21st-century financial marketplace. What steps can you and will you take to combat these efforts to limit free trade protect free access to markets? If Europe refuses to alter its position, what steps can be taken to protect the United States' position in the global derivatives markets?

A.3. Answer not received by time of publication.

Q.4. Chairman Gensler, one of many important lessons from the financial panic last fall following the collapse of Lehman Brothers and AIG, it is that regulators need direct and easier access to trade and risk information across the financial markets to be able to effectively monitor how much risk is being held by various market participants, and to be able to credibly reassure the markets in times of panic that the situation is being properly managed. A consolidated trade reporting facility, such as the Trade Information Warehouse run by the Depository Trust and Clearing Corporation for the credit default swaps markets, is the critical link in giving regulators access to the information this kind of information. Currently, there is no consensus on how trade reporting will be accomplished in domestic and international derivatives markets, and it is possible that reporting will be fragmented across standards established by various central counterparties and over-the-counter derivatives dealers. Do you agree that a standardized and centralized trade reporting facility would improve regulators' understanding of the markets, and do you believe that DTCC is currently best equipped to perform this function?

A.4. Answer not received by time of publication.

Q.5. Chairman Gensler, in response to the need for greater transparency in the derivatives market, a joint venture between DTCC and NYSE was recently announced called New York Portfolio Clearing. Market innovations such as these, which intend to provide a single view of risk across asset classes, can help close regulatory gaps that currently exist between markets. Do you agree that this one approach that would help increase market efficiency and could reduce systemic risk? Should we expect the Commission to support this initiative?

A.5. Answer not received by time of publication.

**RESPONSES TO WRITTEN QUESTIONS OF SENATOR BUNNING
FROM GARY GENSLER**

Q.1.a. Do you believe the existence of an actively traded cash market is or should be a necessary condition for the creation of a derivative under law and regulation?

A.1.a. Answer not received by time of publication.

Q.1.b. If not, what specific, objective means besides a cash basis market could or should be used as the underlying relationship for a derivative?

A.1.b. Answer not received by time of publication.

Q.2. Why should the models to price OTC derivatives not be published? If there is no visible cash basis for a derivative, and the model is effectively the basis, why should the models not be public?

A.2. Answer not received by time of publication.

Q.3. What is the best way to draw the line between legitimate hedges and purely speculative bets? For example, should we require an insurable interest for purchasers of credit protection, require delivery of the reference asset, or something else?

A.3. Answer not received by time of publication.

Q.4. Is the concern that increased regulation of derivatives contracts in the United States will just move the business overseas a real issue? It seems to me that regulating the contracts written in the U.S. and allowing American firms to only buy or sell such regulated contracts would solve the problem. What else would need to be done?

A.4. Answer not received by time of publication.

Q.5. Should parties to derivative contracts be required to post cash collateral, or is other collateral acceptable? And is there any reason not to require segregation of customer collateral?

A.5. Answer not received by time of publication.

Q.6. Is there any reason standardized derivatives should not be traded on an exchange?

A.6. Answer not received by time of publication.

Q.7. It seems that credit default swaps could be used to manipulate stock prices. In a simple example, an investor could short a stock, and then purchase credit default swaps on the company. If the swaps are not heavily traded, the purchase would likely drive up the price of the swaps, indicating higher risk of default by the com-

pany, and lead to a decline in the stock price. Is there any evidence that such manipulation has taken place? And more generally, what about other types of manipulation using derivatives?

A.7. Answer not received by time of publication.

Q.8. Credit default swaps look a lot like insurance when there are unbalanced, opportunistic sellers. However, life and property insurance requires an insurable interest for the buyer and reserves for the seller. Why should we not regulate these swaps like traditional insurance?

A.8. Answer not received by time of publication.

Q.9. How do we take away the incentive for credit default swap holders to force debtors into bankruptcy to trigger a credit event rather than renegotiate the debt?

A.9. Answer not received by time of publication.

Q.10. How do we reduce the disincentive for creditors to perform strong credit research when they can just buy credit protection instead?

A.10. Answer not received by time of publication.

Q.11. In her testimony Chairman Schapiro mentioned synthetic exposure. Why is synthetic exposure through derivatives a good idea? Isn't that just another form of leverage?

A.11. Answer not received by time of publication.

Q.12. Regarding synthetic exposure, if there is greater demand for an asset than there are available assets, why shouldn't the economic benefit of that demand—higher value—flow to the creators or owners of that asset instead of allowing a dealer to create and profit from a synthetic version of that asset?

A.12. Answer not received by time of publication.

Q.13. One of the arguments for credit default swaps is that they are more liquid than the reference asset. That may well be true, but if there is greater demand for exposure to the asset than there is supply, and synthetic exposure was not allowed, why wouldn't that demand lead to a greater supply and thus more liquidity?

A.13. Answer not received by time of publication.

Q.14. Is there any justification for allowing more credit protection to be sold on a reference asset than the value of the asset?

A.14. Answer not received by time of publication.

Q.15. Besides the level of regulation and trading on an exchange, there seems to be little difference in swaps and futures. What is the need for both? In other words, what can swaps do that forward contracts cannot?

A.15. Answer not received by time of publication.

Q.16. One of the arguments for keeping over-the-counter derivatives is the need for customization. What are specific examples of terms that need to be customized because there are no adequate substitutes in the standardized market? Also, what are the actual increased costs of buying those standard contracts?

A.16. Answer not received by time of publication.

Q.17. On the second panel, Mr. Whalen suggests that Congress should subject all derivatives to the Commodity Exchange Act, at least as an interim step. Is there any reason we should not do so?

A.17. Answer not received by time of publication.

Q.18. There seems to be agreement that all derivatives trades need to be reported to someone. Who should the trades be reported to, and what information should be reported? And is there any information that should not be made available to the public?

A.18. Answer not received by time of publication.

Q.19. Is there anything else you would like to say for the record?

A.19. Answer not received by time of publication.

**RESPONSES TO WRITTEN QUESTIONS OF CHAIRMAN REED
FROM PATRICIA WHITE**

Q.1. What do you see as your agency's possible role under the Administration's proposal in overseeing the OTC derivatives trading activities of dealers or other market participants? Do certain responsibilities for prudential oversight, enforcing record keeping requirements, or others still need to be determined?

A.1. Major U.S. derivatives dealers currently are subsidiaries of bank holding companies (BHCs) that are supervised by the Federal Reserve Board. The Board provides prudential oversight of BHCs, and the Administration has not proposed a change in that role. The Board envisions that the CFTC and SEC will set, in consultation with the banking agencies, various record keeping requirements necessary for the commissions to carry out their market-integrity responsibilities; the banking agencies, CFTC, or SEC could enforce these recordkeeping requirements.

Q.2. Are there differences between the SEC's and CFTC's approaches for regulating their respective markets and institutions that we should take into consideration when thinking about the regulation of the OTC derivatives markets?

A.2. There are surely significant differences in approach, which reflect the two agencies' different histories and origins, but both agencies have developed approaches that address the key public policy goals of protecting customers, guarding against fraud, and preventing manipulation in the markets that each regulates.

The critical question going forward involves how, with both agencies slated to play important roles in the oversight of the over-the-counter derivatives markets, their approaches to these instruments will be harmonized. This will be challenging as financial market developments in recent decades have obscured the traditional boundaries between securities and commodities. Moving forward with enhanced oversight of the over-the-counter derivatives markets without harmonization, and with closely related instruments subject to significantly different regimes, risks imposing unnecessary costs on all market participants and, perhaps more seriously, leaving gaps between the regimes applied to different types of over-the-counter derivatives that could enable regulatory arbitrage and undermine the goals of the regulatory reform effort. The Adminis-

tration's legislative proposal requires harmonization to address these types of concerns.

Q.3. The Administration's proposal would require, among other things, clearing of all standardized derivatives through regulated central counterparties (CCPs). What is the best process or approach for defining standardized products? How much regulatory interpretation will be necessary?

A.3. Perhaps the key feature determining whether a product is sufficiently standardized that it can be centrally cleared is the CCP's ability to manage the product's risk. Criteria that will bear on this assessment include whether the product has standard documentation and electronic confirmation templates, accurate valuation procedures and pricing sources, and a liquid market, as well as whether the CCP will be able to establish procedures for handling defaults involving the product. These features are subject to interpretation and likely will change over time as the nature of OTC products evolve. Thus the best approach for identifying standardized products is through a flexible regulatory process that includes significant consultation with central counterparties and other market participants.

Q.4. Are there key areas of disagreement between market participants about how central counterparties should operate? For example, what are the different levels of access these central counterparties grant to different market participants? What are the benefits and drawbacks of different ways of structuring these central counterparties?

A.4. Central counterparties (CCPs) that clear over-the-counter contracts have taken different approaches to access both at the clearing member level and at the end-user level. Some CCPs limit clearing membership to dealers and only clear trades among those dealers. These CCPs often cite procedures that require clearing members to take an active role in managing a default in limiting their membership to dealers. Internationally agreed standards require access at the clearing member level to be determined on an objective basis, to be publicly disclosed, and to permit fair and open access. The Board believes that all supervisors should hold CCPs to this standard.

Some CCPs offer end users such as hedge funds or institutional investors access to clearing through intermediaries; that is, end users are not members of the CCP, but a clearing member submits deals on the end-user's behalf. CCPs that allow intermediated clearing must have a legal structure that provides protection to end-users' positions and collateral in the event their clearing member defaults. Events of the last few years have demonstrated the importance of end users as well as dealers having additional tools to manage their counterparty credit risk. Operators and developers of CCPs for OTC derivatives have committed to offering intermediated clearing with suitable protections for end users. The Board believes that the benefits from centralized clearing will be greatest if CCPs are structured so as to allow participation by end users within a framework that ensures protection of their positions and collateral. Changes to bankruptcy laws may be necessary to achieve this.

Q.5. One key topic touched on at the hearing is the extent to which standardized products should be required to be traded on exchanges. What is your understanding of any areas of disagreement about how rigorous new requirements should be in terms of mandating, versus just encouraging, exchange trading of standardized OTC derivatives?

A.5. The Board supports requiring the trading of standardized products on exchanges or on electronic transaction systems which (in conjunction with centralized clearing) offer similar benefits in terms of transparency and risk reduction. Use of these platforms aids regulators in monitoring market activity and can assist market participants in reducing operational risks and enhancing valuation capacities.

The more difficult issue will likely be to set forth a definition of “standardized” which is sufficiently broad that market participants cannot avoid the requirements by incorporating twists and wrinkles in over-the-counter contracts and sufficiently narrow that products which pose specialized risk management challenges, and thus might pose risks to centralized clearing systems and exchanges, are not swept in.

Q.6. Can you share your views on the benefits of customized OTC derivatives products? About how much of the market is truly customized products?

A.6. Customized OTC derivatives products allow end users to precisely hedge a risk. Standardized products may be offered on a somewhat different underlying instrument than the end user desires to hedge, for example, and use of the standardized product creates what is known as basis risk when the price of the standardized hedge moves differently from the balance sheet exposure. Corporations report that they need the precise hedges afforded by non-standardized products to be permitted under the accounting standards to recognize gains and losses from a hedge at the same time as they recognize gains and losses from the exposure being hedged. Many corporations also report that they do not have the cash management facilities necessary to meet the daily collateral calls that occur with cleared products.

No data are available on the relative importance of the customized share of the market. The Board supports a short-term focus on creation of trade repositories for OTC derivatives referencing all asset classes, which would provide information on this point.

Q.7. The Administration’s proposal would subject the OTC derivatives dealers and all other firms whose activities in those markets create large exposures to counterparties to a “robust and appropriate regime of prudential supervision and regulation,” including capital requirements, business conduct standards, and reporting requirements. What legislative changes would be required to create margining and capital requirements for OTC derivative market participants? Who should enforce these requirements for various market participants? What are the key factors that should be considered in setting these requirements?

A.7. Within the United States, major derivatives dealers currently are subsidiaries of bank holding companies (BHCs) that are super-

vised by the Federal Reserve Board. The Board and functional regulators of subsidiaries of the BHCs currently have the authority to create margin and capital requirement for these dealers. The Board believes that capital and margin requirements should be enforced through the examination and supervisory process.

Legislative changes would be required to create prudential supervision, including capital, liquidity, and risk management standards, for unregulated firms whose activity creates large exposures in the market, and an examination process would need to be created by the agency or agencies given responsibility for oversight of these firms.

The Board believes that margin and capital requirements for OTC derivatives should be commensurate with the risks they pose. The Board is particularly concerned that, going forward, margin and capital regimes be constructed so as not to amplify cyclical fluctuations in financial markets. That is, requirements should be set with regard to stress levels and longer-run horizons, and not in a manner likely to require a tightening of standards during periods of market dislocation.

Q.8. One concern that market participants have expressed is that mandatory margining requirements will drain capital from firms at a time when capital is already highly constrained. Is there a risk that mandatory margining will result in companies choosing not to hedge as much and therefore have the unintended consequences of increasing risk? How can you craft margin requirements to avoid this?

A.8. Yes, mandatory margining requirements could impose a cost on firms' use of OTC derivatives and lead some firms to reduce hedging. Two kinds of costs can be identified. First, if mandatory margin requirements lead to more capital being used to support OTC derivatives activities, that capital will not be available for other uses. Second, nonfinancial corporate users of OTC derivatives may not have the cash management capability to post margin and adjust that margin on a daily basis, as is the standard practice for interdealer trading. To avoid this, dealers could tailor their margin requirements for less active nonfinancial customers to the relatively modest risk and scale of the customer's activity and ability to post collateral, while always maintaining appropriate limits on the dealer's own credit risk exposure.

Q.9. Is there a risk that regulating the OTC derivatives markets will dramatically alter the landscape of market participants or otherwise have unintended consequences we aren't aware of?

A.9. The proposed changes in the regulation of OTC derivative markets are quite extensive, and this raises the possibility of unintended consequences that are negative. Three issues are critical to minimizing the likelihood of such negative consequences.

First the definition of standardized contracts, which will be required to be traded on exchanges or on electronic transaction systems in conjunction with centralized clearing, needs to be carefully crafted. The term "standardized" must be sufficiently broad that market participants cannot avoid the requirements by incorporating twists and wrinkles in over-the-counter contracts and sufficiently narrow that products which pose certain very specialized

risk management challenges, and thus might pose risks to centralized clearing systems and exchanges, are not swept in.

Second, the regimes applied by the SEC and CFTC to the over-the-counter derivatives market must be harmonized. Given that contracts involving similar risks and suitable for similar purposes will likely be regulated by each of these two market regulators, it is critical that their approaches be consistent. Moving forward with enhanced oversight of the over-the-counter derivatives markets without harmonization, with closely related instruments falling under significantly different regimes, risks imposing unnecessary costs on all market participants and, perhaps more seriously, leaving gaps between the regimes applied to different types of over-the-counter derivatives that could enable regulatory arbitrage and undermine the goals of the regulatory reform effort.

Third, a broad definition of a major swap participant could result in capital requirements being applied to large number of firms that are currently unregulated, including nonfinancial firms. It is far from clear how such requirements would be determined and whether they would be effective.

**RESPONSES TO WRITTEN QUESTIONS OF SENATOR SCHUMER
FROM PATRICIA WHITE**

Q.1. Ms. White, I am very concerned by efforts by the European Commission to implement protectionist restrictions on derivatives trading and clearing. A letter signed by many of the world's largest financial institutions earlier this year under significant pressure from European Commissions, commits them to clearing any European-referenced credit default swap exclusively in a European clearinghouse.

This kind of nationalistic protectionism has no place in the 21st-century financial marketplace. What steps can you and will you take to combat these efforts to limit free trade protect free access to markets? If Europe refuses to alter its position, what steps can be taken to protect the United States' position in the global derivatives market?

A.1. The Federal Reserve is working with authorities in Europe and other jurisdictions to improve international cooperation regarding the regulation of OTC derivatives markets. Current areas of focus include developing common reporting systems and frameworks for coordination of oversight. The goal of these efforts is to avoid duplicative and possibly conflicting requirements from different regulators. In addition, these efforts lay a foundation for broader recognition that policy concerns can be addressed even when market utilities are located in other jurisdictions.

Q.2. Ms. White, one of many important lessons from the financial panic last fall following the collapse of Lehman Brothers and AIG, it is that regulators need direct and easier access to trade and risk information across the financial markets to be able to effectively monitor how much risk is being held by various market participants, and to be able to credibly reassure the markets in times of panic that the situation is being properly managed. A consolidated trade reporting facility, such as the Trade Information Warehouse run by the Depository Trust and Clearing Corporation for the cred-

it default swaps markets, is the critical link in giving regulators access to the information this kind of information. Currently, there is no consensus on how trade reporting will be accomplished in domestic and international derivatives markets, and it is possible that reporting will be fragmented across standards established by various central counterparties and over-the-counter derivatives dealers. Do you agree that a standardized and centralized trade reporting facility would improve regulators' understanding of the markets, and do you believe that DTCC is currently best equipped to perform this function?

A.2. A standardized and centralized trade reporting facility serving a particular OTC derivatives market would improve regulators' understanding by providing them with a consolidated view of participant positions in that market.

In general, a centralized reporting infrastructure for OTC derivatives markets is unavailable. An exception is the credit derivatives market, for which the DTCC Trade Information Warehouse (TIW) serves as the *de facto* standard trade repository. It provides a bookkeeping function, similar to the role of central securities depositories in the cash securities markets. The TIW registers most standardized CDS contracts and has begun registering more complex credit derivatives transactions in accordance with collective industry commitments to supervisors. While no other OTC derivatives markets are presently served by a trade repository, several CCPs serve an analogous function for limited segments of OTC derivatives markets such as LCH.Clearnet for interest rate derivatives and NYMEX Clearport for some commodity derivatives.

There may be benefits to a single entity providing trade reporting services for OTC derivatives, but the Board does not believe that there is a good policy reason to force that result. Through collective supervisory efforts, major industry participants have committed to building centralized reporting infrastructure for both the OTC equity and interest rate derivatives markets. The industry has committed to creation of a repository for interest rate contracts by December 31, 2009, and for equity contracts by July 31, 2010.

**RESPONSES TO WRITTEN QUESTIONS OF SENATOR BUNNING
FROM PATRICIA WHITE**

Q.1.a. Do you believe the existence of an actively traded cash market is or should be a necessary condition for the creation of a derivative under law and regulation?

A.1.a. Market participants use derivatives to manage and hedge a variety of risks. Some of these risks are associated with positions in actively traded cash instruments. For example, an insurance company that writes equity-linked annuities may use an equity derivative to hedge the risk of fluctuations in the referenced equity index. Some of these risks are associated with positions in relatively illiquid instruments. For example, a commercial bank may use a credit default swap to hedge against a concentrated exposure in its loan portfolio. Some of these risks may not be associated with any cash instrument. For example, some businesses use weather derivatives (futures contracts listed on the CME) to hedge their financial risk associated with fluctuations in the weather. All of

these uses of derivatives seem appropriate, so it would not appear to be useful to limit the creation of derivatives based on the existence of an actively traded cash market.

Q.1.b. If not, what specific, objective means besides a cash basis market could or should be used as the underlying relationship for a derivative?

A.1.b. The counterparties to a financial derivative contract must agree on the manner of calculating its value at expiration or at any intervals requiring periodic payments as part of the negotiations related to doing the trade. The agreed upon terms must be well-defined, and not subject to different interpretation by different parties. In some cases, a cash market price can be the basis for calculation of a contract's periodic contractual payments or final value. In other cases, such as the weather derivatives mentioned above, a calculation based on observable characteristics is utilized (*e.g.*, temperature at a particular location at a particular time of day).

Q.2. Why should the models to price OTC derivatives not be published? If there is no visible cash basis for a derivative, and the model is effectively the basis, why should the models not be public?

A.2. For OTC derivatives that are standardized and widely held and traded, consensus generally exists regarding appropriate valuation models. Many of these can be found in an introductory finance textbook and often can be implemented with a personal computer. For customized OTC derivatives, valuation methods may be proprietary. For example, an oil company may enter into an OTC energy derivative whose value is based on expectations involving oil prices at particular locations, for particular types of oil products, at various points in the future. Not only can informed parties hold differing views regarding these future prices, but disclosure of the exact valuation formula could effectively reveal the oil company's future production plans and forecasts, which it may consider to be proprietary information. In addition to the valuation models, counterparties may also legitimately wish to keep private other contract provisions. Respecting a desire for confidentiality is consistent with the approach taken to most other bilateral contracts, which are not generally subject to public disclosure. Transparency needs of the public can be met more effectively in the ways described in the response to Question 4 below.

Q.3. Should parties to derivative contracts be required to post cash collateral, or is other collateral acceptable? And is there any reason not to require segregation of customer collateral?

A.3. Noncash collateral, appropriately haircut, can mitigate the counterparty credit risk associated with OTC derivative contracts. Noncash collateral has been used successfully by central counterparties (CCPs) for futures contracts for many years.

The benefits from centralized clearing will be greatest if CCPs are structured so as to allow participation by end users within a framework that ensures protection of their positions and collateral. Segregation is an important and common tool for ensuring that customer positions and collateral can be transferred to a solvent clearing member in the event the customer's clearing firm defaults.

The Board supports steps to ensure that segregation and other customer protection regimes have a sound legal basis so that the expected protection will be realized in the event an end-user's clearing firm defaults.

Q.4. There seems to be agreement that all derivatives trades Deed to be reported to someone. Who should the trades be reported to, and what information should be reported? And is there any information that should not be made available to the public?

A.4. The Board supports requiring all OTC derivative trades to be reported either to a contract repository or to a central counterparty, which could provide the information to the relevant regulatory bodies. Both data on the flow of transactions and data on the stock of positions may be of interest to authorities. For example, prudential supervisors are interested in position information insofar as it affects the safety and soundness of the market participants whom they directly regulate. Agencies with an interest in financial stability have an interest in receiving position information that would enhance understanding of the network of exposures among major market participants. Central banks may benefit from information on the flow of transactions to the extent that transfers represented by OTC derivatives positions have effects on their respective currencies and payment systems. Finally, regulators with market integrity mandates are interested in both position and transaction information to aid their surveillance and enforcement activities.

A subset of the information provided to regulatory authorities could be aggregated and reported to the public. Public reporting should support overall market transparency by providing investors, analysts, and the general public with a means for better understanding the OTC derivatives market. Until recently, there had been little or no such reporting for OTC derivatives, but progress has been made in the CDS market. The DTCC Trade Information Warehouse has published certain aggregate open interest information on its Web site, including breakdowns by category of counterparties, types of CDS products traded, and referenced underliers of CDS trades. This information is found on DTCC's Web site at: http://www.dtcc.com/products/derivserv/data_table_i.php.

Sensitive information such as the positions of individual market participants should not be publicly reported. Such disclosure would be undesirable as it would expose participants' trading or risk management strategies to competitors. Participants also may have fiduciary relationships or confidentiality agreements with clients that may be compromised by publishing identifiable positions. Finally, publishing such data may raise concerns about privacy laws in some jurisdictions.

Q.5. Is there anything else you would like to say for the record?

A.5. No. thank you.

**RESPONSES TO WRITTEN QUESTIONS OF CHAIRMAN REED
FROM HENRY T. C. HU**

Q.1. Are there differences between the SEC and CFTC's approaches for regulating their respective markets and institutions

that we should take into consideration when thinking about the regulation of the OTC derivatives markets?

A.1. Answer not received by time of publication.

Q.2. The Administration's proposal would require, among other things, clearing of all standardized derivatives through regulated central counterparties (CCPs). What is the best process or approach for defining standardized products? How much regulatory interpretation will be necessary?

A.2. Answer not received by time of publication.

Q.3. Are there key areas of disagreement between market participants about how central counterparties should operate? For example, what are the different levels of access these central counterparties grant to different market participants? What are the benefits and drawbacks of different ways of structuring these central counterparties?

A.3. Answer not received by time of publication.

Q.4. One key topic touched on at the hearing is the extent to which standardized products should be required to be traded on exchanges. What is your understanding of any areas of disagreement about how rigorous new requirements should be in terms of mandating, versus just encouraging, exchange trading of standardized OTC derivatives?

A.4. Answer not received by time of publication.

Q.5. Can you share your views on the benefits of customized OTC derivatives products? About how much of the market is truly customized products?

A.5. Answer not received by time of publication.

Q.6. The Administration's proposal would subject the OTC derivatives dealers and all other firms whose activities in those markets create large exposures to counterparties to a "robust and appropriate regime of prudential supervision and regulation," including capital requirements, business conduct standards, and reporting requirements. What legislative changes would be required to create margining and capital requirements for OTC derivative market participants? Who should enforce these requirements for various market participants? What are the key factors that should be considered in setting these requirements?

A.6. Answer not received by time of publication.

Q.7. One concern that some market participants have expressed is that mandatory margining requirements will drain capital from firms at a time when capital is already highly constrained. Is there a risk that mandatory margining will result in companies choosing not to hedge as much and therefore have the unintended consequence of increasing risk? How can you craft margin requirements to avoid this?

A.7. Answer not received by time of publication.

Q.8. Is there a risk that regulating the OTC derivatives markets will dramatically alter the landscape of market participants or otherwise have unintended consequences we aren't aware of?

A.8. Answer not received by time of publication.

**RESPONSES TO WRITTEN QUESTIONS OF SENATOR BUNNING
FROM HENRY T. C. HU**

Q.1.a. Do you believe the existence of an actively traded cash market is or should be a necessary condition for the creation of a derivative under law and regulation?

A.1.a. Answer not received by time of publication.

Q.1.b. If not, what specific, objective means besides a cash basis market could or should be used as the underlying relationship for a derivative?

A.1.b. Answer not received by time of publication.

Q.2. Why should the models to price OTC derivatives not be published? If there is no visible cash basis for a derivative, and the model is effectively the basis, why should the models not be public?

A.2. Answer not received by time of publication.

Q.3. What is the best way to draw the line between legitimate hedges and purely speculative bets? For example, should we require an insurable interest for purchasers of credit protection, require delivery of the reference asset, or something else?

A.3. Answer not received by time of publication.

Q.4. Is the concern that increased regulation of derivatives contracts in the United States will just move the business overseas a real issue? It seems to me that regulating the contracts written in the U.S. and allowing American firms to only buy or sell such regulated contracts would solve the problem. What else would need to be done?

A.4. Answer not received by time of publication.

Q.5. Do over-the-counter or custom derivatives have any favorable accounting or tax treatments versus exchange traded derivatives?

A.5. Answer not received by time of publication.

Q.6. In addition to the Administration's proposed changes to gain on sale accounting for derivatives, what other changes need to be made to accounting and tax rules to reflect the actual risks and benefits of derivatives?

A.6. Answer not received by time of publication.

Q.7. Is there any reason standardized derivatives should not be traded on an exchange?

A.7. Answer not received by time of publication.

Q.8. It seems that credit default swaps could be used to manipulate stock prices. In a simple example, an investor could short a stock, and then purchase credit default swaps on the company. If the swaps are not heavily traded, the purchase would likely drive up the price of the swaps, indicating higher risk of default by the company, and lead to a decline in the stock price. Is there any evidence that such manipulation has taken place? And more generally, what about other types of manipulation using derivatives?

A.8. Answer not received by time of publication.

Q.9. Credit default swaps look a lot like insurance when there are unbalanced, opportunistic sellers. However, life and property insur-

ance requires an insurable interest for the buyer and reserves for the seller. Why should we not regulate these swaps like traditional insurance?

A.9. Answer not received by time of publication.

Q.10. How do we take away the incentive for credit default swap holders to force debtors into bankruptcy to trigger a credit event rather than renegotiate the debt?

A.10. Answer not received by time of publication.

Q.11. How do we reduce the disincentive for creditors to perform strong credit research when they can just buy credit protection instead?

A.11. Answer not received by time of publication.

Q.12. Do net sellers of credit protection carry that exposure on their balance sheet as an asset? If not, why shouldn't they?

A.12. Answer not received by time of publication.

Q.13. In her testimony Chairman Schapiro mentioned synthetic exposure. Why is synthetic exposure through derivatives a good idea? Isn't that just another form of leverage?

A.13. Answer not received by time of publication.

Q.14. Regarding synthetic exposure, if there is greater demand for an asset than there are available assets, why shouldn't the economic benefit of that demand—higher value—flow to the creators or owners of that asset instead of allowing a dealer to create and profit from a synthetic version of that asset?

A.14. Answer not received by time of publication.

Q.15. One of the arguments for credit default swaps is that they are more liquid than the reference asset. That may well be true, but if there is greater demand for exposure to the asset than there is supply, and synthetic exposure was not allowed, why wouldn't that demand lead to a greater supply and thus more liquidity?

A.15. Answer not received by time of publication.

Q.16. Is there any justification for allowing more credit protection to be sold on a reference asset than the value of the asset?

A.16. Answer not received by time of publication.

Q.17. Besides the level of regulation and trading on an exchange, there seems to be little difference in swaps and futures. What is the need for both? In other words, what can swaps do that forward contracts cannot?

A.17. Answer not received by time of publication.

Q.18. One of the arguments for keeping over-the-counter derivatives is the need for customization. What are specific examples of terms that need to be customized because there are no adequate substitutes in the standardized market? Also, what are the actual increased costs of buying those standard contracts?

A.18. Answer not received by time of publication.

Q.19. Who is a natural seller of credit protection?

A.19. Answer not received by time of publication.

Q.20. There seems to be agreement that all derivatives trades need to be reported to someone. Who should the trades be reported to, and what information should be reported? And is there any information that should not be made available to the public?

A.20. Answer not received by time of publication.

Q.21. What is insufficient about the clearinghouse proposed by the dealers and New York Fed?

A.21. Answer not received by time of publication.

Q.22. How do we prevent a clearinghouse or exchange from being too big to fail? And should they have access to Fed borrowing?

A.22. Answer not received by time of publication.

Q.23. What price discovery information do credit default swaps provide, when the market is functioning properly, that cannot be found somewhere else?

A.23. Answer not received by time of publication.

Q.24. Selling credit default swaps is often said to be the same as being long in bonds. However, when buying bonds, you have to provide real capital up front and there is a limit to the lending. So it sounds like selling swaps may be a bet in the same direction as buying bonds, but is essentially a highly leveraged bet. Is that the case, and if so, should it be treated that way for accounting purposes?

A.24. Answer not received by time of publication.

Q.25. Why should we have two regulators of derivatives, with two interpretations of the laws and regulations? Doesn't that just lead to regulation shopping and avoidance?

A.25. Answer not received by time of publication.

Q.26. Why is synthetic exposure through derivatives a good idea? Isn't that just another form of leverage?

A.26. Answer not received by time of publication.

Q.27. What is good about the Administration proposal?

A.27. Answer not received by time of publication.

Q.28. Is the Administration proposal enough?

A.28. Answer not received by time of publication.

Q.29. Mr. Whalen suggests that Congress should subject all derivatives to the Commodity Exchange Act, at least as an interim step. Is there any reason we should not do so?

A.29. Answer not received by time of publication.

Q.30. Is there anything else you would like to say for the record?

A.30. Answer not received by time of publication.

**RESPONSES TO WRITTEN QUESTIONS OF CHAIRMAN REED
FROM KENNETH C. GRIFFIN**

Q.1. Are there differences between the SEC and CFTC's approaches for regulating their respective markets and institutions that we should take into consideration when thinking about the regulation of the OTC derivatives markets?

A.1. It is critical that there be clarity as to the rules that apply to a given market sector. No confusion should exist as to applicable rules or conflicts in overlapping rules. In view of these principles, we would ask that Congress, in enacting any OTC derivative legislation, ensure clean lines of regulatory jurisdiction and consistency of rules. It is important that the legislation eliminate and not create any new instances of regulatory arbitrage. Capital and margin requirements, for example, must be consistent across regulatory regimes.

As we consider the optimum design of a central clearing structure from the perspective of the buy-side—asset managers, corporations, pension funds, hedge funds, and all other end users—one of the most critical components must be robust account segregation. Buy-side accounts represent a substantial portion of any derivative’s systemic exposure. With proper account segregation for cleared products, the buy-side’s positions and margins are protected from the bankruptcy of a defaulting clearing member and transferred to other clearing members, securing the orderly functioning of the markets. The buy-side has confidence in the time-tested CFTC account segregation rules, which were amply proven in the case of the rapid workout, without market disruption, of Lehman’s CFTC-regulated futures positions. This was in stark contrast to the losses suffered by end users who faced Lehman in bilateral, non-cleared positions that were (and remain) trapped in Lehman’s bankruptcy.

Q.2. The Administration’s proposal would require, among other things, clearing of all standardized derivatives through regulated central counterparties (CCPs). What is the best process or approach for defining standardized products? How much regulatory interpretation will be necessary?

A.2. Market forces have already created largely standardized derivatives across the credit and interest rate derivative markets, two of the largest OTC markets. In analyzing other derivative markets, legislators and regulators should consider the level of standardization to which such markets have evolved and the frequency of price discovery (*i.e.*, trading or the placing of bids and offers) to ascertain the ability of a CCP to clear transactions.

Legislators and regulators must not succumb to the rhetoric of certain incumbent market participants that wish to delay the movement to CCPs and exchange trading by arguing the market is not standardized and by establishing excessively narrow criteria for eligibility for clearing. To help define and pressure test the criteria, regulators and legislators should seek input from a broad range of market participants, which include industry associations (*e.g.*, ISDA, MFA, and SIFMA), CCPs, and, most importantly, large and small sell-side and buy-side market participants who are the ultimate holders of the majority of the market’s risk.

Regardless of the final definition of what contracts should be centrally cleared, legislators and regulators must also incentivize market participants to use CCPs through higher, risk-based capital and collateral requirements for noncleared derivative trades.

Q.3. Are there key areas of disagreement between market participants about how central counterparties should operate? For exam-

ple, what are the different levels of access these central counterparties grant to different market participants? What are the benefits and drawbacks of different ways of structuring these central counterparties?

A.3. Well-functioning markets are efficient, open, and transparent. Well-functioning standardized derivatives markets also utilize a CCP to significantly reduce counterparty risk exposure, increase liquidity, protect customer collateral, and facilitate multilateral netting and monitoring of positions.

All CCPs, however, do not deliver the same benefits to the market. Key attributes of robust CCPs include:

- A well-tested risk management framework that includes daily mark-to-market calculations, a robust initial margin methodology, active monitoring of clearing member and customer positions, and a large guaranty fund to backstop clearing member defaults;
- A highly developed legal and regulatory framework for protecting customer margins and positions in the case of a clearing member default;
- Straight-through processing of trades into clearing immediately after execution;
- Ability of participants to trade with other participants so long as each participant is a clearing member or a customer of a clearing member; and
- Open access for all market participants to clearing membership with time-tested and risk-based standards.

Q.4. One key topic touched on at the hearing is the extent to which standardized products should be required to be traded on exchanges. What is your understanding of any areas of disagreement about how rigorous new requirements should be in terms of mandating, versus just encouraging, exchange trading of standardized OTC derivatives?

A.4. Exchanges are an important step in the evolution of the CDS market. Moving from the current bilateral market to a CCP will dramatically reduce systemic risk and increase the stability of the financial markets. The enhanced liquidity and standardization brought about by clearing would then likely facilitate an exchange-trading mechanism, similar to what was seen in other markets such as energy. If it does not, however, then regulators should intervene to remove any artificial barriers to such market evolution.

Q.5. Can you share your views on the benefits of customized OTC derivatives products? About how much of the market is truly customized products?

A.5. For CDS, customized OTC products represent approximately 5–10 percent of the notional value currently traded. Other OTC derivatives such as interest rate and foreign exchange swaps are also predominately standardized. In the case of interest rate swaps, for example, customized products (*i.e.*, products that might at this stage be more challenging to clear centrally) likely represent no more than 25 percent of the notional value currently traded.

Customized OTC derivative products are most important to end users who are trying to manage multiple risks with one derivative contract. An energy utility for example, may want to enter into a swap contract to purchase power at a fixed price which is determined based upon the average temperature for a given day. Esoteric derivatives such as this meet a real need in the marketplace, but only account for a *de minimus* portion of total activity. To reflect the higher systemic, operational risk and counterparty risks of the noncleared CDS, higher capital and or collateral burdens should be placed on such products.

As noted in the answers to Senator Bunning's questions #6 and #16, there are significant benefits of migrating to the use of standardized contracts and CCPs, such as lower total costs of trading and deeper, more liquid markets.

Q.6. The Administration's proposal would subject the OTC derivatives dealers and all other firms whose activities in those markets create large exposures to counterparties to a "robust and appropriate regime of prudential supervision and regulation," including capital requirements, business conduct standards, and reporting requirements. What legislative changes would be required to create margining and capital requirements for OTC derivative market participants? Who should enforce these requirements for various market participants? What are the key factors that should be considered in setting these requirements?

A.6. It is critical to distinguish dealer from nondealer participants. A proposal that imposes substantial reporting and regulatory burdens on nondealer participants as if they were dealers, while well intended, will force many investors to cease participating in the derivatives markets. The unintended consequences that must be recognized are that markets will become less efficient, the cost of capital will increase and investors will be harmed. Today's market structure, where incumbent OTC derivatives dealers act as unregulated central counterparties, and extract significant economic rents from their privileged position, creates the systemic risk that must be addressed. The introduction of a CCP would address most of the public policy goals, with almost no burden on investors and on the OTC derivatives dealers (other than the loss of oligopolistic profits).

The factors to be addressed in legislation relating to appropriate margining and capital are these:

1. For noncleared trades, in light of the fact that nondealer participants generally post margin, there is no benefit, and significant harm, in imposing separate capital burdens on nondealer participants. This would effectively penalize the victims of the current crisis, imposing reporting and financing burdens that will hinder the beneficial flow of investor capital to the capital markets and raise the cost of hedging. Dealers, on the other hand, do not post margin for noncleared derivatives. As such, systemic risk would be significantly reduced by requiring dealers to hold sufficient capital against their noncleared derivative positions.
2. The key is central clearing, because a CCP independently margins and risk manages the positions, requires margin from all participants, and safeguards that margin. The margin lev-

els are set under strict regulatory supervision, and are driven by the need to protect the CCP from default, for the neutral benefit of both the CCP and the financial system as a whole. Legislation must therefore establish appropriate incentives and requirements for participants to clear as much of the derivatives market as possible.

3. As noted, the market practice for noncleared trades is that dealers, who are on one side of every trade, do not post margin. Legislation should ensure that for noncleared trades, dealers set aside sufficient capital to cover the systemic risk generated by such trades, and to protect the dealers' customers from dealer default. The regulators that currently supervise the dealers should establish appropriate capital levels, and should coordinate amongst themselves to prevent regulatory arbitrage or gaps.
4. As also noted, the buy-side participant in every noncleared trade, unlike the dealer, generally posts margin. Today that margin is taken onto the dealer's balance sheet and is subject to dealer insolvency. Legislation should facilitate the protection of such margin through third party trust arrangements remote from dealer insolvency. For customer margin held in the trust arrangement, it may be appropriate for dealers to receive capital off-set to reflect the reduction of counterparty risk.

Q.7. One concern that some market participants have expressed is that mandatory margining requirements will drain capital from firms at a time when capital is already highly constrained. Is there a risk that mandatory margining will result in companies choosing not to hedge as much and therefore have the unintended consequence of increasing risk? How can you craft margin requirements to avoid this?

A.7. AIG has shown us that it is unacceptable for us to continue a bilateral system that allows certain participants not to margin when they should, or to concentrate risk without adequate collateralization in a way that can damage a wide range of interconnected parties. There must be fair, neutral margin required of all participants to avoid a repetition of the crises and losses that required government intervention in the past year. Margin is the simple price that must be paid for us to have a functioning central counterparty.

A well-disciplined, well-supervised CCP structure is by far the most efficient risk management system from a margining perspective, meaning it will come closest to requiring the lowest reasonable amount of capital that will achieve the most risk management protection and will do this fairly across all market participants. This is because a well supervised CCP has as its first mandate the need to protect its default fund, so it will build an extensive risk management capability to ensure that it requires adequate margin.

At the same time, that CCP is incentivized to keep the level of such margin at the most reasonable level required to achieve the appropriate protection, so that market participants will clear volume through the CCP.

A CCP that has a neutral, standardized methodology will assess the same margin from all its clearing members, which it also continuously, rigorously assesses for credit strength. Those clearing members may in turn assess a higher margin requirement on the individual clearing customers they represent, based on their individualized credit assessment of those firms. Again clearing members have proper, balanced incentives. On the one hand, because they guarantee the obligations of their customers to the clearinghouse, they want to ensure they are adequately collateralized against the risk of any customer default. At the same time they are competing for customer business, so will want to calibrate that margin to be sufficiently economic to retain customers.

End users clearly benefit from these structures—unlike in the current bilateral environment, the underlying margin system is transparent, so end users can determine in advance the base margin to be assessed by the clearinghouse (and of course these end users will now no longer be exposed to the credit risk of their counterparties, thanks to the CCP). At the same time, competition amongst clearing members, and the standardization of the cleared product that greatly increases end-users' flexibility in selection of clearing member, will benefit end users in keeping margin and fee levels competitive.

The argument that requiring margin will cause parties not to hedge is not valid. The cost of hedging for end users will not be raised by central clearing, but meaningfully reduced—the increased transparency that will come with central clearing will reduce bid-offer spreads, which go to the real economic cost of hedging. The net capital costs associated with posting initial margin are largely inconsequential, if not completely offset by the multilateral netting benefits of a CCP. No market participants should be exempt from posting adequate margin or, in the case of dealers, sufficient capital.

Q.8. Is there a risk that regulating the OTC derivatives markets will dramatically alter the landscape of market participants or otherwise have unintended consequences we aren't aware of?

A.8. We see limited risk of detrimental unintended consequences or a destructive alteration of the market landscape with prudent regulation, particularly given the benefits that will result. To the contrary, we see a grave risk in delay. The conditions that gave rise to the interconnected losses generated by the Lehman collapse are still present, and granted the financial motivations of the incumbent CDS dealers, will not be corrected without intervention immediately to require clearing of standardized products.

As noted in our other responses, prudent regulation can still allow for customized contracts and innovation. Customized contracts represent a small fraction of the market. It cannot be disputed that the parties that create increased systemic risk through the use of customized, noncleared contracts should be responsible for setting aside greater margin and capital to ensure adequate systemic protection against those risks. And even with such realigned reserves and incentives, we believe the evidence is overwhelming that any incremental cost will not substantially alter the

market, except in the beneficial way of motivating more trading to standardized products and CCPs.

**RESPONSES TO WRITTEN QUESTIONS OF SENATOR BUNNING
FROM KENNETH C. GRIFFIN**

Q.1.a. Do you believe the existence of an actively traded cash market is or should be a necessary condition for the creation of a derivative under law and regulation?

A.1.a. No. There are many legitimate derivative instruments that serve important economic functions that have no “cash” market. Examples of these include: weather derivatives, which, for example, can be used by farmers to manage exposure to adverse climate changes; reinsurance derivatives, which allow a broad array of market participants to mitigate the risk of natural catastrophes; and macroeconomic derivatives on measures of inflation, GDP growth and unemployment which give a wide range of firms important tools to manage their risk exposure to changes in the broad economy.

Q.1.b. If not, what specific, objective means besides a cash basis market could or should be used as the underlying relationship for a derivative?

A.1.b. The value of many derivatives is determined solely by observed values of indices, such as measures of inflation, weather observations and other objectively determined variables.

Q.2. Why should the models to price OTC derivatives not be published? If there is no visible cash basis for a derivative, and the model is effectively the basis, why should the models not be public?

A.2. The models and principals used in the pricing of OTC derivatives are widely available. For example, the University of Chicago’s Master of Science in Financial Mathematics describes its program as
(http://finmath.uchicago.edu/new/msfm/prospective/ourprogram_program.php):

Theory Applied to the Real World

This program teaches applied mathematics and its applications in the financial industry. Students learn the theoretical background for pricing derivatives and for managing assets, but also attain a real understanding of the underlying assumptions and an ability to critically ascertain the applicability and limitations of the various models. Courses are taught by faculty of the University of Chicago and by professionals from the financial industry.

In the CDS market, participants historically have used arbitrage-free pricing models based on spreads, default probabilities and recovery rates. ISDA has published a spread-based model with standardized inputs that is widely used to drive consistency in calculating trade settlement amounts. Of course, many firms have spent considerable resources developing models superior to the general market models and these models appropriately constitute trade secrets. No end user of derivatives should use derivative instruments without an understanding of the risks involved in the use of the instrument.

Note finally that, apart from the uses of models in pricing derivatives and managing risk, over the life of the derivative instrument, realization in value based upon the observed underlying variables will ultimately take place.

Q.3. What is the best way to draw the line between legitimate hedges and purely speculative bets? For example, should we require an insurable interest for purchasers of credit protection, require delivery of the reference asset, or something else?

A.3. Restricting the use of OTC derivatives to “legitimate hedges” will significantly impair the valuable economic function that such markets perform in allowing participants to hedge and transfer risk. It would be a very unlikely and a costly undertaking for a dealer to find a willing buyer and willing seller of the same risk exposure at the same time if trading were limited to those only with “legitimate” hedges. Investors (which here, though being characterized as “speculators,” really represent all those who are willing to take risk in seeking return on investment capital) and market makers serve an important role in absorbing risk from hedgers. Furthermore, the price discovery of the derivatives markets send important signals to producers and consumers about the future prices of goods, encouraging investment where appropriate and conservation where appropriate.

In the CDS market, there are a tremendous number of “natural” or hedged buyers of credit protection (all those who own bonds), but there are virtually no natural sellers of protection who are doing so solely to hedge a specific credit risk. As such, the CDS market would not exist if the only users of the product would be those market participants who owned the underlying cash bonds. Liquidity of CDS, one of the most important financial innovations of the past two decades, would disappear, undermining the ability to hedge risks and likely materially raising the cost of capital for corporate America, which could lead to additional job losses

In addition to the near impossibility of a market structure as described above, it also is quite difficult to determine and enforce an appropriate definition of “legitimate” hedging. Consider a firm that does not own a bond of one of its suppliers or clients. It may be a wise business decision for that firm to buy protection against a possible bankruptcy of that supplier or client. But what would the extent of the “insurable interest” have to be to qualify to trade in the market?

What if CDS offers the best way of hedging against the credit risks posed by a given sector to which a firm is particularly exposed through a range of commercial relationships? How again could the extent of “insurable interest” be defined here?

Q.4. Is the concern that increased regulation of derivatives contracts in the United States will just move the business overseas a real issue? It seems to me that regulating the contracts written in the U.S. and allowing American firms to only buy or sell such regulated contracts would solve the problem. What else would need to be done?

A.4. Regulatory arbitrage is a very real issue in a global economy where capital can flow freely. The U.S. should take the lead and act while working with and through international bodies such as

the Financial Stability Board, the Basel Committee on Banking Supervision, the European Union and the G20 to ensure safe and sound markets that do not disadvantage U.S. firms.

Regulating only contracts written in the U.S. and allowing American firms to only buy and sell regulated contracts will not solve the problem when U.S. firms can operate subsidiaries or affiliates offshore free of such restrictions. Also, this could invite a retaliatory response from non-U.S. regulators that would put U.S. firms at a disadvantage if they, but not their international competitors, are excluded from financial markets and products abroad. International coordination is essential.

Q.5. Do over-the-counter or custom derivatives have any favorable accounting or tax treatments versus exchange traded derivatives?

A.5. From an accounting perspective, many financial participants follow mark-to-market accounting and therefore recognize gains and losses on their derivative contracts in current earnings, irrespective of whether such contracts are exchange-traded or not. For firms that do not follow mark-to-market accounting, however, certain accounting provisions, such as FAS 133, may favor customization of certain derivative instruments for certain users. A clearinghouse for derivatives should be able to provide the level of customization needed—for example in notional amount or maturity date—to meet the needs of the significant portion of the users who require FAS 133 accounting treatment.

From a tax perspective, exchange-traded derivatives are generally subject to mark-to-market treatment, whereas OTC derivatives are governed by rules, depending on how they are structured, for notional principle contracts, forwards or options. Contingent swap contracts such as CDS present a different case. Specifically, there is substantial uncertainty as to how contingent swap contracts should be treated for tax purposes.

Q.6. In addition to the Administration's proposed changes to gain on sale accounting for derivatives, what other changes need to be made to accounting and tax rules to reflect the actual risks and benefits of derivatives?

A.6. As noted, certain hedge accounting rules have the effect of discouraging the use of standardized derivatives as compared to more customized solutions, even when the risk profile and economic considerations of the standardized derivatives are equal to or better than the customized instrument. FAS 133, and any other hedge accounting rules, should be broadened to permit corporate users to use the standardized products, if the hedging basis risk is minimal. The societal benefits of deeply liquid and transparent markets, driven largely through increased use of standardized products and CCPs, justify the absorption of a higher level of basis risk under FAS 133.

The tax treatment of contingent swap contracts (which may encompass CDS) should be clarified and legislators and regulators should work with industry groups such as ISDA which has already proposed clarifications to the tax code on this issue.

Q.7. Is there any reason standardized derivatives should not be traded on an exchange?

A.7. Exchanges are an important step in the evolution of the CDS market. Moving from the current bilateral market to a CCP will dramatically reduce systemic risk and increase the stability of the financial markets. The enhanced liquidity and standardization brought about by clearing will further facilitate an exchange-trading mechanism.

Exchanges work best when there is a concurrency in interest between natural buyers and sellers. For the liquid index CDS product, which accounts for approximately 70 percent of all CDS trading volume, and for the most liquid single name CDS, the introduction of exchange trading will facilitate a more efficient and transparent market. However, for the less liquid single name CDS products, it will be necessary to allow market makers to continue to play a vital role in providing liquidity outside the exchange model, at least until the markets for these products evolve to the stage where there is sufficient concurrency of interest for exchange trading.

Q.8. How do we take away the incentive for credit default swap holders to force debtors into bankruptcy to trigger a credit event rather than renegotiate the debt?

A.8. In today's market, holders of a corporate debt security utilize a variety of investment products that may alter debt holders' payoffs to make bankruptcy preferable to debt restructuring. Examples include shorting junior debt instruments in the capital structure, shorting the underlying stock, buying equity default swaps and buying puts or selling call options on the stock. CDS are no different than these other instruments in their ability to alter the economic preference of a debt holder with respect to a bankruptcy or a restructuring.

Although beyond the scope of this question, research suggests that under current rules bankruptcy itself is quite costly and reduces a firm's value, independent of and in addition to the financial and operational problems that brought the firm to distress. Accordingly, streamlining of the bankruptcy process to minimize the dead-weight loss incurred in a bankruptcy proceeding would potentially more directly address the concern raised with this question.

Q.9. How do we reduce the disincentive for creditors to perform strong credit research when they can just buy credit protection instead?

A.9. As there are always two sides of every trade, even if a specific investor chooses not to perform credit research on a particular issuer, the seller of credit protection for the debt securities of such issuer will have a strong economic incentive to perform extensive credit research.

Where the risks of CDS are properly managed by a central counterparty and when a diverse set of participants create a liquid, transparent market, CDS can also provide a benchmark for pricing the probability of default of a firm or index of firms. By aggregating market participants' views on creditworthiness, CDS performs an important role in the pricing of a wide range of vital credit instruments.

Q.10. Do net sellers of credit protection carry that exposure on their balance sheet as an asset? If not, why shouldn't they?

A.10. Sellers of credit protection record their exposure on their balance sheet under their applicable accounting rules. Generally, for CDS contracts, the net seller's economic exposure is better described as the fair market value of the open contracts and not the notional amount. This is similar to a wide range of traded derivatives, such as options, where the relevant valuation for balance sheet purposes is the fair market value of the contract, not the notional value of the option. For financial reporting purposes, the fair market value of the open contracts is presented in the financial statements, often along with additional information in the financial footnotes. GAAP accounting rules typically require disclosure of the gross and net notional exposure for off balance sheet derivatives.

Q.11. In her testimony Chairman Schapiro mentioned synthetic exposure. Why is synthetic exposure through derivatives a good idea? Isn't that just another form of leverage?

A.11. "Synthetic exposure" through derivatives is a cornerstone of our modern financial markets, enabling investors to secure an economic exposure without needing to own the underlying asset. For example, a retiree may want to hedge against the risk of inflation by buying gold futures. It is far more efficient to purchase a gold future than to acquire gold.

The leverage created by derivatives is a function of margin and capital requirements. A central clearing solution for CDS would establish appropriate margin and capital requirements for the instruments, helping to reduce systemic risk.

Q.12. Regarding synthetic exposure, if there is greater demand for an asset than there are available assets, why shouldn't the economic benefit of that demand—higher value—flow to the creators or owners of that asset instead of allowing a dealer to create and profit from a synthetic version of that asset?

A.12. One of the central tenets of our economy is that supply and demand are largely balanced through free market forces. The same can be said of supply and demand for financial products; that is, free market forces bring equilibrium to supply and demand. Synthetic exposures created through derivatives are an important means by which the market arrives at a more stable equilibrium. Without derivatives instruments, we would be likely to see markets characterized by much higher levels of volatility and far lower levels of liquidity.

In addition, if there is increased demand for credit exposure, for example, the net effects of trading in the synthetic exposure will flow through to the owner of related assets and the issuer of that asset. For instance, if the market perceives a company to have a low probability of default and the supply of credit protection outweighs the demand for the bonds, then the cost CDS protection will decrease. When the cost of CDS protection decreases, it is easier for investors manage their bond credit risks, leading to an increase in demand for the bond, resulting in a decrease in borrowing costs for the issuer and higher bond prices for owners of the bonds.

Q.13. One of the arguments for credit default swaps is that they are more liquid than the reference asset. That may well be true, but if there is greater demand for exposure to the asset than there is supply, and synthetic exposure was not allowed, why wouldn't that demand lead to a greater supply and thus more liquidity?

A.13. With respect to the credit markets, it is fundamental to emphasize that corporations focus on achieving the capital structure that meets the needs of their stakeholders, as opposed to meeting "the demand for debt securities" of investors. Corporate CEOs and CFOs have a fiduciary duty to limit issuance of debt that, although potentially satisfying investor demand, would leave the company dangerously over-leveraged and at risk of bankruptcy. Synthetic exposure to corporate credit through CDS thus helps to satisfy investor and hedging demand for such risks without distorting corporate balance sheets.

The CDS market allows investors with a viewpoint on the price of risk for a given issuer to actively express their view by use of CDS contracts. Such trading increases liquidity and encourages more investors to focus on the merits of any given issuer's credit-worthiness. As noted in the response to the preceding question, the increase in liquidity and the broadening of investor participation works to reduce the cost of capital for corporations. Conversely, if CDS trading was restricted or eliminated, liquidity in the bonds would almost certainly be reduced, leading to a higher cost of capital for American corporations.

Q.14. Is there any justification for allowing more credit protection to be sold on a reference asset than the value of the asset?

A.14. There are numerous well-functioning markets where derivative exposure exceeds the value of underlying assets; certain equity options and commodity futures are two such examples. The presence of this alone does not cause any systemic risk to the economy. In fact, it very well can be a sign of a healthy and robust marketplace where many participants come together to provide consensus pricing. Moreover, as noted above, there are many circumstances in which one party may not own the reference asset but have a legitimate demand to hedge, *e.g.*, a firm that wants to buy protection against the possibility of bankruptcy of a major customer or supplier.

As stated previously, CDS in particular serve several critical market functions that lead to stronger economic growth by lowering the cost of capital for America's corporations. Examples of these critical market functions include: (a) the ability to efficiently and effectively manage credit risk, which (i) permits investors (including financial institutions) to diversify their holdings, and (ii) increases liquidity in the marketplace; (b) balancing of the supply and demand for credit risk, which helps to moderate asset prices to reflect appropriate risk-based returns; and (c) providing credit risk price transparency, which increases investor confidence and market liquidity.

Events of 2008 have highlighted weaknesses in the market structure for CDS, and underscore the valuable role of a CCP for users of CDS. By swiftly introducing and promoting CCP clearing of CDS, the important societal benefits of CDS can be maintained

while at the same dramatically reducing the systemic risk inherent in noncleared derivative products.

Q.15. Besides the level of regulation and trading on an exchange, there seems to be little difference in swaps and futures. What is the need for both? In other words, what can swaps do that forward contracts cannot?

A.15. Futures are highly standardized contracts that are traded on exchanges and centrally cleared by a clearinghouse. Futures offer a proven template for operational and risk management of standardized derivatives, providing for efficient and well-understood processing, margining, netting and default management. Swaps, historically, are more customized, bespoke trades that are individually negotiated in the OTC market. However, with the significant progress towards standardization over the last several years, many bespoke, customized swaps have become standardized. Examples include the CDS market where 90–95 percent of trading volume is now in “standardized” contracts. All the terms of such contracts are fixed by convention, and the contracts trade purely on price and volume. Such “standardized” CDS contracts can be centrally cleared in a futures-like framework, subject to the standard rules of the central counterparty and provide similar risk management and customer segregation protection and portability. Individually negotiated swaps may still be utilized to meet the limited need for customized CDS contracts.

With central clearing of standardized CDS in a futures-like framework, most market participants agree that electronic trading, at least of the leading CDS indices and most highly liquid single names, will shortly follow. If it does not, then regulators should intervene to remove any artificial barriers to such market evolution.

Q.16. One of the arguments for keeping over-the-counter derivatives is the need for customization. What are specific examples of terms that need to be customized because there are no adequate substitutes in the standardized market? Also, what are the actual increased costs of buying those standard contracts?

A.16. The most liquid of the OTC derivatives markets, such as the interest rate swap markets and CDS markets, have already embraced standardization as a means of increasing liquidity, reducing operational risk and reducing costs. In both the interest rate swap markets and the CDS markets, the vast majority of contracts are traded according to standardized market conventions. What has not evolved is a central clearinghouse readily available to the end users of such products. Such a central clearinghouse would reduce the banks’ privileged role as the providers of credit intermediation (and undermine the economic rents associated with such concentrated power).

Depending upon the OTC market, customization may be desirable to reflect specific underlying commodities or instruments, delivery locations, quantity, quality or grade, payment dates, maturity dates, cash flows or other payment terms, any or all of which may or may not be reflected in standardized agreements.

It is a fallacy that standardized and cleared contracts are more costly than customized, noncleared OTC contracts. There are three primary economic costs in trading contracts: (i) operational costs of

managing and processing such contracts; (ii) trading costs, as measured by the bid-offer spread; and (iii) capital and margin costs for investing in such contracts. Standardization and clearing significantly reduces the first two costs and can be expected to reduce the third.

Numerous studies have documented the economies of scale that are gained by centrally processing and managing contracts through a central counterparty. Moreover, standardized contracts also enable standardized processes that reduce costs. Additionally, as contracts are standardized and move to a CCP (increasing price transparency and making it easier to transact in such instruments), liquidity increases and the bid-offer spread decreases—reducing the cost for all investors, including corporations, pension funds, insurance companies and hedge funds.

The posting of collateral for standardized cleared contracts does not necessarily increase costs compared to noncleared OTC contracts. Central clearing provides significant capital efficiency through multilateral netting and the elimination of counterparty risk.

Of greatest importance, a clearinghouse will all but eliminate the externalities inherent in today's market structure—externalities that are borne by taxpayers. A clearinghouse will roll back the emergent paradigm of “too interconnected to fail” and dramatically reduce the probability of a future AIG-like financial black hole.

Q.17. Who is a natural seller of credit protection?

A.17. The natural sellers of credit protection would be best described as the broad array of investors who generally invest in the cash corporate bond markets. These investors generally have demonstrated credit analysis capabilities and strong balance sheets with which to underwrite risk.

Q.18. There seems to be agreement that all derivatives trades need to be reported to someone. Who should the trades be reported to, and what information should be reported? And is there any information that should not be made available to the public?

A.18. Cleared derivative transactions are, of course, recorded on the books and records of the clearinghouses and details of these transactions are readily available to regulators. Noncleared derivative transactions should be reported to a non-CCP based central warehouse such as DTCC to ensure that the details of these transaction are readily available to regulators. In addition to facilitating the appropriate monitoring of systemic risk in the financial system, an accurate and readily accessible warehouse of transaction details is important to facilitate the dissolution of a financial institution that is in financial distress. Regulators and others, however, need to closely guard the information at both the CCPs and trade warehouses such that no information that would compromise the identity or specific positions of institutions is publicly divulged. The public disclosure of such information could have significant negative effects on liquidity in the market.

CCPs' publishing of end of day settlement prices, and the progressive publishing of transaction prices for liquid traded CDS, will bring highly beneficial transparency to the CDS market. However, for certain less-liquid contracts, immediately releasing the details

of a trade could serve to reduce liquidity. In relatively illiquid markets, or where an individual trade may be large relative to daily trading volume, dealers or others may be reluctant to commit large amounts of capital if their actions become immediately known to other market participants. In this case, requiring such information to be immediately disclosed could discourage trading and thus impair liquidity. In these circumstances, such information should be made available to the public only on a lagged basis, and, depending on the circumstances, potentially also only on an aggregated basis.

Q.19. What is insufficient about the clearinghouse proposed by the dealers and New York Fed?

A.19. Well-functioning markets are efficient, open, and transparent. Well-functioning standardized derivatives markets utilize a CCP to significantly reduce counterparty risk exposure, facilitate liquidity, protect customer collateral, and facilitate multilateral netting and monitoring of positions.

ICE U.S. Trust (ICE), the first U.S.-based clearinghouse to be sponsored by the dealers does, to some extent, improve upon the current market by reducing counterparty risk and facilitating multilateral netting and the monitoring of positions among and for the select group of 10 ICE clearing members. At the same time, certain elements of the ICE model do not help as much as they could to improve the CDS market structure, because of:

- Lack of regulatory and legal clarity on the protection of customer margins and positions in the case of a clearing member default, which dramatically limits the value of such clearinghouse for customers;
- Inability to process trades directly into clearing without any daylight counterparty exposure post execution;
- Reliance upon bilaterally negotiated ISDA agreements that limit the ability of one firm to trade with another firm; and
- Inability of nonbank CDS dealers to directly face ICE as a clearing member and receive the benefits of such clearing membership.

ICE's structural lack of straight through processing and immediate review and acceptance for clearing creates a very significant barrier to the evolution of electronic matching.

Additionally, ICE's clearing solution lacks buy-side stakeholders and participation in governance. This general lack of inclusion of buy-side firms has led to the development of a solution that does not currently meet the needs of most buy-side firms, whose positions and trading volume comprise a substantial portion of the CDS market and the vast majority of the aggregate net risk held in the market place. It is important for any clearinghouse or any other central industry facility to include the voice of all market participants—buy-side and sell-side alike.

Q.20. How do we prevent a clearinghouse or exchange from being too big to fail? And should they have access to Fed borrowing?

A.20. CCPs have a very long track record of surviving wars, depressions, recessions and failures of major members. In fact, there has never been a clearinghouse failure in the U.S. in the over 100-

year history of U.S. clearing organizations. When Lehman's default was declared, the CME as central counterparty to Lehman's futures positions moved all futures customer positions to other clearing members and auctioned Lehman's positions quickly and efficiently. As a result of these actions there was no disruption in the market and no loss to any customer or CME clearing member or to the CME's pool of security deposits and other assets that stand as a backstop to protect the clearinghouse and its members against loss in extreme scenarios. By contrast, Lehman's bilateral, interconnected derivatives positions and counterparty margin a year later are still locked up in bankruptcy and Lehman's customers suffered significant losses. This is why a clearinghouse is critical to these markets and reduces systemic risk.

The robustness of CCPs is a testament to their independence and incentives to be expert in managing risks. The clearinghouse imposes a consistent, neutral margin and risk management discipline on each counterparty, and will work very proactively to prevent default. The clearinghouse has its own capital at stake if the margin is insufficient. The clearinghouse continually assesses its clearing members, and can at any time reduce trading limits or take other measures to reduce risk. This is not always the case in the bilateral world, where commercial relationships, historical agreements and other factors have been proven to lead to inconsistent margining or credit assessment practices, as was the case with AIG. AIG was not required by its counterparties in many instances to post any margin, including mark-to-market margin.

While clearinghouses have grown considerably in size as markets have flourished, their maintenance of proportionate capital and margin has ensured their survival. The right way to keep this track record of success unbroken is to ensure the close regulatory supervision of clearinghouses, and the maintenance of their independence so that their incentives remain to be proactive and conservative.

Clearinghouses have not required the ability to borrow from the Fed and, if they were, we believe that this would introduce a moral hazard problem. If the CCP believed that the government would bail out any defaults, there is the risk that clearing members would seek to reduce their capital and ease risk-management standards and the CCP would lose its neutral discipline. This is exactly the opposite of what regulators and taxpayers would call for.

Q.21. What price discovery information do credit default swaps provide, when the market is functioning properly, that cannot be found somewhere else?

A.21. CDS are the most accurate indicators of corporate credit risk and provide capital market participants with robust, real-time, and consensus-driven estimates of corporate default probabilities and recovery rates. No other market, including the bond market, or research institutions such as rating agencies, can provide a similar depth of information that is so critical to debt issuance and economic growth. This is largely because:

- CDS are in many instances far more liquid than individual bonds, due, in part, to the fact that the CDS represent the credit risk of the underlying entity, whereas that entity may

have many distinct bond issuances. IBM, for example, has over 20 different bond issuances.

- The vast majority of CDS are standardized instruments. Valuation of the CDS are not complicated by specific market technical factors or unique contractual features or rights that are associated with a specific bond issue. In addition, CDS represent the price of credit risk bifurcated from the compensation demanded by investors for committing cash to the acquisition of a debt security.
- Rating agencies' analytics are driven by analysts that cover the specific corporate bonds. The market price of CDS, on the other had, reflect the market's consensus view of real-time credit risk as determined by investors with financial capital at risk.

Q.22. Selling credit default swaps is often said to be the same as being long in bonds. However, when buying bonds, you have to provide real capital up front and there is a limit to the lending. So it sounds like selling swaps may be a bet in the same direction as buying bonds, but is essentially a highly leveraged bet. Is that the case, and if so, should it be treated that way for accounting purposes?

A.22. Please see the answer to questions #11, which is restated below for reference.

“Synthetic exposure” through derivatives is a cornerstone of our modern financial markets, enabling investors to secure an economic exposure without needing to own the underlying asset. For example, a retiree may want to hedge against the risk of inflation by buying gold futures. It is far more efficient to purchase a gold future rather than to acquire gold.

The leverage created by derivatives is a function of margin and capital requirements. A central clearing solution for CDS would establish appropriate margin and capital requirements for the instruments, helping to reduce systemic risk.

Q.23. Why should we have two regulators of derivatives, with two interpretations of the laws and regulations? Doesn't that just lead to regulation shopping and avoidance?

A.23. If we were starting with a clean sheet of paper, we might agree to have a single regulator of derivatives. This is not the case, however. The SEC and CFTC are two large and well-established regulatory bodies that would be difficult and time-consuming to combine. More could be accomplished sooner by focusing on fixing the regulatory gaps—such as exclusion of certain derivatives from oversight and allowing participants to transact in markets without holding or putting up sufficient capital and/or collateral—that contributed to the problems seen in the markets over the past 18 months.

We believe the necessary regulatory infrastructure and tools are in place, with support of appropriate legislation, to rapidly implement the reforms needed. In this context, please see the answer to Senator Reed's question #1, with an excerpt of relevant material from that answer below, affirming the immediate value to the market of building from the CFTC's proven account segregation framework:

A critical feature of any central clearing structure from the perspective of the buy-side—asset managers, corporations, pension funds, hedge funds, and all other end users—is proven account segregation. Buy-side accounts represent a substantial portion of any derivative’s systemic exposure. With proper account segregation for cleared products, the buy-side’s positions and margins are protected from the bankruptcy of a defaulting clearing member and transferred to other clearing members, securing the orderly functioning of the markets. The buy-side has confidence in the time-tested CFTC account segregation rules, which were amply proven in the case of the rapid workout, without market disruption, of Lehman’s CFTC-regulated futures positions. This was in stark contrast to the losses suffered by end users who faced Lehman in bilateral, non-cleared positions that were trapped in Lehman’s bankruptcy.

Q.24. Why is synthetic exposure through derivatives a good idea? Isn’t that just another form of leverage?

A.24. Please see answer to question #11, which is restated below for reference.

“Synthetic exposure” through derivatives is a cornerstone of our modern financial markets, enabling investors to secure an economic exposure without needing to own the underlying asset. For example, a retiree may want to hedge against the risk of inflation by buying gold futures. It is far more efficient to purchase a gold future rather than to acquire gold.

The leverage created by derivatives is a function of margin and capital requirements. A central clearing solution for CDS would establish appropriate margin and capital requirements for the instruments, helping to reduce systemic risk.

Q.25. What is good about the Administration proposal?

A.25. We support the broad principles articulated in the Administration proposal, which include moving towards more efficient and transparent markets, enacting necessary regulatory oversight to prevent market manipulation and fraud, and reducing the concentrated systemic risk that exists today. Specifically, with regard to regulation of the OTC derivative market, we support:

- The aggressive promotion of clearing of all standardized transactions through capital and other incentives, with higher risk-based capital charges for noncleared derivatives;
- The need to regulate all significant OTC derivative market participants to prevent systemic risks, while making such regulation transparent and fair to all market participants;
- The need for greater market transparency, openness and efficiency; and
- The facilitation of exchange trading for derivatives, where appropriate, and the removal of any artificial barriers to market evolution towards exchange trading if such trading has not naturally evolved.

Q.26. Is the Administration proposal enough?

A.26. We believe the critical question is not whether the Administration proposal is enough, but whether legislators and regulators can quickly implement key aspects of the proposal (as articulated

in the answer to question #25 above) across a broad OTC product set (e.g., credit default swaps, interest rate swaps, and foreign exchange swaps). Unfortunately, certain incumbent market participants seek to delay the movement of noncleared products to clearing, for reasons driven by profitability irrespective of the systemic risks created. These interests should not drive legislative outcomes.

Legislators and regulators should not exempt certain market participants from having to post margin or collateral. There is no principled basis for such carve-outs. No market participant should be exempt from posting risk-based capital and/or margin sufficient to protect its counterparties and the market from the risk it incurs. No counterparty should be exempt from the requirement to clear transactions when they can be cleared. But also no qualifying counterparty who meets these requirements should be excluded from the benefits of CDS.

Separately, as discussed in more detail in response to Senator Reed's question #6, because dealers today do not post margin for noncleared trades, and buy-side participants do, dealers should be obliged to set aside sufficient capital to secure the exposure they take on, while buy-side participants already meet this requirement through margin. Imposing capital or other requirements on these buy-side firms, would therefore only serve to create impediments to investment, increase the cost of hedging, and reduce liquidity.

Please note answers to questions #6 and #16 above that discuss the significant benefits of using standardized contracts and CCPs, such as lower costs of trading and deeper, more liquid markets. The Administration and Congress should work closely to define the most inclusive practical standards for trades to be subject to mandatory clearing, driven primarily by the clearinghouses' independent willingness to accept such trades, on reasonable commercial margining terms.

Regulatory carve outs and differential treatment of certain participants, such as exclusion of certain derivatives from regulatory oversight and inconsistent collateral policies, greatly contributed to the problems seen in the derivatives market over the past 18 months and cannot be allowed to continue.

Q.27. Mr. Whalen suggests that Congress should subject all derivatives to the Commodity Exchange Act, at least as an interim step. Is there any reason we should not do so?

A.27. It is most important that all OTC derivatives be subject to some form of robust regulation that ensures proper transparency, adequate capital and collateral requirements, and clearing by a strong CCP. We support whichever regulatory regime can best and most rapidly achieve these imperatives, provided it recognize the needs of all market participants, including buy-side investors.

Please also see the answer to Senator Reed's question #1, from which relevant material is restated below for reference.

A critical feature of any central clearing structure from the perspective of the buy-side—asset managers, corporations, pension funds, hedge funds, and all other end users—is proven account segregation. Buy-side accounts represent a substantial portion of any derivative's systemic exposure. With proper account segregation for cleared products, the buy-side's positions and margins are protected

from the bankruptcy of a defaulting clearing member and transferred to other clearing members, securing the orderly functioning of the markets. The buy-side has confidence in the time-tested CFTC account segregation rules, which were amply proven in the case of the rapid workout, without market disruption, of Lehman's CFTC-regulated futures positions. This was in stark contrast to the losses suffered by end users who faced Lehman in bilateral, non-cleared positions that were (and remain) trapped in Lehman's bankruptcy.

Q.28. Is there anything else you would like to say for the record?

A.28. The time to act is now. The experience of the current crisis provides us with a tremendous opportunity to learn from past mistakes and correct the fundamental flaws in the financial system. What we saw was that participants in free markets were subsidized, perhaps unjustly, by public resources and investors lost substantial sums of money, not because of their investment strategies, but because of the bankruptcy of their counterparties. It is well established that CCPs will mitigate or eliminate many of the weaknesses inherent in the bilateral trading of derivatives, reducing systemic risk and placing the "too interconnected to fail" genie back into the bottle. CCPs can best meet the needs of our society and our capital markets, and can do so now.

**RESPONSES TO WRITTEN QUESTIONS OF CHAIRMAN REED
FROM ROBERT G. PICKEL**

Q.1. Are there differences between the SEC and CFTC's approaches for regulating their respective markets and institutions that we should take into consideration when thinking about the regulation of the OTC derivatives markets.

A.1. There are differences in both the traditional roles and approaches to regulation between the SEC and CFTC that warrant consideration as Congress contemplates oversight of the OTC derivatives markets. The former primarily serves an investor protection role; the latter a market regulatory role. Generally, the SEC relies on rule-based regulation and enforcement actions, while the CFTC relies on principle-based regulation.

Q.2. The Administration's proposal would require, among other things, clearing of all standardized derivatives through regulated central counterparties (CCPs). What is the best process or approach for defining standardized products? How much regulatory interpretation will be necessary?

A.2. The industry strongly supports the clearing of OTC derivatives contracts and believes that clearing should be encouraged wherever feasible. In identifying those derivatives that are standardized and therefore clearable, we suggest the Federal regulators look to apply certain criteria or a framework of conditions to ensure that required clearing of standardized derivatives promotes economic efficiency, fungible treatment of cleared contracts, clearinghouse interoperability, choices among clearinghouses, and consistency with international standards. In particular, the Federal regulators should consider whether:

1. One or more regulated clearing organizations are prepared to clear the contract in accordance with U.S. regulatory requirements and will have the necessary resources, capacity, operational competence, experience, risk management infrastructure and governance structure to clear the contract in a prudent manner and mitigate systemic risk, taking into account the size and specific characteristics of the market for the relevant contract;
2. The contract is traded with sufficient frequency and volume that the risks associated with outstanding positions in the contract are significant with respect to the market as a whole;
3. Liquidity in the contract is sufficient to provide reliable price sources for the regulated clearing organization(s) to calculate collateral requirements consistent with prudent risk management; and
4. The contract is traded in the OTC market on terms and trading conventions that are sufficiently standardized to facilitate clearing without basis risk to be regulated clearing organization(s). The clearing rules applicable to the contract are consistent with the OTC market's trading terms and conventions.

To the extent that mandatory clearing requirements for OTC derivatives contracts are adopted and implemented, they should apply only to OTC derivatives transactions between professional intermediaries within Tier 1 Financial Holding Companies and other systemically significant persons and should ensure broad-based participation among the covered participants active in the relevant market.

Q.3. Are there key areas of disagreement between market participants about how central counterparties should operate? For example, what are the different levels of access these central counterparties grant to different market participants? What are the benefits and drawbacks of different ways of structuring these central counterparties?

A.3. An important consideration facing market participants regarding how CCPs operate is the segregation and portability of CDS positions and associated initial margin. A related consideration is a CCP's criteria for clearing member (CM) status.

ISDA, as part of an ad hoc group comprising both buy-side and sell-side constituents, prepared a report to the supervisors of the major OTC derivatives dealers (the Report), which analyzes the following proposed clearing solutions: CME Clearing, ICE Trust U.S. LLC, Eurex Clearing AG, ICE Clear Europe, LCH.Clearnet Limited/NYSE Liffe and LCH.Clearnet SA. The Report is available at www.isda.org/credit/buy-side-access.html.

The Report explores the rights of "customers"—*e.g.*, buy-side and other market participants proposing to clear CDS through CMs of a CCP—in regard to the segregation and portability of CDS positions and associated initial margin. The Report also contains each CCP's response to a questionnaire, which, among other things, contains detailed information on the CCP structure and criteria for CM status. The Report also suggests legislative and regulatory re-

forms that may be particularly helpful in paving the way for effective clearing.

The industry recognizes that clearing is an important public policy consideration and that it can provide many benefits to the market, including helping to identify systemic risk. It is also worth noting that along with the widespread recognition of the benefits of clearing, there is also widespread acknowledgement that there is a continued need for customized OTC derivatives.

Establishing a clearing framework that maximizes the benefits of clearing while avoiding unnecessary costs requires the consideration of many factors. A recent paper authored by Darrell Duffie and Haoxiang Zhu entitled “Does a Central Clearing Counterparty Reduce Counterparty Risk?” analyzes many of these factors, including whether a CCP can actually reduce netting efficiency and thereby lead to an increase in collateral demands and average exposure to counterparty default and the effect of requiring multiple clearinghouses. Regarding the latter point, the authors conclude that whenever a single CCP reduces average counterparty exposures, relative to bilateral netting, it is never efficient to introduce another central clearing counterparty for the same class of derivative. This observation is particularly significant in light of regulatory proposals that would ostensibly require clearing of the same product across multiple CCPs, whether such requirement is based on jurisdictional considerations or otherwise. Such a requirement may not only undermine the benefits of clearing, it would also impose considerable real costs for market participants. The industry does not oppose multiple clearing solutions and allowing the market to determine which should succeed but requiring compatibility with multiple CCPs will impose significant costs and may undermine the benefits that clearing provides.

Q.4. One key topic touched on at the hearing is the extent to which standardized products should be required to be traded on exchanges. What is your understanding of any areas of disagreement about how rigorous new requirements should be in terms of mandating, versus just encouraging, exchange trading of standardized OTC derivatives?

A.4. There is no simple division between standardized OTC derivatives and those that are not; instead, OTC derivatives occupy points on a continuum ranging from completely customized and unique to completely standardized. An example of the former would be a credit default swap used to transfer credit risk in a synthetic collateralized debt obligation (CDO); such a contract might not even be executed under an ISDA Master Agreement, and would reference a specific portfolio of credits in the securitization issue. Moving slightly along the continuum, one might find an option on the spread between the crude oil price and a basket of refined product prices based on the output mix of a specific refinery; this “crack spread” option would be executed under the ISDA Master Agreement but would involve, at least for the refined product prices, a unique basket of prices. Moving still further on the continuum, one would find interest rate caps on bond issues or bank loans. None of the three products described would generate sufficient volume to

trade on an exchange, nor are they sufficiently standardized to trade on an exchange.

As a general matter, standardization is a necessary but not sufficient condition for trading on an exchange: Standardized derivatives can be traded on an exchange only when a product has sufficient volume and liquidity to support reliable price discovery for the product. If sufficient volume and liquidity do not exist, it would be preferable to trade the products over-the-counter, that is, execute trades privately, and then book the trade with a clearinghouse.

Policy discussions frequently confound exchange trading—which means that all trades must be negotiated and executed through a central venue—with clearing—which means that trades must be booked with a central counterparty that serves as the counterparty to all cleared transactions. Exchange trading is possible without clearing, although most exchanges involve clearing as well; and clearing is compatible with both exchange trading and over-the-counter trading.

Exchanges and clearinghouses both make use of standardization, but for different reasons. Exchange trading involves extensive standardization because it makes a product easier to trade, which leads to higher liquidity. But as a product becomes more standardized, it attracts a narrower range of traders, which leads to lower liquidity. As a result of these conflicting effects, only products that inherently appeal to a large number of traders are likely to succeed on an exchange; more specialized products generally lack liquidity and consequently do not trade successfully on an exchange.

Clearinghouses also rely on standardization, not to make trading easier but to facilitate valuation for the purposes of margin setting. Although cleared products need to be substantially standardized, they need not be highly liquid; all that matters is that the clearinghouse can calculate contract values and required margin in a timely manner. Clearinghouses are therefore suitable to both OTC and exchange-traded products.

We see no compelling public policy rationale for mandating, as opposed to encouraging, exchange trading or clearing. To the extent there is a consensus in favor of some mutualization of counterparty credit risk, however, we believe that encouraging clearing should be sufficient.

Q.5. Can you share your views on the benefits of customized OTC derivatives products? About how much of the market is truly customized products?

A.5. A liquid, functioning OTC market requires the existence of both customized and relatively standardized derivatives. Customized derivatives are necessary in order to provide efficient and safe risk management for clients. Relatively standardized, known commonly as “vanilla” derivatives, are necessary for dealers to trade among each other and other market professionals in order to maintain a liquid, price efficient market. Further, the vanilla part of the market is likely to be substantially larger than the customized part because continuous trading is necessary to maintain liquidity. But the relatively low numbers of customized derivatives does not make them any the less important to the market.

As a general rule, hedgers prefer flexible, customized OTC derivatives, while purely financial traders, including speculators, prefer the ease of trading standardized, transparent products. Customized OTC derivatives are most important to nonfinancial corporations seeking to manage the financial risks encountered in the course of business activities, as well as investment managers managing specific portfolios. An American manufacturing company that exports overseas, for example, encounters foreign exchange risks in its activities; because the cash flows do not correspond with exchange settlement schedules, the firm would need a customized derivative. Another example is an oil refinery that transforms crude oil into refined products; because each refinery has a unique product mix, only customized derivatives can fill the needs of the refiner. In both cases, requiring the use of standardized, margined products would make hedging more costly and possibly less likely because such companies do not routinely keep sufficient cash balances to ensure that margin calls can be met; instead, they often collateralize their OTC derivatives along with other banking relationships such as loans.

ISDA has only indirect, rough estimates of the proportion of the market that is highly customized. According to a poll of ISDA Board member firms, an average of 58 percent are with dealers, 27 percent with nondealer financial counterparties (*e.g.*, regional banks and hedge funds), and 6 percent are with end users (*e.g.*, nonfinancial corporations); for interest rate options, 65 percent are with dealers, 28 percent with nondealer professionals, and 7 percent with end users. For credit default swaps, the proportions are 75 percent with dealers, 25 percent with nondealers professionals, and less than one percent with end users. The primary users of the more standardized instruments are likely to be dealers and hedge funds; the primary users of the more customized instruments are likely to be regional banks and corporation. Finally, a high proportion of equity derivatives are customized, especially those based on single equity issues.

Q.6. The Administration's proposal would subject the OTC derivatives dealers and all other firms whose activities in those markets create large exposures to counterparties to a "robust and appropriate regime of prudential supervision and regulation," including capital requirements, business conduct standards, and reporting requirements. What legislative changes would be required to create margining and capital requirements for OTC derivative market participants? Who should enforce these requirements for various market participants? What are the key factors that should be considered in setting these requirements?

A.6. Prudential oversight of the OTC derivatives markets should ensure the availability of both customized OTC derivatives and more standardized derivatives as risk management tools. A vibrant and healthy derivatives market plays a crucial role in today's credit markets. Imposing capital requirements on OTC derivatives would require policy makers to find the equilibrium between the need for effective regulation of risk-taking and the need for effective risk-management. Therefore, we respectfully suggest that the setting

and enforcement of capital requirements for OTC derivatives be left to the appropriate regulators.

Q.7. One concern that some market participants have expressed is that mandatory margining requirements will drain capital from firms at a time when capital is already highly constrained. Is there a risk that mandatory margining will result in companies choosing not to hedge as much and therefore have the unintended consequence of increasing risk? How can you craft margin requirements to avoid this?

A.7. This concern is valid because nonfinancial corporations, which make extensive use of customized derivatives, are not geared up to routinely post cash margin as required by clearinghouses. Instead, they customarily collateralize as part of their overall banking relationship. If margin were made a matter of law or regulation, the cost of funding margin might be sufficient to lead corporations to reduce their hedging activities and thereby increase their financial risk exposures. We respectfully suggest that margin requirements be left to clearinghouses and their regulators to determine, as they do now, for cleared products.

Q.8. Is there a risk that regulating the OTC derivatives markets will dramatically alter the landscape of market participants or otherwise have unintended consequences we aren't aware of?

A.8. Yes. OTC derivatives offer significant value to the customers who use them, to the dealers who provide them, and to the financial system in general by enabling the transfer of risk between counterparties. It is important that any changes to the OTC derivatives market maintain the continued availability and affordability of these important tools.

The recent market turmoil and today's tight credit environment may be attributed, at least in part, to a lapse in risk management. It is difficult to determine unintended consequences *ex ante*, however, changes that would reduce the availability of credit or restrict the ability to manage risk, for example by restricting the ability of businesses to hedge their unique risks via customized derivative products, would be particularly problematic.

**RESPONSES TO WRITTEN QUESTIONS OF SENATOR BUNNING
FROM ROBERT G. PICKEL**

Q.1.a. Do you believe the existence of an actively traded cash market is or should be a necessary condition for the creation of a derivative under law and regulation?

A.1.a. In general, derivatives markets tend to be more liquid than underlying cash markets. For example, bank loans and many bonds issues tend to be fairly illiquid. There is no good reason to prohibit credit default swaps on such securities because the underlying instruments do not trade in a liquid market. Such a prohibition would only serve to reduce bank lending capacity and the ability and willingness of investors to purchase bonds, which would not be desirable while the economy is in the midst of a credit crunch.

Privately negotiated derivatives are built on the fundamental principle of freedom of contract. Two parties can construct a mutually beneficial agreement to address their risk management needs,

which may or may not be related to the existence of a cash market. We question whether the creation of such an agreement should be subject to conditions specified by law or regulation, especially since regulators can use powers they already have to limit trading in products that are judged to threaten systemic stability.

Q.1.b. If not, what specific objective means besides a cash basis market could or should be used as the underlying relationship for a derivative?

A.1.b. We do not believe it would be productive to attempt to legislate or regulate the types of risks traded in derivatives markets. All derivatives reference risks arising from normal economic activity are borne by market participants. Most securities, even the most basic types of securities such as bonds, embody a bundle of risks. The benefit of derivatives is that they permit the unbundling and pricing of specific risks.

For example, an investor holding a corporate bond bears both interest rate risk and credit risk. Those individual risks can separately be traded, and valued, using interest rate derivatives and credit default swaps. By allowing investors to unbundle and trade individual risks, derivatives make it possible for investors to tailor the risks they bear. Likewise, hedgers in commercial markets can reduce financial risk while concentrating on managing the business risk associated with their enterprises.

The need to manage specific risks can change as economic conditions change. Any a priori restriction on the types of risks that can be referenced by derivatives could easily hamper effective risk management.

Q.2. Why should the models to price OTC derivatives not be published? If there is no visible cash basis for a derivative and the model is effectively the basis, why should the models not be public?

A.2. As a general matter, prices are determined through trading and not by financial models. Financial models attempt to explain the factors determining values of financial instruments. Many such models lend insight into the factors that influence prices of financial instruments, which is why some traders use financial models to inform their trading decisions. But most existing models cannot predict asset prices accurately enough to be used exclusively for price setting, which is why many more traders do not rely on financial models. In addition to informing trading decisions, models are used for risk management purposes and to value illiquid positions for which market prices are not readily available.

Many dealers currently publish newsletters that analyze factors determining the behavior of credit default swap valuation along with insights into how they model the behavior of credit default swap spreads. Moreover, existing regulations require regulated financial intermediaries to disclose to regulators in detail the methods they use to value financial instruments and to measure risk and the controls placed on such processes. This is as it should be. But there has been no demonstrated advantage, yet there would be great expense, associated with a legal mandate requiring every institution to publish the details of their own proprietary models and to explain in detail how they apply those models in practice.

We are not suggesting that greater forms of transparency are not desirable. For example, ISDA has recently released the ISDA CDS Standard pricing (originally developed by JPMorgan) as part of an effort to facilitate the central clearing of standardized credit default swap contracts. The ISDA standard CDS model does not determine CDS prices. It merely provides a standardized method for calculating changes in up-front payments for standardized credit default swaps based on changes in credit default swap spreads. Credit default swap spreads are still determined through trading, however, which is the principal method of price discovery in all markets. The ISDA model is freely available to all market participants on a Web site maintained by Markit at www.cdsmodel.com.

As a final point, we are not aware of any derivatives market for which there is no cash basis. We are aware that some commentators have leveled this criticism at the credit default swaps market, but we believe the criticism is misplaced. The cash basis for credit default swaps is the difference between the credit default swap spread and observed risk premium paid by bond issuers and borrowers in the loan market. Several good books analyzing and explaining the behavior of the credit default swap basis have been published in recent years. These books are publicly available to all interested parties.

Q.3. What is the best way to draw the line between legitimate hedges and purely speculative bets? For example, should we require an insurable interest for purchasers of credit protection, require delivery of the reference asset, or something else?

A.3. The dichotomy between “legitimate” hedges and “purely speculative bets” is a false one because a functioning market requires a seller for every buyer. A person who buys a bond and does not hedge the risk of the bond, for example, could be characterized under an exceedingly narrow definition as engaging in a “purely speculative bet.” Few would adopt such a characterization, however, because it would imply that buying bonds without hedging is not legitimate. Similarly, a person who wants to hedge the risk of a bond by buying CDS protection requires that another person be willing to sell protection, which could itself be characterized as a purely speculative bet.

Requiring that all hedges be offset by other hedges would result in a “by appointment only” market that matches hedges, which would be impossible in the case of credit risk because it is unlikely that a seller of protection would meet the definition of a hedger. Put simply, what is a seller of protection hedging? Further, requiring an insurable interest for purchasers of credit protection, which is meant to apply to insurance products and not to financial derivatives, would effectively make risk transfer impossible. Suppose, for example, that a bondholder buys CDS protection from a bank; the bank that sells protection will normally want to hedge the credit risk it takes on from the bondholder by buying protection. But if only bond owners can buy protection, the bank will not be able to hedge its risk. In the presence of such restrictions, few firms will be willing to act as protection sellers. Finally, requiring delivery of the reference asset, which was the standard means of settlement prior to 2005, would be counterproductive and harmful to bond

market liquidity in light of the large number of index CDS transactions found in today's market.

Q.4. Is the concern that increased regulation of derivatives contracts in the United States will just move the business overseas a real issue? It seems to me that regulating the contracts written in the U.S. and allowing American firms to only buy or sell such regulated contracts would solve the problem. What else would need to be done?

A.4. Derivatives markets are fluid and global. Any increased regulation must take into account that certain trades will not be done or will be done elsewhere.

A recent article shows that the concern about business moving overseas is real: According to Euractiv.com, the European Commission's proposed rules for derivative dealers, which appear to be more flexible than those discussed in the U.S., might be intended to "court" U.S. dealers faced with a choice of where to conduct business.

More broadly, companies need the risk management tools that only derivatives can supply and will respond to arbitrary restrictions on their ability to enter into risk-shifting contracts by seeking out venues where they can enter into such agreements. For example, an American company with foreign subsidiaries routinely needs to enter into a variety of contracts with local parties as part of the conduct of business, and these business dealings will produce risks that they will wish to hedge. The assumption that a U.S. company could always find a market in derivatives for any type of risk in the United States is unfounded. Derivatives contracts are not universal. Interest rate derivatives referencing foreign interest rates, for example, are typically actively traded in the home country of the currency. The demand for such contracts inside the United States might be so limited that a U.S. market for such contracts does not exist. Thus, restricting a U.S. company to trade only U.S.-regulated derivatives will have the effect of prohibiting the hedging of interest rate risks borne by overseas subsidiaries.

At the very least, such a prohibition would effectively make it impossible for U.S. banks to offer through overseas subsidiaries a full complement of financial services to U.S. firms operating outside the U.S., which would thereby hamper the competitiveness of any U.S. company with overseas operations.

Q.5. Do over-the-counter or custom derivatives have any favorable accounting or tax treatments versus exchange-traded derivatives?

A.5. Over-the-counter derivatives may enjoy favorable accounting treatment when they are used to hedge an existing risk. U.S. GAAP hedge accounting guidelines are extremely rigid. Unless a company can demonstrate that a hedge employing a derivative instrument is a nearly perfect hedge, it is required to report the mark-to-market gains and losses from the hedge instrument as a profit or loss, even if it does not report changes in the value of the underlying exposure. By their nature, standardized derivatives contracts almost never qualify as a perfect hedge. Thus, if a company hedges the interest rate risk using interest rate futures it must report any gains or losses on the hedging position in its income statement. But if the underlying instrument is held in the investment

portfolio, changes in the market value of the instrument do not affect reported income. Such a regime creates artificial volatility in reported earnings.

Similarly, a multinational company that wishes to use standardized foreign exchange futures to hedge against changes in exchange rates might find that the exercise exacerbates the volatility of its reported income. Thus, requiring all companies to use only standardized derivatives may have the unintended effect of making reported income more volatile than it really is. The ultimate result would be to discourage legitimate hedging activity, placing U.S. companies at a competitive disadvantage.

Over-the-counter derivatives do not necessarily enjoy favorable tax treatment relative to exchange-traded derivatives. To the extent that the tax treatment may differ, it is because gains and losses on exchange-traded derivatives are recorded daily. Whether this difference benefits the user depends on the nature of the transaction and the ultimate change in the value of the contract, which may be positive or negative. As a general rule, it all depends on the type of transaction, the terms of the contract, and what happens to market prices and rates over the term of the contract.

Q.6. In addition to the Administration's proposed changes to gain on sale accounting for derivatives, what other changes need to be made to accounting and tax rules to reflect the actual risks and benefits of derivatives?

A.6. ISDA is actively engaged with tax authorities and accounting standard setters on rules governing derivatives. The FASB has an active agenda, and we would encourage policy makers to engage them in consideration of their views. ISDA is concerned about preserving the ability of commercial end users to customize derivatives in order to meet their particular risk management needs. Without the ability to precisely hedge risks in accordance with FASB 133 through customized OTC derivatives, companies would experience increased volatility, reduced liquidity, and higher financing costs.

Q.7. Is there any reason standardized derivatives should not be traded on an exchange?

A.7. Standardization is a necessary but not sufficient condition for trading on an exchange: Standardized derivatives can be traded on an exchange only when a product has sufficient volume and liquidity to support reliable price discovery for the product. If sufficient volume and liquidity do not exist, it would be preferable to trade the products over-the-counter, that is, execute trades privately, and then manage the risk in other ways, such as through a clearinghouse.

Policy discussions frequently confound exchange trading—which means that all trades must be negotiated and executed through a central venue—with clearing—which means that trades must be booked with a central counterparty that serves as the counterparty to all cleared transactions. Exchange trading is possible without clearing, although most exchanges involve clearing as well; and clearing is compatible with both exchange trading and over-the-counter trading.

Exchanges and clearinghouses both make use of standardization, but for different reasons. Exchange trading involves extensive

standardization because it makes a product easier to trade, which leads to higher liquidity. But as a product becomes more standardized, it may attract a narrower range of traders, leading to lower liquidity. As a result of these conflicting effects, only products that inherently appeal to a large number of traders are likely to succeed on an exchange; more specialized products generally lack liquidity and consequently do not trade successfully on an exchange.

Clearinghouses also rely on standardization: not to facilitate trading but to facilitate valuation for the purposes of margin setting. Although cleared products need to be substantially standardized, they need not be as liquid as exchange-traded instruments. What matters is that the clearinghouse can calculate contract values and required margin in a timely manner and can unwind a position in the event of clearing member default.

Q.8. How do we take away the incentive for credit default swap holders to force debtors into bankruptcy to trigger a credit event rather than renegotiate the debt?

A.8. It is debatable whether such an incentive exists at all. It is more likely that bankruptcy and credit default swap protection are independent of each other. Claims that bought credit default swap protection somehow “caused” a bankruptcy filing appear to be based on misunderstanding of how credit default swaps work.

One misunderstanding is that buyers of credit default swap protection can profit only if the reference entity actually goes bankrupt. But if the credit quality of a borrower deteriorates, a protection buyer need not wait for bankruptcy, but can instead take its profit by closing out the contract that presumably has appreciated in value.

It is even possible that the protection buyer might prefer that the reference entity continue as a going concern instead of fail. Consider an investor that believes that credit default swaps are underpriced relative to the underlying bond. The investor can buy the bond and buy credit protection, thereby locking in a profit. If the reference entity fails, the investor will be compensated and can then seek recovery on the bond. But if the reference entity survives, the investor can continue to collect the difference between the bond’s interest and the fee paid for the credit protection.

Another misunderstanding is that it is possible to game the bankruptcy system by buying protection on distressed firms and then somehow “forcing” the firms into bankruptcy. This misunderstanding appears to be based on the assumption that the cost of protection is independent of the likelihood of a credit event so one can buy protection on distressed firms at a low cost. But the price paid for credit default swap protection is in fact related directly to the expected loss on the reference credit. Indeed, protection on a distressed credit—one widely expected to declare bankruptcy—requires that the protection buyer pay a substantial amount up-front. And if the reference entity does not declare bankruptcy, the protection buyer will in fact incur a substantial loss.

A final misunderstanding is that, because a protection buyer is “made whole” after a reference entity fails, a protection buyer that cash settles their CDS position and remains in possession of the underlying bond has no incentive to maximize the recovery on the

underlying bond. It is not clear why this should be the case: A bond holder that has been compensated and fails to pursue further recovery is in effect “leaving money on the table,” which does not seem in the bond holder’s interest. The way the credit default swap market works, after settlement of a credit event, someone ends up holding the underlying bond, and that party has an interest in maximizing recovery.

Q.9. How do we reduce the disincentive for creditors to perform strong credit research when they can just buy credit protection instead?

A.9. The presumption that creditors lack incentives to perform strong credit research belies an understanding of how hedging works. As a general matter, it is necessary to take on risk in order to earn a profit. Because hedging involves giving up risk, it also generally means giving up the potential profit from taking risk, usually by paying the cost of the hedge. Further, routinely entering into hedged transactions is seldom profitable unless one has knowledge superior to that of the rest of the market, which is unlikely to be the case on a systematic basis.

Hedging loans with credit default swaps affects profitability as follows. A bank hopes to profit by making a loan; its profit is based on the difference between the bank’s cost of funding and the interest charged the borrower. Before making the loan, the bank should perform strong credit research in order to avoid losses from default. But if the bank decides to hedge against losses on the loan by buying credit protection, the bank will have to pay a periodic fee for protection, which will offset some or all of the profit from the loan. A bank that routinely lends and then buys protection on the loans will almost certainly run a loss-making business; the bank has incentive to hedge only if the borrower’s condition deteriorates unexpectedly. So the bank can either choose not to hedge and possibly profit, or to hedge but give up the opportunity to profit, but generally cannot both hedge and profit simultaneously.

Q.10. Do net sellers of credit protection carry that exposure on their balance sheet as an asset? If not, why shouldn’t they?

A.10. Because the value of a credit default swap is zero at inception and the parties to the contract do not exchange a consideration at the time the contract is initiated, as typically happens when an asset is purchased or sold, the potential exposure is not recorded on the balance sheet at the time the contract is first settled. Under long-standing accounting conventions, there is no way to record a contract as an asset or liability when no consideration is paid or received and the contract has a zero value. For analogous reasons, banks do not report on their balance sheets the notional amount of loan commitments, stand-by letters of credit and unused amounts on revolving credit lines, which all create a similar type of credit exposure as a credit default swap. This is why such commitments are classified as “off-balance sheet.”

This is not to say that financial companies are not required to report the amount of their potential credit exposure arising from credit default swaps, however. First, companies must report the mark-to-market value of their derivatives exposures as either a “derivatives receivable” or a “derivatives payable” when the value

of the contract changes. To illustrate, if a bank sells protection on company XYZ and the credit spreads on that company subsequently widen, then the protection seller must record the mark-to-market loss on the contract as a derivatives liability. Similarly, the protection seller's counterparty will record the mark-to-market gain as a derivatives receivable.

Second, financial companies are required to report as a supplementary item the notional amount of any financial guarantees they have assumed. Thus, the financial reports of banks and other financial companies contain tables detailing the amount of "financial guarantees" the entity has written, including protection sold using credit default swaps, exposures created through written options, and the amount of other financial guarantees that include loan commitments, revolving credit lines and stand-by letters of credit.

AIG, for example, did report to investors, credit-rating agencies, and to regulators in its public financial statements that it wrote protection on \$125 billion of securities in its 2002 10k. The table below, which draws on data reported in subsequent annual reports, documents the growth in AIG's exposure to \$527 billion by year-end 2007, the year when AIG first began reporting losses related to its credit default swap portfolio.

Date Reported (at December 31)	Amount (\$ in billions)
2002	125.7
2003	203.0
2004	290.3
2005	387.2
2006	483.6
2007	527.0

Moreover, AIG's financial reports discuss explicitly the risk the company faced of margin calls stemming from its credit default swap exposure. In short, investors, credit-rating agencies and regulators all had ample prior knowledge of AIG's credit derivatives related potential risk exposure. Like AIG's management, however, all involved parties failed to appreciate the impact a collapsing housing market would have on that exposure. Opaque financial reporting was not the reason why AIG was permitted to amass such a large risk exposure using credit default swaps.

Q.11. In her testimony Chairman Schapiro mentioned synthetic exposure. Why is synthetic exposure through derivatives a good idea? Isn't that just another form of leverage?

A.11. "Synthetic exposure" refers to the ability to take on a risk by means of derivatives or a combination of derivatives and cash instruments. Synthetic exposure is not necessarily equivalent to leverage. For example, many investors use equity swaps to gain synthetic exposure to foreign equities. They do not do this to leverage their exposure. Purchasing foreign equities can be very expensive. In many countries, it can only be done from within the country and ownership is limited to residents. A U.S. investor can enter into an equity swap to gain equivalent economic, or "synthetic," exposure to foreign equities, thereby gaining diversification while holding cash in the form of Treasury bills or other liquid investments.

More generally, equity swaps can be used to gain exposure to baskets of equities while avoiding the brokerage fees and other transactions costs associated with buying and selling the cash instruments.

Another form of synthetic exposure is exemplified by selling credit default swap protection on asset backed securities. The motivation for doing so is to attain access to investments that are limited in supply, but does not necessarily constitute leverage. This form of synthetic exposure will be discussed in the next question.

Q.12. Regarding synthetic exposure, if there is greater demand for an asset than there are available assets, why shouldn't the economic benefit of that demand—higher value—flow to the creators or owners of that asset instead of allowing a dealer to create and profit from a synthetic version of that asset?

A.12. Financial assets such as bonds represent a bundle of risks. For a bond, that bundle of risks comprises credit risk, interest rate risk, funding risk, and possibly foreign exchange risk. Derivatives facilitate the unbundling of the different types of risks embodied by securities such as bonds. Because derivatives are not funding transactions, the act of selling protection on a reference entity is not equivalent to buying a bond issued by that entity and does not drain away the benefit of access to credit from the bond issuer.

Finance is not a zero-sum game. The benefit that one party derives from being able to trade an unbundled risk does not necessarily diminish the benefit of access to credit by borrowers. In the case of synthetic exposure such as credit default swaps on securitized products, it is doubtful that synthetic exposure occurs at the expense of the “creators or owners” of the underlying assets. If access to synthetic exposure is restricted, investors will not necessarily continue to bid up the price of the underlying asset but will likely turn to other, lower priced investments instead. And in many cases, creators or owners of assets will benefit from the existence of synthetic exposure. For instance, a bond issuer may benefit from such activity because it indirectly promotes the liquidity of its bonds, thereby lowering funding costs. Also, after an investor takes on synthetic exposure on an asset by selling protection to a dealer, the dealer will in many cases buy the underlying asset to hedge its own position. The economic benefit in these cases will flow to the owners.

Q.13. One of the arguments for credit default swaps is that they are more liquid than the reference asset. That may well be true, but if there is greater demand for exposure to the asset than there is supply, and synthetic exposure was not allowed, why wouldn't that demand lead to a greater supply and thus more liquidity?

A.13. Financial assets are not homogeneous—that is, infinitely interchangeable with each other—nor are they completely elastic in supply. Instead, assets are heterogeneous and can generally be issued only in limited amounts. Particularly in the case of fixed income (bond) markets, many individual issues tend to be illiquid. There is therefore demand for access to certain assets that have attractive properties but cannot easily be increased in supply. Restricting access to synthetic exposure would make it more difficult for investors to benefit from exposure to these assets.

As noted earlier, financial assets embody a bundle of different risks. Derivatives facilitate the unbundling of risks so that they can be managed individually. Thus, a bond incorporates both interest rate risk and credit risk. What derivatives cannot do is to confer the benefit of funding to the contract's counterparties. Therefore, the act of selling credit protection does not divert the benefit of receiving credit from the borrower. To the contrary, the availability to creditors of a means of hedging and trading the borrower's credit risk in more liquid markets should facilitate the availability of credit, thereby benefiting the bond issuer. In general, market liquidity tends to reduce borrowing costs, which is why interest rates paid by bond issuers tend to be lower than interest rates on loans.

Q.14. Is there any justification for allowing more credit protection to be sold on a reference asset than the value of the asset?

A.14. For every buyer of protection, there is a seller of protection. Prior to default, the terms of a credit default swap is determined by market sentiment regarding a firm's prospects, but has no causal influence that we are aware of on the underlying bond's price. After default, recent experience has shown that the vast majority of the offsetting bought and sold protection net down to a comparatively small proportion of the market. Harrah's, for example, has \$17 billion of outstanding debt compared with \$30 billion of outstanding CDS protection. But according to the Depository Trust Clearing Corporation, this \$30 billion of CDS protection nets down to \$1.86 billion, which is far less than the amount of outstanding debt. Given the ISDA Credit Event Auction Mechanism, most protection buyers need not deliver the underlying asset, so there is little if any liquidity pressure on the underlying asset.

Q.15. Besides the level of regulation and trading on an exchange, there seems to be little difference in swaps and futures. What is the need for both? In other words, what can swaps do that forward contracts cannot?

A.15. A swap is a bundle of forward contracts with different maturity dates. In the early days of trading in interest rate futures, the exchanges listed contracts with maturities extending only 2 years into the future. Swaps and other OTC derivatives originally were created in part to address the needs of market participants who wished to hedge longer-dated exposures.

While market participants currently have a broader choice of standardized contracts, they typically turn to OTC markets for longer-dated contracts and, more generally, when available standardized products do not meet their needs. Only highly standardized contracts can be traded on exchanges because contract standardization facilitates liquidity by limiting trading to just a few contracts. The Eurodollar futures contract, for example, specifies a \$1 million notional principal. These contracts are listed for quarterly expiration (in March, June, September, and December) on the second London business day preceding the third Wednesday of the expiration month.

Such standardized contracts are well suited for speculation on changes in the general level of interest rates, but are ill-suited to hedge the unique risk exposures borne by most market partici-

pants. In the parlance of derivatives markets, using exchange traded derivatives requires hedgers to take on significant basis risk, the risk that changes in the value of the exposure being hedged and changes in the value of the hedging instrument might not fully offset each other. For example, a company may have floating-rate bonds outstanding for which the interest rate resets on the 15th of February, May, August, and November. As noted above, however, the only available interest rate contracts mature in the third week of March, June, September, and December.

In such circumstances, the company would find it impossible to hedge perfectly its interest exposure. Each interest payment would be unhedged for over a month of the quarter. Instead of taking on the basis risk, the company could enter into an OTC interest rate swap, thereby effectively passing on the basis risk to an OTC derivatives dealer. OTC dealers have a natural advantage in managing such risks because they trade continuously with a large number of counterparties and have the skilled personnel and order flow necessary to manage interest rate risk arising from mismatched contracts and exposures. For these reasons, futures markets tend to be professional markets while the OTC markets serve the needs of customers such as corporates and smaller, less-sophisticated banks.

There is no easy way around this obstacle. The range of listed contracts cannot be extended to include all contracts because most individual contracts arising from commercial trade are so unique as to be inherently illiquid. Simply listing a contract on an exchange does not guarantee liquidity, and may actually reduce the liquidity of existing contracts. Every derivatives exchange has had experience listing new contracts that subsequently had to be withdrawn because the contract never acquired sufficient interest to become viable. If a contract is illiquid, it cannot be marked to market reliably and the exchange clearinghouse cannot manage the associated risk as effectively as with a liquid instrument. Thus, a blanket requirement that all derivatives be exchange traded would have the practical effect of prohibiting most contracts for deferred delivery, including such straightforward transactions as the purchase or sale of fuel oil or wheat at a negotiated price for delivery at a chosen future date. Mandating that all risk management solutions be standard does not reflect the hedging needs driven by the unique risks that businesses encounter.

Q.16. One of the arguments for keeping over-the-counter derivatives is the need for customization. What are specific examples of terms that need to be customized because there are no adequate substitutes in the standardized market? Also, what are the actual increased costs of buying those standard contracts?

A.16. As noted in the above response to Question 15, standardized contracts list standard delivery dates, maturities and deliverable grades that do not necessarily correspond to the delivery dates and types of exposures market participants need to hedge. Bank loans, for example, are illiquid by their very nature.

A creditor bank might wish to reduce its exposure to a particular borrower so as to expand its lending capacity. But if the company in question is relatively small, exchanges will not find it worth-

while to list standardized credit default swaps against that company's loans. At the same time, there might be some investors interested in diversifying their portfolios by taking on an exposure to bank debt. They can do this by buying a portion of the loan, but because bank loans are illiquid trading loans is much more expensive than entering into an over-the-counter credit default swap. More than any other group, restricting trading to standardized derivatives would hurt small businesses.

In the area of equity derivatives, investors often use equity swaps to gain exposure to foreign equities because the direct purchase of foreign equities can be very expensive—and in some cases impossible—for an institution without foreign offices (and foreign broking licenses). Thus, restricting trading to standardized contracts traded only in the United States would make it much more difficult and much more costly for U.S. investors to diversify into foreign stocks.

The problem would be even more severe in commodity markets. Airlines wishing to hedge jet fuel costs, for example, are often forced to use heating oil futures because the market for jet fuel derivatives is relatively illiquid. Substituting heating oil futures for jet fuel forwards or jet fuel swaps exposes the airline to basis risk. As noted earlier, managing basis risk is a difficult task that typically requires the expertise of professional traders. Simply banning trading in OTC instruments does not guarantee that a liquid market in jet fuel futures would emerge. Moreover, futures markets are typically only liquid for short-term contracts, so that companies such as airlines would find themselves without a way to secure long-term, fixed-price delivery contracts. By offering to provide such custom-tailored contracts, banks supply risk management services to their corporate customers more effectively and at a lower cost than those organizations could do if they had to hire the staff necessary to manage those risks themselves. Managing risks using standardized contracts would require companies to replicate the types of trading and risk management systems typically found only in commodity dealers and banks, and at a very steep cost.

More generally, the ability to enter freely into a variety of long-term contracts facilitates the conduct of business. No one can anticipate in advance the terms of all the long-term contracts U.S. companies will find necessary to conduct business, which makes it impossible to list standardized contracts that will address all the needs of all businesses.

Q.17. Who is a natural seller of credit protection?

A.17. A “natural” seller of protection is any entity seeking to profit from being exposed to credit risk of a company, region or industry. Examples of natural sellers include:

- Institutional investors, pension funds, and insurers, which also invest in corporate bonds.
- Banks seeking to diversify their sources of income in order to reduce credit concentration.
- Hedge funds and other investors seeking to profit from perceived overpricing of credit.

A seller of credit protection is in an analogous position to a bond holder who has hedged the interest rate risk and, in some cases, exchange rate risk bundled in the bond. The advantage to doing so using credit default swaps instead of buying the bond is that transactions costs typically are smaller and credit default swaps tend to be more liquid than the underlying debt. Credit default swaps may also be available for maturities that would be otherwise unavailable to investors.

Q.18. There seems to be agreement that all derivatives trades need to be reported to someone. Who should the trades be reported to, and what information should be reported? And is there any information that should not be made available to the public?

A.18. Trades across all derivative asset classes will be reported to various trade information repositories. A repository is accessible in full detail to anyone who regulates the entities who have provided such information to allow the regulator to properly access the risk inherent in the transactions. Aggregated data on open positions and trading volumes will be available to the public. We would direct your attention to <http://www.newyorkfed.org/newsevents/news/markets/2009/ma090602.html>, which contains a link to the most recent industry letter outlining its commitments to the Federal Reserve Bank of New York, which included commitments regarding trade reporting.

Q.19. What is insufficient about the clearinghouse proposed by the dealers and New York Fed?

A.19. Please review the “Report to the Supervisors of the Major OTC Derivatives Dealers on the Proposals on Centralized CDS Clearing Solutions for the Segregation and Portability of Customer CDS Positions and Related Margin” for a detailed analyses of the relevant clearinghouses. The report can be accessed at <http://www.isda.org/credit/docs/Full-Report.pdf>. The report highlights some legislative changes that would be desirable to facilitate buy-side access to clearing.

Q.20. How do we prevent a clearinghouse or exchange from being too big to fail? And should they have access to Fed borrowing?

A.20. These questions are matters of public policy that are appropriately decided by legislative and regulatory bodies and not by ISDA or other industry groups. Nonetheless, we respectfully suggest that the possibility of failure is an important element of the market process and that protecting firms from failure can have the paradoxical effect of making individual firms safer while making the financial system less safe.

Congress might consider the precedent of the Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA), which placed limitations on the ability of regulators to rescue failing banks, subject to a systemic risk exception. Such limitations put the industry on notice that they will have to bear the consequences of unsound practices. But in order for such a policy to be effective, the limitations must be credible; in other words, the industry must know that regulators will not routinely invoke a systemic risk exception when faced with an actual failure. If such a credible policy cannot be achieved, it is difficult to envision circumstances in

which the government would not find it necessary to rescue a large central clearinghouse if it ever experienced financial distress.

Access to Fed borrowing by the clearinghouse might be necessary to cope with temporary liquidity crises but should not be used as a bailout tool. In order to address the moral hazard issue, policy makers could require that any lending by the Fed could be repaid out of guarantee funds as well as loss sharing arrangements among surviving firms so the losses would ultimately be borne by the industry. The result would be greater incentives for clearinghouse participants to monitor the risks associated with the clearinghouse.

Q.21. What price discovery information do credit default swaps provide, when the market is functioning properly, that cannot be found somewhere else?

A.21. Credit default swaps have made credit pricing more transparent by means of their price discovery function. First, credit default swaps on diversified credit indexes such as CDX in North America and iTraxx in Europe provide virtually the only price discovery information on credit markets overall, similar to the price discovery information for U.S. equity markets provided by the ability to enter into contracts on such indexes as the S&P 500 and Dow Jones indexes.

Second, both single-name credit default swaps and corporate bond markets provide price discovery for individual corporate debt issues, and the two are linked by means of asset swap pricing. Credit default swaps are arguably more liquid than the underlying bond issues, however, and are therefore likely to provide more informative credit pricing than the underlying cash markets.

Finally, the uneven liquidity of corporate bonds is a primary reason not only for widespread reliance on credit default swaps for price discovery, but for early warning about impending credit problems as well. While it is true that corporate bond credit spreads also provide early warning, most corporate bonds tend to trade infrequently so the information dispersal is generally less timely than with credit default swaps.

Q.22. Selling credit default swaps is often said to be the same as being long in bonds. However, when buying bonds, you have to provide real capital up front and there is a limit to the lending. So it sounds like selling swaps may be a bet in the same direction as buying bonds, but is essentially a highly leveraged bet. Is that the case, and if so, should it be treated that way for accounting purposes?

A.22. First, it should be noted that while it is true that an investor who holds a bond bears the same credit risk as the seller of credit default swap protection, the protection seller does not bear the same bundle of risks as a lender or bond investor. In addition to credit risk, a bond investor faces interest rate risk, possibly foreign exchange risk (in the case of a bond denominated in a foreign currency), funding risk (it is worth remembering that many bond investors such as banks and insurance companies are leveraged: they must borrow the funds they use to buy bonds), and liquidity risk (bonds tend to be much less liquid than derivatives referencing those bonds). Therefore, there is no compelling conceptual reason

to apply the same accounting treatment to credit default swaps and bonds based on an equivalence of risks.

Moreover, as discussed in response to Question 10 above, it is simply infeasible to apply the same accounting treatment to off-balance-sheet instruments such as credit default swaps as to transactions involving cash securities. Companies can and do report their off-balance-sheet exposures; existing bank regulatory capital requirements already limit the effective leverage that can be created using derivatives. To the extent that existing regulations have not always been applied effectively in the past, or to the extent that they have not been applied uniformly to financial companies in all industries, this is an issue best addressed through more uniform and effective regulation and supervision and more effective risk management.

Mandating changes to accounting standards is not a solution. Existing accounting standards were originally devised as expense tracking systems and are not a substitute for capital requirements. Therefore, mandating changes to accounting standards in contravention of conventions established by existing professional rule-making bodies would likely prove an ineffective method of improving risk management practices.

Q.23. Why should we have two regulators of derivatives, with two interpretations of the laws and regulations? Doesn't that just lead to regulation shopping and avoidance?

A.23. Regulation of the derivatives markets is a part of the broader public policy debate over the financial regulatory reform. Federal regulation of securities, commodities, exchanges, and derivatives has developed over time and reflects the evolution of the capital markets. In its white paper released last month, the Administration supports the harmonization of futures and securities regulation, proposing the CFTC and the SEC make recommendations to Congress for changes to statutes and regulations that would harmonize regulation of futures and securities. The SEC and CFTC are expected to complete a report to Congress on this issue by the end of September. As Congress considers these recommendations, we submit that inconsistency between regulatory requirements and enforcement of those requirements, for generally equivalent instruments or activities leads to costly uncertainties. Reporting requirements, filing requirements, and approval standards should be harmonized as much as possible. Harmonized standards are necessary to enhance the quality of regulation by the primary Federal regulators and any systemic risk regulator.

Finally, the derivatives markets are global and require cooperation among the international markets' regulators. Coordination among regulators at the Federal Government level is critical to successful coordination on the international level. Toward this end, any regulatory reform restructuring that will be passed by Congress should include provisions to preempt State initiatives on the regulation of derivatives instruments, users, and markets.

Q.24. Why is synthetic exposure through derivatives a good idea? Isn't that just another form of leverage?

A.24. Please see the response to Question 11.

Q.25. What is good about the Administration proposal?

A.25. The Administration's proposal is an important step toward much-needed reform of financial industry regulation. ISDA and the industry welcome the Administration's recognition of industry measures to safeguard smooth functioning of our markets and its support of the customized OTC derivatives as tools needed by companies to meet their specific needs.

ISDA supports appropriate regulation of financial and other institutions that have such a large presence in the financial system that their failure could cause systemic concerns.

For nearly 4 years, the industry has been engaged in a dialogue with the Federal Reserve that has resulted in ISDA and the industry committing to strengthening the resilience and robustness of the OTC derivatives markets through the implementation of changes to risk management, processing and transparency that will significantly transform the risk profile of these important financial markets. Specifically, the industry has undertaken to increase standardization of trading terms, improve the trade settlement process, bring more clarity to the settlement of defaults, move toward central counterparty clearing where appropriate, enhance transparency, and enhance openness in the industry's governance structure. All of these initiatives are consistent with the Administration's proposals. We would direct your attention to <http://www.newyorkfed.org/newsevents/news/markets/2009/ma090602.html>, which contains a link to the most recent industry letter outlining its commitments to the Federal Reserve Bank of New York.

Q.26. Is the Administration proposal enough?

A.26. Please see answer to 25 above.

Q.27. Mr. Whalen suggests that Congress should subject all derivatives to the Commodity Exchange Act, at least as an interim step. Is there any reason we should not do it?

A.27. Here is an extract from Mr. Whalen's testimony: "Congress should subject all OTC contracts to The Commodity Exchange Act (CEA) and instruct the CFTC to begin the systematic review and rule making process to either conform OTC markets to minimum standards of disclosure, collateral and transparency, or require that the contracts be migrated onto organized, bilateral exchanges."

ISDA disagrees with Mr. Whalen's suggestion, which would turn the clock back almost two decades by reintroducing substantial legal and regulatory uncertainty into derivatives activity and to financial markets in general. The problem is that the CEA is unclear about which financial instruments are and are not futures as defined in the CEA, so extensive discretion is left to the Commodity Futures Trading Commission (CFTC) to decide. The extreme possibility is that an over-the-counter derivatives will be found to be an off-exchange futures contract and therefore illegal. Although the CFTC has the authority to carve out exceptions to the exchange trading requirement, the exceptions themselves are subject to uncertainty because they can be subsequently narrowed and possibly even revoked. The result is that parties seeking to manage their risk with OTC derivatives are forced to do so under the cloud that their transaction could at a later date be declared null and void,

which can have potentially disastrous consequences for the firms involved.

We submit instead that the Commodity Futures Modernization Act appropriately cleared up much of the legal and regulatory uncertainty surrounding the CEA while leaving CFTC with sufficient authority to address fraud and market manipulation concerns. Returning to an earlier era of legal uncertainty would unnecessarily increase the risks faced by market participants. Further, forcing useful but relatively less liquid products onto exchanges might in many cases doom such products to failure because they cannot generate sufficient volume to support continuous trading.

Q.28. Is there anything else you would like to say for the record?

A.28. ISDA and the OTC derivatives industry are committed to engaging with Congress to build upon the substantial improvements that have been made in our business since 2005. We will continue to support efforts of Congress, the regulators and the Administration to determine the most effective prudential regulation of this important industry.

Changes to the OTC derivatives industry should be informed by an understanding of how the OTC derivatives market functions as well as a recognition that OTC derivatives play an important role in the U.S. economy. OTC derivatives offer significant value to the customers who use them, to the dealers who provide them, and to the financial system in general by enabling the transfer of risk between counterparties. Ultimately, it is important to maintain the continued availability and affordability of these important tools.

**RESPONSES TO WRITTEN QUESTIONS OF CHAIRMAN REED
FROM CHRISTOPHER WHALEN**

Q.1. Are there differences between the SEC and CFTC's approaches for regulating their respective markets and institutions that we should take into consideration when thinking about the regulation of the OTC derivatives markets?

A.1. The CFTC should be tasked with the functional regulation of all derivatives markets. The SEC should cooperate with the CFTC, especially in terms of the disclosure of any derivative that creates the economic equivalent of a position in a listed security.

Q.2. The Administration's proposal would require, among other things, clearing of all standardized derivatives through regulated central counterparties (CCPs). What is the best process or approach for defining standardized products? How much regulatory interpretation will be necessary?

A.2. The clearing of standardized contracts is a fairly straight-forward proposition and involves risks that may be managed with existing regulation. Perhaps the biggest challenge is to require the terminology used, for example, in a CDS or CDO created from a mortgage backed security, be standardized. As my colleague Ann Rutledge stated in the interview which I included in the hearing record: "The first key issue is that we need to do to reform our markets is to have a standard vocabulary for the definition of what is a delinquency, a default, and loss."

Q.3. Are there key areas of disagreement between market participants about how central counterparties should operate? For example, what are the different levels of access these central counterparties grant to different market participants? What are the benefits and drawbacks of different ways of structuring these central counterparties?

A.3. In the OTC derivatives market, only the dealers have access to the clearinghouse. In an exchange based market, all of the participants face the clearinghouse and there is thus far greater equality in terms of price discovery and execution cost. From this perspective, an exchange type model is far superior, especially seen from the perspective of nondealer participants.

Q.4. One key topic touched on at the hearing is the extent to which standardized products should be required to be traded on exchanges. What is your understanding of any areas of disagreement about how rigorous new requirements should be in terms of mandating, versus just encouraging, exchange trading of standardized OTC derivatives?

A.4. Standardized products do not have to be traded on an exchange. The mere fact of standardization, as in the case of currency and interest rate swaps, will have the desired positive benefits. In many respects, the issue of standardization is a canard and misses the true public policy issues posed by certain OTC derivatives such as CDS in terms of (a) the lack of an actively traded cash basis market and (b) the creation of excessive risk in the financial system by allowing cash settlement.

Q.5. Can you share your views on the benefits of customized OTC derivatives products? About how much of the market is truly customized products?

A.5. See answer to Question 15 above.

Q.6. The Administration's proposal would subject the OTC derivatives dealers and all other firms whose activities in those markets create large exposures to counterparties to a "robust and appropriate regime of prudential supervision and regulation," including capital requirements, business conduct standards, and reporting requirements. What legislative changes would be required to create margining and capital requirements for OTC derivative market participants? Who should enforce these requirements for various market participants? What are the key factors that should be considered in setting these requirements?

A.6. Under current law, the Fed and SEC already have the ability to impose such a regime. The only lacking is the will to regulate. The Congress does not need to pass major legislation. What is required is congressional oversight of the Executive Branch and, if needed, action to compel the Fed and Treasury to serve the public interest instead of the narrow interests of the largest dealer banks. If the Fed and Treasury are unable or unwilling to take the lead on requiring "robust and appropriate regime of prudential supervision and regulation" for the large banks that control the OTC markets, then the Congress should follow my recommendation and strip the Treasury and Fed of all powers in terms of regulating and supervising banks and create a new prudential regulator that is in-

sulated from the partisan politics of Executive Branch appointments. The biggest problem facing the U.S. today in terms of financial regulation is the capture of regulators by the banks which they are supposed to supervise!

Q.7. One concern that some market participants have expressed is that mandatory margining requirements will drain capital from firms at a time when capital is already highly constrained. Is there a risk that mandatory margining will result in companies choosing not to hedge as much and therefore have the unintended consequence of increasing risk? How can you craft margin requirements to avoid this?

A.7. This seems to be a false argument. Dealers lacking capital to cover their risk should reduce those risk and related leverage. Why should dealers be able to access markets via OTC markets and thereby evade the leverage, margin limits and prudential regulations that have been long-established in organized markets? The more leverage that is available to market participants via OTC derivatives, the greater the systemic risk. Thus it seems that the Congress, if it truly wishes to limit systemic risk, must conform the margin requirements in the OTC markets to those prevailing elsewhere in the U.S. financial markets. To do otherwise is inconsistent and would seem to undermine the whole purpose of financial regulation.

Q.8. Is there a risk that regulating the OTC derivatives markets will dramatically alter the landscape of market participants or otherwise have unintended consequences we aren't aware of?

A.8. As I mentioned in my testimony, the chief result of regulation will be to lessen the supranormal returns earned by the dealers in the OTC markets and thereby expose the fundamental lack of profitability in these institutions. If the Congress has the courage and sense of purpose to reject the pretense that OTC markets for instruments such as CDS actually enhance market stability or bank profits on a risk adjusted basis, then we can return banks to being what they should be—namely low-risk utilities—and end the threat of systemic risk one and for all. So long as the Congress refuses to act, then the most irresponsible and aggressive speculators will continue to use our banking system to create ever more complex and opaque securities, and systemic risk will increase and eventually destroy our economy and our Nation.

RESPONSES TO WRITTEN QUESTIONS OF SENATOR BUNNING FROM CHRISTOPHER WHALEN

Q.1.a. Do you believe the existence of an actively traded cash market is or should be a necessary condition for the creation of a derivative under law and regulation?

A.1.a. Yes. As I stated in my prepared remarks, where there is no underlying cash market that both parties to a derivatives transaction may observe, then the derivative has no true economic "basis" in the markets, and is entirely speculative. Where there is no cash market, there is, by definition, no price discovery. A derivative that is created without the benefit of an actively traded cash market is essentially a deception. In the case of credit default

swaps and other “derivatives” where no actively traded cash market exists, the dealer pretends that a model can serve as a substitute for a true cash market basis. But such a pretense on the part of the dealer is patently unfair and, in my view, is really an act of securities fraud that should be prohibited as a matter of law and regulation.

Q.1.b. If not, what specific, objective means besides a cash basis market could or should be used as the underlying relationship for a derivative?

A.1.b. See above. To the extent that the Congress is willing to continue to tolerate speculation in derivatives for which no cash market basis exists and are instead based upon models, then the dealers should be compelled to publish these models on a monthly basis for the entire market to see and assess. Requiring SEC registration might be another effective solution. Enhanced disclosure of models for OTC derivatives would likely lead to a multiplicity of new lawsuits by investors against the OTC derivatives dealers, thus the effect of compelling the disclosure of models used to price OTC derivatives would be to greatly lessen the complexity of these instruments. Think of this as a “market based” solution driven by the trial lawyers.

Q.2. Why should the models to price OTC derivatives not be published? If there is no visible cash basis for a derivative, and the model is effectively the basis, why should the models not be public?

A.2. See response to 1b.

Q.3. What is the best way to draw the line between legitimate hedges and purely speculative bets? For example, should we require an insurable interest for purchasers of credit protection, require delivery of the reference asset, or something else?

A.3. Allowing speculators using OTC derivatives to effectively take positions against securities and companies in which they have no economic interest is a form of gaming that the Congress and Federal regulators should reject. The term “hedge” implies that the user has an economic position or exposure to a form of risk. The use of cash settlement OTC contracts by parties who have no interest in the underlying assets or company creates perverse incentives that essentially equate an owner of an asset with the speculator with no economic interest. The AIG episode illustrates an extreme example of this problem where AIG was actively using derivatives to engage in securities fraud, both for itself and others, and apparently with the full support and knowledge of the OTC dealers. Allowing speculators to use cash settlement OTC derivatives to game against real companies and real assets to which they have no connection creates systemic risk in our financial system and should be prohibited by law and regulation.

Q.4. Is the concern that increased regulation of derivatives contracts in the United States will just move the business overseas a real issue? It seems to me that regulating the contracts written in the U.S. and allowing American firms to only buy or sell such regulated contracts would solve the problem. What else would need to be done?

A.4. No. Those critics who proclaim that regulation of OTC derivatives such as CDS will force the activity offshore are mistaken. Where will they take this vile business? London? No. The EU? No. China? No. Russia? No. Let the proponents of this market go where they will. The government of the U.S. should not allow itself to be held hostage by speculators.

The fact is, the U.S. and EU are the only political jurisdictions in the world that are sufficiently confused as the true, speculative nature of CDS to allow their financial institutions to serve as a host for this reckless activity. Regulating the speculative activities of U.S. banks in the OTC derivatives markets and banning all OTC derivatives for which there is no actively traded cash basis market will effectively solve the problem of systemic risk.

Q.5. In addition to the Administration's proposed changes to gain on sale accounting for derivatives, what other changes need to be made to accounting and tax rules to reflect the actual risks and benefits of derivatives?

A.5. The key change that must be made is to distinguish between true derivatives, where there is an observable cash market basis, and pseudo derivatives based upon models such as CDS and collateralized debt obligations (CDOs) which have no observable basis and which have caused such horrible damage to the global financial system. Where there is no active market price for the underlying relationship upon which the derivative is "derived," then the bank or other counterparty should be required to reserve 100 percent of the gross exposure of the position to cover the market, liquidity and counterparty risks created by these illiquid, difficult to value gaming instruments. Congress should explicitly forbid "netting" of OTC contracts such as CDS and any other derivative structure for which there is no cash basis market since there is no objective, independent way to value these instruments. How can any financial institution pretend to "manage" the risk of a CDS instrument or CDO when the only objective means of valuation is a private model maintained by a dealer?

Q.6. Is there any reason standardized derivatives should not be traded on an exchange?

A.6. No. All derivatives for which there is an active cash market basis may easily be traded on exchanges. Only those OTC derivatives for which there is no cash market and thus no price discovery will not be practical for exchange trading. The problem here is a basic one since the clearing members of an exchange are not likely to be willing to interpose their capital to jointly and severally guarantee a market based on a CDS model. Unless the clearing members and the customers of a partnership exchange possess the discipline of a cash market basis to support and validate valuations, then it is unlikely that an exchange-based approach will be practical.

Q.7. How do we take away the incentive for credit default swap holders to force debtors into bankruptcy to trigger a credit event rather than renegotiate the debt?

A.7. The simple answer is to require that CDS only be held by those with an economic interest in the debtor that is the under-

lying “basis” for the derivative. If, as under current law and regulation, you allow speculators with no economic interest in a debtor to employ CDS, then all weak banks and companies may be pushed into insolvency by parties whose sole interest is their failure. Allowing speculators to use CDS against debtors in which they have no economic interest essentially voids the traditional social purpose of the U.S. bankruptcy laws, namely a) to recover the maximum value for creditors of the bankruptcy estate in an equal and fair way and b) to provide a fresh start for the company, which has historically been seen as a benefit in social terms. The Congress needs to recall that the requirement imposed in the 18th century by our Nation’s founders to establish Federal bankruptcy courts had both a practical and a social good component.

Q.8. How do we reduce the disincentive for creditors to perform strong credit research when they can just buy credit protection instead?

A.8. You cannot. CDS is essentially a low-cost substitute for performing actual credit research. As with credit ratings, investors use CDS to create or adjust exposures based upon market perception rather than a true analysis of the underlying value. And best of all, the spreads that are usually reflected in CDS pricing often are wrong and do not accurately reflect the true economic cost of default. Thus when speculators employ CDS to purchase protection against a default, the pricing is usually well-below the true economic value of the default. Or to put it another way, AIG was not nearly compensated for the risks that it took in the CDS markets—even though AIG was an insurer and arguably should have understood the difference between short-term “price” of an illiquid bond or loan vs. long-term “value” of a default event.

Q.9. Do net sellers of credit protection carry that exposure on their balance sheet as an asset? If not, why shouldn’t they?

A.9. The treatment of CDS varies by country. All CDS positions, long or short, should be reflected as a contingent liability or asset, and carried on balance sheet in the appropriate way. The treatment used in the insurance industry for such obligations may be the best model for the Congress to consider as a point of departure for any legislation.

Q.10. In her testimony Chairman Schapiro mentioned synthetic exposure. Why is synthetic exposure through derivatives a good idea? Isn’t that just another form of leverage?

A.10. Yes, it is another form of leverage and Chairman Schapiro addressed this issue directly. When a user of CDS creates the equivalent of a cash market position in a listed security, then that position should be reported to the SEC and disclosed to the marketplace. Allowing speculators to synthetically create the functional equivalent of a cash market position using CDS arguably is a violation of existing law and regulation. Why should an investor be required, for example, to disclose a conventional option to purchase listed shares but not the economic equivalent in CDS? This dichotomy only illustrates the true purpose of CDS, namely to evade established prudential norms and regulation.

Q.11. Regarding synthetic exposure, if there is greater demand for an asset than there are available assets, why shouldn't the economic benefit of that demand—higher value—flow to the creators or owners of that asset instead of allowing a dealer to create and profit from a synthetic version of that asset?

A.11. Agreed. One of the pernicious and truly hideous effects of OTC instruments such as CDS is that they equate true “owners” of assets with speculators who create ersatz positions in these assets via derivatives; that is, they “rent” the asset with no accountability to the owner. It could be argued that such activity amounts to an act of thievery and one that is encouraged by Federal bank regulators, particularly the academic economists who dominate the Fed's Board of Governors! Since the users of cash-settlement OTC contracts never have to deliver the underlying reference assets to the buyer, there is no economic connection between the real asset and the OTC derivative. Again, to repeat, this activity is best described as gaming, not risk management.

Q.12. One of the arguments for credit default swaps is that they are more liquid than the reference asset. That may well be true, but if there is greater demand for exposure to the asset than there is supply, and synthetic exposure was not allowed, why wouldn't that demand lead to a greater supply and thus more liquidity?

A.12. Arguments that CDS are more liquid than the reference assets are disingenuous and stand the world on its head. As above, why allow a derivative at all when there is no cash reference market? Allowing speculators to create a short market in an illiquid corporate bond, for example, via single-name CDS does not improve price discovery in the underlying asset since there is no market in the first place. And since the “players” in this ersatz market are required to neither borrow nor deliver the underlying reference asset, the entire exercise is pointless in terms of price discovery. The only purpose is to allow the large dealer banks to extract supranormal returns and increase systemic risk. Again, it is just as easy to speculate on the outcome of a horse race as on the price of a CDS since there is no mechanistic connection between the wager and the actual reference “asset” or event.

Q.13. Is there any justification for allowing more credit protection to be sold on a reference asset than the value of the asset?

A.13. No. See reply to Question 12.

Q.14. Besides the level of regulation and trading on an exchange, there seems to be little difference in swaps and futures. What is the need for both? In other words, what can swaps do that forward contracts cannot?

A.14. A swap and futures/options are functionally equivalent. The OTC swaps for oil or interest rates can be and are actively traded against the corresponding exchange traded products because they share a common cash market basis. The advantage of OTC contracts is that they allow for customization regarding size and time periods for the counterparties. There is nothing inherently wrong with maintaining these two markets, exchange traded and OTC, side by side, so long as a cash market basis for both exists and is equally visible to the buyer and the seller. Only when the cash

market basis is obscured or nonexistent does systemic risk increase because (a) the pricing is entirely speculative and thus subject to sudden changes in liquidity, and (b) cash settlement of OTC contracts such as CDS allows the risk inherent due to the lack of true price discovery to expand infinitely.

Q.15. One of the arguments for keeping over-the-counter derivatives is the need for customization. What are specific examples of terms that need to be customized because there are no adequate substitutes in the standardized market? Also, what are the actual increased costs of buying those standard contracts?

A.15. The spreads on OTC contracts generally are wider than exchange traded instruments, a difference that illustrates the inefficiency of OTC markets vs. exchange traded markets. That said, the ability to specify size and duration of these instruments is valuable to end users and the Congress should allow the more sophisticated private participants in the markets to make that choice. For example, if a large energy company or airline wants to enter into a swap to hedge fuel sales or costs, respectively, in a way the exchange traded contracts will not, then the user of derivatives ought to have that choice to employ the OTC instruments. Again, OTC markets in and of themselves are not problematic and do not create systemic risk.

Q.16. There seems to be agreement that all derivatives trades need to be reported to someone. Who should the trades be reported to, and what information should be reported? And is there any information that should not be made available to the public?

A.16. All open positions in OTC derivatives above a certain percentage of the outstanding contracts in any market should be (a) reported to the CFTC, and (b) publicly disclosed in aggregate form. Such disclosure would greatly enhance market efficiency, but it does not mitigate the concerns regarding CDS and other contracts for which there is no liquid, actively traded cash basis market. No amount of disclosure can address that basic flaw in the CDS and other markets which lack a cash basis.

Q.17. What is insufficient about the clearinghouse proposed by the dealers and New York Fed?

A.17. The proposed clearinghouse is entirely controlled by the dealer banks. As we wrote in *The Institutional Risk Analyst* in May of this year:

In 2005, the New York Fed began to fear that the OTC derivatives market, at that time with a notional value of over \$400 trillion dollars, was a sloppy mess—and it was. Encouraged by the Congress and regulators in Washington, the OTC market was a threat to the solvency of the entire global financial system—and supervisory personnel in the field and the Fed and other agencies had been raising the issue for years—all to no effect. This is part of the reason why we recommended to the Senate Banking Committee earlier this year that the Fed be completely relieved of responsibility for supervising banks and other financial institutions.

Parties were not properly documenting trades and collateral practices were ad hoc, for example. To address these problems, the Fed of New York began working with 11 of the largest dealer firms,

including Bear Stearns, Merrill Lynch, Lehman, C, JPM, Credit Suisse, and [Goldman Sachs]. Among the “solutions” arrived at by these talks was the creation of a clearinghouse to reduce counterparty credit risk and serve as the intermediary to every trade. The fact that such mechanism already existed in the regulated, public markets and exchanges did not prevent the Fed and OTC dealers from leading a multiyear effort to study the problem further—again, dragging their collective feet to maximize the earnings made from the existing OTC market before the inevitable regulatory clampdown.

For example, in the futures markets, a buyer and seller agreeing to a transaction will submit it to a clearing member, which forwards it to the clearinghouse. As the sell-side counterparty to the buyer and the buy-side counterparty to the seller, the clearinghouse assumes the risk that a party to the transaction might fail to pay on its obligations. It can do this because it is fully regulated and by well capitalized. As the Chicago Mercantile Exchange is fond of saying, in 110 years no futures clearinghouse has ever defaulted.

While the NY Fed believed that a central counterparty was necessary to reduce risks that a major OTC dealer firm might default, the banks firmly resisted the notion. After all, they make billions of dollars each year on the cash and securities which they required their hedge fund, pension fund and other swap counterparties to put up as collateral. Repledging or loaning these customer securities to other clients is very lucrative for the dealers and losing control over the clients collateral would dramatically impact large bank profits.

A clearinghouse would eliminate the need for counterparties to post collateral and a lucrative source of revenue for the dealer firms. So they bought the Clearing Corporation, an inactive company that had been the clearinghouse for the Chicago Board of Trade. If they had to clear their trades, the dealer firms reasoned, at least they would find a way to profit by controlling the new clearing firm. Such is the logic of the GSE mindset.

Meanwhile, other viable candidates for OTC derivatives clearing were eager to get into the business, such as the Chicago Mercantile Exchange and the New York Stock Exchange. Both had over 200 years experience in clearing trades and were well suited to serve as the impartial central counterparty to the banks and their customers.

If the NYSE and CME were to trade derivatives, the big banks knew they would not be able to control their fees or capture the profits from clearing. Therefore, they sold The Clearing Corp. to the Intercontinental Exchange, or ICE, a recent start-up in the OTC derivatives business which had been funded with money originally provided by, you guessed it, the banks. In the deal with ICE, the banks receive half the profit of all trades cleared through the company. And the large OTC dealer banks made sure, through their connections with officials at the Fed and Treasury, that ICE was the winner chosen over the NYSE and CME offerings. That’s

right, we hear that Tim Geithner personally intervened to make sure that ICE won over the NYSE and CME clearing units.¹

Q.18. How do we prevent a clearinghouse or exchange from being too big to fail? And should they have access to Fed borrowing?

A.18. Limit trading in OTC derivatives by (a) requiring sellers to deliver the basis of the derivative upon expiration of the contract and (b) ban those derivatives for which there is no actively traded cash basis market. If such reforms are enacted, there should be no need for the Fed to ever support a multilateral exchange or clearinghouse.

Q.19. What price discovery information do credit default swaps provide, when the market is functioning properly, that cannot be found somewhere else?

A.19. None. The argument that a derivative can aid in price discovery for an illiquid cash basis is circular and ridiculous. Trading in CDS is merely gaming between the parties vs. current market prices. As mentioned above, most single name CDS trade against the short-term yields/prices of the supposed basis, thus these contracts arguably do not provide any price discovery vs. the true cost of insuring against default. For example, the day before Lehman Brothers filed bankruptcy, the CDS was trading at roughly 700bp over the Treasury yield curve or roughly 7 percent per year (plus upfront fees totaling another couple of percentage points) to insure against default. Yet when Lehman filed for bankruptcy, the resulting default required the payment of 9,700bp to the buyers of protection or par less the 3 percent recovery rate determined by the ISDA auction process. Clearly, receiving 7 percent and having to pay 97 percent is not an indication of effective price discovery! The sad fact is that many (but by no means all) users of CDS employ these instruments to trade or hedge current market exposures, not to correctly price the cost of default insurance.

Q.20. Selling credit default swaps is often said to be the same as being long in bonds. However, when buying bonds, you have to provide real capital up front and there is a limit to the lending. So it sounds like selling swaps may be a bet in the same direction as buying bonds, but is essentially a highly leveraged bet. Is that the case, and if so, should it be treated that way for accounting purposes?

A.20. That is correct. In order to sell a bond short, the seller must be able to borrow the collateral and deliver same. In CDS, since there is no obligation to deliver the underlying basis for the contract, the leverage is far higher and, more important, there is no real connection between the price discovery in the cash market and the CDS. While services such as Bloomberg and others use cash market yields to estimate what they believe the valuation of CDS should be, there is no objective confirmation of this in the marketplace. The buyers of CDS protection should be required to deliver the underlying instrument in order to collect on the insurance. Indeed, this was the rule in the OTC market until the after the bank-

¹See "Kabuki on the Potomac: Reforming Credit Default Swaps and OTC Derivatives", *The Institutional Risk Analyst*, May 18, 2009.

ruptcy of Delphi Corporation.² At a minimum, the Congress should compel ISDA to roll-back the template for CDS contracts to the pre-Delphi configuration and require that buyers of protection deliver the underlying basis.

Q.21. Why should we have two regulators of derivatives, with two interpretations of the laws and regulations? Doesn't that just lead to regulation shopping and avoidance?

A.21. Yes, in terms of efficiency, we should not have two regulators of derivatives, but the purpose of the involvement by the two agencies is not identical. When a derivative results in the creation of the economic equivalent of a listed security, then investors must be given notice via SEC disclosure. It should be possible for CFTC to exercise primary regulatory oversight of these markets while preserving the role of the SEC in enforcing the legal duty to disclose events that are material to investors in listed securities.

Q.22. Why is synthetic exposure through derivatives a good idea? Isn't that just another form of leverage?

A.22. Yes, it is another form of leverage against real assets. Like any form of leverage, it must be disclosed and subject to adequate prudential safeguards such as collateral and disclosure.

Q.23. What is good about the Administration proposal?

A.23. At least we are now talking about some of the important issues, but the Administration proposal essentially mirrors the position of the large banks and should not be taken as objective advice by the Congress.

Q.24. Mr. Whalen, you suggest making all derivatives subject to the Commodity Exchange Act. The SEC says some derivatives should be treated like securities. Is that an acceptable option?

A.24. See response to Question 21.

Q.25. Is there anything else you would like to say for the record?

A.25. To repeat my earlier testimony, the supranormal returns paid to the dealers in the CDS market is a tax. Like most State lotteries, the deliberate inefficiency of the CDS market is a dedicated subsidy meant to benefit one class of financial institutions, namely the large dealer banks, at the expense of other market participants. Every investor in the markets pay the CDS tax via wider spreads and the taxpayers in the industrial nations pay due to periodic losses to the system caused by the AIGs of the world. And for every large, overt failure like AIG, there are dozens of lesser losses from OTC derivatives buried by the professional managers of funds and financial institutions in the same way that gamblers hide their bad bets. How does the continuance of this market serve the public interest?

²See Boberski, David, "CDS Delivery Option: Better Pricing of Credit Default Swaps", *Bloomberg Books* (2009), Pages 101–104.

ADDITIONAL MATERIAL SUPPLIED FOR THE RECORD

CATERPILLAR®
June 22, 2009

Caterpillar Inc.

100 NE Adams Street
Peoria, Illinois 61629

The Honorable Mike Crapo
United States Senate
Washington D.C. 20510

Dear Senator Crapo:

Thank you for your letter dated June 18th, 2009, requesting the input of Caterpillar Inc. on pending legislation concerning regulation of Over-the-Counter Derivatives. We appreciate the opportunity you have afforded us to comment on these important issues.

Based in Peoria, Illinois, for more than 80 years, Caterpillar Inc. has been making progress possible and driving positive and sustainable change on every continent. With 2008 sales and revenues of \$51.324 billion -- driven in part by more than \$16 billion in exports from our US-based operations -- Caterpillar is the world's leading manufacturer of construction and mining equipment, diesel and natural gas engines and industrial gas turbines. We are also a leading services provider through Caterpillar Financial Services, Caterpillar Remanufacturing Services, Caterpillar Logistics Services and Progress Rail Services. We employ more than 40,000 people across our nearly 300 U.S. locations, and strive to be a positive community leader everywhere we operate.

The following is our response to the three questions you pose.

1. *How does your company use customized over-the-counter derivatives to help stabilize prices and mitigate risk?*

Caterpillar uses over-the-counter derivatives ("OTC Derivatives") to mitigate risk in three areas:

- a) Interest rates -- in order cover risk related to fluctuations in borrowing and lending costs.
- b) Foreign currency -- as a global supplier of goods and services, we must cover risk related to fluctuations in currency exchange rates; and
- c) Commodity pricing -- to cover risk related to fluctuating prices in raw materials used to produce our products.

In each of these areas, the purpose of the OTC Derivative contract is to eliminate market-based risk. A simplified example of a commodity forward purchase contract is illustrative.

Caterpillar has significant exposure to copper price movements through purchases of wire harnesses, electronics and alternators from suppliers.

As the price of copper increases, the cost of these parts also increases. To mitigate this price risk, Caterpillar uses OTC Derivatives called "forward swaps". Caterpillar may, for example, enter into a contract with our counterparty bank to buy X pounds of copper forward for the next Y months. As the price of copper rises, our OTC Derivative Contracts gain in value to offset the higher costs of copper-based parts purchased from suppliers. Upon settlement with the counterparty bank, the gain is settled in cash with no physical exchange of copper. These contracts offer an effective way to manage the embedded cost volatility of parts and components whose price is derived from commodities like copper, aluminum, nickel, zinc, lead, etc.

Similar forward swap arrangements are used to manage foreign exchange exposures and interest rate risks related to short and long-term operational borrowing. In each of these cases, we match our hedges by amount and duration of our anticipated exposure. The ability to customize those amounts and durations with counterparties is key to qualifying for FASB-mandated accounting treatment that allows for stability in SEC-regulated financial reporting.

2. *What are the possible effects of severely restricting access to customized OTC Derivatives on your ability to manage risk and on the prices you charge your customers?*

As explained above, it is critical for Caterpillar to have the flexibility to utilize customized OTC derivative products that allow us to match the underlying exposure we are striving to protect to the specific hedge instrument that best reduces our risk. We match our hedges by amount and duration of our anticipated exposure. Our understanding of currently pending regulation in this area is that it would require a clearing function which would standardize terms like duration and amount. Any standardization of this type would prohibit us from matching exactly the terms of the underlying exposure we are attempting to hedge. This, in turn, would expose us to uncovered risk and introduce needless volatility into our financial results.

Due to hedge accounting requirements, the potential exists for proposed legislation to discourage hedging, resulting in corporate risk taking to avoid earnings volatility. This could be a significant unintended consequence of the proposed legislation.

For example, faced with such a regulatory climate, U.S.-based companies would need to consider one or more of the following courses. First, companies would almost certainly need to add significant cost by implementing processes and otherwise non-value-added back-office

functions to comply with mark-to-market and margin requirements. Second, in an environment where companies are asked to undertake greater risk, shareholders would likely expect greater return which could only be achieved by cutting costs or raising revenue elsewhere in the value chain. This could result in a loss of competitive positioning, especially overseas where competitors would not necessarily be saddled with similar requirements. Finally, in the face of such competitive pressures and shareholder expectations, U.S.-based companies may need to explore performing more treasury functions outside of the United States, which would adversely impact American jobs.

3. *What safeguards are in place to ensure that your derivatives portfolio is a tool for hedging risk, rather than a source of risk for your company?*

Caterpillar's derivatives policies are specifically written to ensure we only focus on the management of risks created by our business operations. In the area of foreign currency, for example, we collect foreign currency exposures from worldwide operations and net these exposures to ensure all natural offsets are fully utilized. We only hedge the net portion of our exposure to limit unnecessary risk creation and expense. Derivatives are utilized to hedge these net exposures to protect Caterpillar from the risk of unfavorable movement of a currency. We only enter into foreign currency derivative contracts when we have identified an underlying exposure. Similar policies are in place for commodities and interest rate hedging as well. Caterpillar does not use derivatives to speculate.

Senator, once again we thank you for the opportunity to provide input on this important issue. Caterpillar supports the need for transparent financial reporting and takes our obligations in this area very seriously. We also understand that the recent economic crisis has exposed some areas of the financial system that probably require enhanced regulation. However, as you point out in your request, this is a highly technical issue and poorly crafted legislation could create significant negative and unintended consequences for U.S. manufacturers during the most difficult economic times since the Great Depression.

At Caterpillar, we are very proud of our position as a U.S.-based global industry leader. We employ tens of thousands of Americans in the production of goods and supply of services that are critical not just to the U.S. economy but to the growth of economies around the world. Our business model does not allow for the speculation in derivative contracts, but requires the hedging of certain risks described above.

The Honorable Mike Crapo

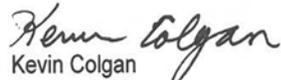
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June 22, 2009

We believe that the speculation that contributed to the current financial crisis can and should be addressed in a way that does not burden companies like ours who are attempting to responsibly manage risk. We are more than happy to work with members of Congress to further this objective.

Please let us know if you or your staff have any further questions or need more information in this area. Feel free to contact Clay Thompson in our Washington office at (202) 466-0662.

Very truly yours,



Kevin Colgan
Corporate Treasurer
Caterpillar Inc.
Telephone: (309) 675-1104



June 19, 2009

The Honorable Mike Crapo
 United States Senator
 239 Dirksen Senate Office Building
 Washington D.C. 20510

Dear Senator Crapo,

I am writing in response to your request for input on the recent legislative proposals to alter the regulatory framework of over-the-counter derivatives. Cargill appreciates having this opportunity as we are an extensive end-user of over-the-counter derivatives in the interest rate, foreign exchange and commodity markets.

Cargill believes that improvements can and should be made to the OTC derivative markets and we support Congress and the regulators in their work with this initiative. From Cargill's perspective, it starts with:

- Increasing transparency and reporting of OTC transactions
- Putting in place enforceable position limits for non-commercial participants (i.e. speculators)

We are, however, concerned that the recent U.S. Treasury proposal seeks a "one-size-fits-all" regulatory solution for all OTC products in response to systemic risk posed by one particular market: credit default swaps. We believe that the regulatory reforms as they are presented today will have the unintended consequence of either increasing risk because companies like Cargill will choose to hedge less, or impeding business growth due to the diversion of working capital to margin accounts. These concerns will be further outlined below in our responses to your three questions:

- How does your company use customized over-the-counter derivatives to help stabilize prices and mitigate risk?

Cargill uses customized over-the-counter derivatives to reduce earnings volatility and to give our customers (producers and end-users) more stable and predictable pricing. The advantages that customized over-the-counter products have over exchange products are the following:

- a) Ability to precisely tailor the product to meet the risk or exposure that needs to be hedged. For example, Cargill will often borrow at a variable rate. To hedge or manage the risk of rising interest rates, we will enter into an interest rate swap to lock in a fixed rate for the entire maturity of the debt. It is important to note that while interest rate derivatives currently are offered on US exchanges, these exchange-traded contracts are not customized to the specific terms of our debt issuances, creating an economic mismatch. In addition to the economic risks of the

mismatch, if we are unable to execute a customized derivative, it will impact our accounting treatment. Customization allows us to qualify for hedge accounting under US accounting rules. Without hedge accounting, changes in the market value of the derivative will be recorded in our income statement, creating earnings volatility that is unrelated to our core business.

- b) Customization has the benefit of giving a broader product mix and a more efficient and cost effective hedge than what is generically available on the exchange. For example, a product that gives protection against the average price of corn over a certain period may be a better hedge for a processor of corn that is buying corn every day. Average price products in corn are not available on the futures exchanges, but they are available in the over-the-counter markets. Averaging products are materially less expensive than traditional exchange products. Furthermore, the OTC markets allow for the averaging period to be set to the exact period that the hedger is looking to protect, insuring that the hedger does not overpay for his protection.
- What are the possible effects of severely restricting access to customized over-the-counter derivatives on your ability to manage risk and on the prices you charge your customers?
 - a) Recent proposals push for having OTC products either be exchange traded or centrally cleared. Our concern with this is that exchange traded products and centralized clearing require a high degree of standardization. Standardization will make it impossible for companies to achieve "hedge effectiveness" and comply with FAS 133 accounting standards.
 - b) Proposals apply rigid margining, including initial and variation margin, across all OTC markets (interest rates, currencies, commodities). While margining and other credit support mechanisms are in place and utilized every day in the OTC markets, there is flexibility in the credit terms, credit thresholds and types of collateral that can be applied. This flexibility is a significant benefit for end users of OTC derivatives such as Cargill in managing working capital. Losing this flexibility is particularly concerning because mandatory margining will divert working capital from investments that can grow our business and idle it in margin accounts. While it depends on market conditions, the diversion of working capital for Cargill for margining could be in excess of \$ 1 billion. Multiply this across all companies in the U.S. and the ramifications are enormous, especially at a time when credit is critically tight.
 - What safeguards are in place to ensure that your derivatives portfolio is a tool for hedging risk, rather than a source of risk for your company?

Cargill has the following safeguards in place:

 - a) Policies for the use of over-the-counter derivatives.
 - b) Independent risk group and risk analysts in the company that monitor use of derivatives.

- c) Centralized Financial and Commodity Risk Committees that set policy, limits, and review exposures.
- d) Separation between accounting and commercial managers to independently verify valuations of positions.
- e) Significant credit resources to analyze and monitor counterparty credit exposure.
- f) Daily valuation of derivative positions.
- g) Stress testing of positions.
- h) Use of bi-lateral credit agreements with margining provisions with OTC counterparties.
- i) Resources and systems for valuing positions and moving collateral daily with OTC counterparties to manage credit exposures.

With regard to (h) and (i) above, we believe that there is a misconception that transactions in the OTC markets do not have credit provisions and are not margined or collateralized. A significant number of OTC transactions are margined with collateral being moved daily. With exchange products or centralized clearing, margining terms are standardized, since counterparties do not know each other and there is no counterparty risk analysis performed. In the OTC market credit and collateral terms vary and are set according to the credit quality of the hedger and the size and duration of the OTC transaction. As stated above, this flexibility in setting credit terms is critically important in managing working capital.

Again, I want to thank you for the opportunity to answer your questions and express our concerns. We appreciate your interest in this matter and we look forward to working with you in the days ahead.

Sincerely,



David Dines

President
Cargill Risk Management
Cargill, Inc.
9350 Excelsior Boulevard, MS #150
Hopkins, MN 55343

10 Park Avenue
 PO Box 1902
 Morristown, NJ 07962-1902



June 19, 2009

The Honorable Mike Crapo
 United States Senate
 239 Dirksen Senate Office Building
 Washington, DC 20510

John Rosenthal
 Senior Managing Director
 Investments

(973) 355-4777
 (973) 647-3054 FAX
 jrosenthal@metlife.com

Dear Senator Crapo:

We appreciate your office taking the time to meet with MetLife to discuss the regulatory reform of financial derivatives. We are in receipt of your letter dated June 16, 2009 to our Chief Investment Officer, Steve Kandarian, and thank you for allowing us this opportunity to provide our input on this important legislative initiative.

MetLife, the largest life insurer in the United States, offers life insurance, annuities, auto and home insurance, retail banking and other financial services to individuals, as well as group insurance and retirement and savings products and services to corporations and other institutions. Through our various subsidiaries and affiliates, MetLife reaches over 70 Million customers worldwide. As of March 31, 2009, MetLife had a total investment portfolio of \$316 Billion.

The U.S. life insurance industry benefits greatly from a broad and well functioning market for financial derivatives. As an "end user", MetLife employs derivatives safely and appropriately to protect our assets and hedge the risks inherent in customer liabilities. Derivatives that can be structured to hedge very specific risks, known as "customized" derivatives, are an essential risk management tool. A broad and efficient marketplace that provides continued access to a wide range of financial derivatives is vital so that MetLife and other insurers can meet our commitments to millions of hardworking Americans.

1. How does your company use customized over the counter derivatives to help stabilize prices and mitigate risk?

MetLife utilizes a diversified group of financial derivatives, from standardized derivatives, like exchange traded futures, to customized derivatives, like structured swap and currency transactions. We utilize these products safely and appropriately to manage the risks associated with many of our insurance products and to protect the value of our investment portfolio. Although standardized derivatives are a core hedging tool, they do not offer the flexibility and cost efficiency needed to properly hedge the full range of insurance assets and liabilities that insurers must manage. Customized derivatives account for a large portion of our over the counter derivatives usage and are utilized to provide a closer offset to the market risks of insurance

products that are tailored to fit customer needs and to precisely hedge risks in assets held to match insurance liabilities. For example:

- Many insurance products such as long term care insurance, traditional life insurance and fixed annuity portfolios are of very long duration, characterized by payments out to customers that can range from 15, 25 and even 50 years. The payout period on these policies is much longer than the duration of the derivatives in the exchange traded futures markets. Customized over-the-counter derivatives are utilized to better match the cash flow timing and maturities of the policy holder obligations.
- In connection with certain variable annuity contracts that contain equity guarantees, a policy holder can be guaranteed the ability to withdraw funds at a guaranteed minimum market value, regardless of stock market performance and interest rate movement, over the life of the annuity. These guarantees tied to market performance are prudently hedged with a combination of customized swaps and options.
- In order to diversify the risks of investment portfolios, insurers at times purchase fixed income securities issued by non-U.S. companies. An investment that is attractive from a credit perspective could be denominated in a foreign currency. If the policies supported by these investments are dollar denominated liabilities, these foreign currency investments will be “swapped” to dollars to reduce exposure to fluctuations in currency values. Customized currency swaps are utilized to exactly match the rates, payment periods and maturity of the foreign currency assets to convert the foreign currency amounts into US dollars.

2. What are the possible effects of severely restricting access to customize over the counter derivatives on your ability to manage risk and on the prices you charge your customers?

As indicated above, customized derivatives are an important risk management tool for insurers. A derivatives market that prohibits or severely restricts access to customized over the counter derivatives would create new risks and challenges to delivering on the protections and guarantees our products provide to millions of customers. It would also significantly limit our ability to innovate and provide new insurance and retirement solutions for the financial security of Americans in these difficult times.

Restrictions or prohibitions on the use of customized over the counter derivatives would create an inefficient financial marketplace. Standardized derivatives cannot be used effectively to hedge all types of financial risks. In some cases it is simply more expensive to hedge certain risks with standardized derivatives than with customized derivatives. For example, experience has shown that it is more cost effective to hedge “duration risk” (the risk that policies have a term that extends beyond the maturity dates of easily obtainable assets) with a single customized derivative than through a series of consecutively renewable standard derivatives. In other instances, as

exemplified in our response to question 1, the breadth of hedging solutions provided by standardized derivatives are too narrow to mitigate the many risk combinations arising from variable and guaranteed insurance products. Attempting to utilize standardized derivatives to hedge certain liabilities would not adequately protect insurance companies from these risks, and would in fact introduce additional risks.

Any increased risks would result in higher costs to offer and maintain these products. In either situation, the increased costs of an inefficient derivatives market would be reflected in the pricing to our customers. To the extent the costs and / or risks associated with an inability to appropriately hedge these products became prohibitive; these products could be no longer available for customers.

3. What safeguards are in place to ensure that you derivatives portfolio is a tool for hedging risk, rather than a source of risk for your company?

MetLife safeguards its derivatives portfolio and ensures that it is risk reductive by strictly complying with all regulatory requirements imposed under applicable state insurance laws and adhering to prudent investment and risk management strategies.

Each insurer is subject to regulation by the insurance department and insurance laws in its state of domicile. Under this regulatory regime, MetLife's use of derivatives receives broad and comprehensive oversight.

State insurance statutes proscribe the use of derivatives to hedging investment assets and liabilities. In order to execute a derivatives transaction, it must be demonstrated the derivatives to be purchased reduce identified risks associated with specific assets or liabilities, and this risk reduction essentially must stay in place for the entire time the derivatives transaction remains outstanding.

State insurance statutes also impose quantitative limits on derivatives. The dollar value of derivatives transactions outstanding are usually capped at a very low percentage of an insurer's admitted assets. With respect to over the counter derivatives, state statutes establish the financial strength requirements and aggregate concentration limits for derivatives trading counterparties.

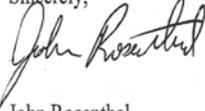
Prior to engaging in any derivative transactions, state insurance law requires the Board of Directors (or Investment Committee of the Board) to adopt a Derivatives Use Plan, setting forth permitted derivatives objectives and strategies, quantitative limitations on transactions, requirements with respect to counterparty exposures, periodic reporting to Board and management, and other management and control procedures. In many states, this plan is also subject to the review and approval of the state insurance department. Derivatives programs are typically subject to a mandated annual compliance audit by an insurer's independent auditors and to periodic review and audit by the state insurance regulators.

All over the counter derivatives transactions executed between insurers and their trading counterparties are governed by an industry master agreement that includes provisions for the daily monitoring and posting of collateral. This master agreement reduces the risk of loss between an insurer and its trading counterparties by aggregating or “netting” the amounts due under all derivatives transactions with a particular counterparty into one payment amount. This netting valuation occurs on a daily basis and collateral is exchanged between the insurer and its trading counterparties based upon each day’s net payment amount.

In addition to periodic examinations by state insurance regulators, internal checks and balances within an insurer’s corporate governance structure are critical to ensuring that derivatives are used appropriately and in compliance with state insurance law. We have established separate units within each of our legal, accounting, audit and enterprise risk management departments dedicated exclusively to the daily oversight of derivatives transactions and our derivatives portfolio.

We hope that this information has been helpful. If we can be any further assistance please contact Kristin Smith of our Washington office at 202-466-6224 or via email ksmith4@metlife.com.

Sincerely,

A handwritten signature in black ink, appearing to read "John Rosenthal". The signature is fluid and cursive, with the first name "John" being more prominent.

John Rosenthal
Senior Managing Director
Chief Hedging Officer



Mark B. Grier
Vice Chairman

Prudential Financial, Inc.
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Tel 973 802-3398 Fax 973 802-3414
mark.grier@prudential.com

June 19, 2009

The Honorable Mike Crapo
United States Senate
239 Dirksen Senate Office Building
Washington, DC 20510

Dear Senator Crapo,

I am writing in response to your June 16 letter requesting comments on proposals to alter the regulatory framework of over-the-counter (OTC) derivatives.

Prudential Financial Inc. appreciates and supports the efforts to ensure appropriate regulatory oversight of market participants and their derivative activities. Prudential further appreciates the opportunity to share with you how important customized bilateral contracts are for us in the over-the-counter derivatives market.

How does your company use customized over-the-counter derivatives to help stabilize prices and mitigate risk?

Prudential's use of OTC derivatives is essential to the product risk management and investment risk management of the assets and liabilities supporting all of its insurance and retirement products. Our products have complicated liability structures; we generally use customized OTC derivatives to tailor our asset portfolio to meet those liabilities. Additionally, customized OTC derivatives allow us precise hedging, which is required by the Financial Accounting Standard (FAS 133), and are the most effective means for mitigating risk and limiting undue volatility in Prudential's financial statements.

Specifically, Prudential uses customized OTC derivatives to mitigate common asset and liability mismatch risk that arises from our core business. For example, selling life insurance policies to individuals generates the need for Prudential to invest in a long, diverse fixed rate portfolio to fund future death benefits. Customized OTC interest rate swaps are purchased to align the future cash flows of the bond portfolio to the future liabilities. The more precisely we can match cash flows the more certainty we have in meeting our obligations. The customized OTC derivative market affords us that certainty.

Also, with a large fixed income portfolio diversification is essential to portfolio management. Some investments are made in currencies other than dollars to achieve this diversification. We use cross currency swaps to convert the foreign currency flows to dollars, and to align the assets with the corresponding liabilities. These customized OTC currency swaps match the material terms of the underlying bond: principle amount, floating index, spread, currency, payment dates and maturity date. There is no exchange-traded market for such a customized derivative because no two bonds are identical. Each corresponding hedge has unique terms and therefore is not fungible with others.

Many of our insurance and retirement products also contain minimum interest rate guarantees and/or minimum crediting rates. These portfolio risks are also mitigated using both standardized and customized derivatives.

As you know, Prudential has international operations. We protect our capital invested overseas by using asset swaps and currency forwards, thereby maintaining a US dollar capital base. We also convert foreign income to dollars using long dated currency forwards.

The final example to illustrate Prudential's use of customized OTC derivatives to help stabilize prices and mitigate risk relates to the tailored OTC derivatives hedges used in connection with our variable annuities and retirement products. Prudential offers annuity products with "high watermarks" tied to equity portfolios. These principal guarantees with guaranteed minimum incomes are all attractive features of our products, which serve to provide secure retirement income. It has been estimated that guaranteed annuity products such as ours collectively "saved" retirement savers \$230 billion that otherwise would have been lost in the recent equity market collapse.

To hedge our exposure to these products, Prudential enters into "look-back" equity options with terms from one to ten years. These customized OTC derivatives have contractual terms that are carefully structured to manage the underlying risks of the products we sell. In each case the characteristics of the option will depend upon the amount of the risk to be hedged, the level and volatility of the referenced index (e.g., S&P, Russell), the look-back period, observation dates, etc. Once again, such customized OTC derivatives defy commoditization.

What are the possible effects of severely restricting access to customized OTC derivatives on your ability to manage risk and on the prices you charge your customers?

Without customized OTC derivatives, Prudential would be incapable of closely managing the risks created in selling life insurance, offering commercial loans, and providing annuities for retirement. Consequently without appropriate hedge tools the products we sell would have to be modified to place the additional risk on to the consumer or be eliminated from our product offerings. Even if Prudential and other insurers found a way to continue these core products, they would have to come at a higher cost to the consumer, because, absent precise risk- and volatility-reducing hedges, we would be subject to higher capital requirements. The higher costs of products would be passed on to consumers who would be buying an inferior product.

What safeguards are in place to ensure that your derivatives portfolio is a tool for hedging risk rather than a source of risk for your company?

There are several safeguards in place at Prudential to ensure derivatives are used for risk management and not a source of risk taking. Most importantly, all over-the-counter derivatives entered into by Prudential are managed and executed through one central entity, Prudential Global Funding (PGF). This unit acts as a central clearing house for the company, ensuring that the derivatives are used for their intended purpose and that the price movements of the derivative will move correspondingly with the asset or liability that is being hedged or replicated. PGF does not act as a dealer or market maker in derivatives but instead is part of our risk management culture. PGF measures the residual risk of the derivatives portfolio using a value at risk methodology. All positions are marked to market daily and their market value is stressed at two standard deviations. The risk of loss may not exceed \$750,000 per day. This is monitored by both our Senior Financial Risk Management Officer, Treasurer and selected senior investment professionals. Additionally, Prudential is subject to state (New Jersey, New York and Connecticut) regulatory oversight. PGF, as a wholly owned subsidiary of Prudential Insurance Company of America, is constrained by that regulatory oversight and its' parent balance sheet.

In your letter you address central counterparty clearing and exchange trading of relatively standardized contracts. At Prudential all derivative transactions are executed under master netting agreements and a credit support annex. Collateral is exchanged between us and our counterparty representing the net present value of the transactions, much the way daily variation margin is used by the futures exchanges. However, the exchanges require cash and government securities be posted for collateral. We post corporate bonds. Requiring standardized contracts to be centrally cleared would lead to increased cost of maintaining our collateral arrangements. Furthermore, having customized contracts separately collateralized with a counterparty may increase risk, since we will no longer have the correlation benefits of the standardized contracts to net down our total exposure.

Sincerely,



Mark B. Grier
Vice Chairman

Janet L. Yeomans
Vice President and Treasurer

3M Treasurers

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jlyeomans@mmm.com

June 19, 2009



The Honorable Mike Crapo
U.S. Senate
239 Dirksen Senate Office Building
Washington, D.C. 20510

Dear Senator Crapo:

Thank you very much for requesting our input on proposals that would impact 3M's use of over-the-counter (OTC) derivatives.

As you know, 3M is a U.S.-based employer headquartered in Minnesota. We are home to such well-known brands as Scotch, Post-it, Nexcare, Filtrete, Command, and Thinsulate. 3M has some 34,000 employees in the US and operations in 27 states, where over 60% of 3M's worldwide R&D and over 60% of our manufacturing occurs. While our U.S. presence is strong, being able to compete successfully in the global marketplace is critical. In 2008, 64% of our sales (over \$16 billion) were outside the U.S. – this number is expected to grow to over 70% by 2010.

It is because of the global success of our brands that we manage foreign currency risks via the OTC markets. Likewise, our desire to efficiently manage our raw material and financing costs gives rise to our use of OTC commodity and interest rate tools. It is important to note that 3M, like the majority of end users, does not speculate with derivatives. All of our hedge transactions are carefully matched with underlying risks from the operation of our businesses.

We greatly appreciate your interest in our perspective on proposals to establish a regulatory framework for OTC derivatives. While 3M supports the objectives outlined by the Administration and some Members of Congress, we have strong concerns about the potential impact on OTC derivatives and 3M's ability to continue to use them to protect our operations from the risk of currency, commodity, and interest rate volatility.

3M agrees that the recent economic crisis has exposed some areas in our financial regulatory system that should be addressed. However, not all OTC derivatives have put the financial system at risk and they should not all be treated the same. The OTC foreign exchange, commodity, and interest rate markets have operated uninterrupted throughout the economy's financial difficulties. We urge policy makers to focus on the areas of highest concern.

3M understands and respects the need for reporting and record keeping. Publicly held companies are currently required by the SEC and FASB to make significant disclosures about our use of derivatives instruments and hedging activities, including disclosures in

our 10Ks and 10Qs. We would like to work with policy makers on ways to efficiently collect information into a trade repository to further enhance transparency.

3M opposes a mandate to move all derivatives into a clearing or exchange environment. One key characteristic of OTC derivatives for commercial users is the ability to customize the instrument to meet a company's specific risk management needs. Provisions that would require the clearing of OTC derivatives would lead to standardization, thus impeding a company's ability to comply with hedge accounting requirements for financial reporting, thereby exposing reported corporate financial results to unwarranted volatility and distracting from operating results.

While we are mindful of the reduction in credit risk inherent in a clearing or exchange environment, robust initial and variation margin requirements would create substantial incremental liquidity and administrative burdens for commercial users, resulting in higher financing, and operational costs. The hedging of business risks could well be discouraged. Scarce capital currently deployed in growth opportunities would need to be maintained as margin, which could result in slower job creation, lower capital expenditures, less R&D or higher costs to consumers.

Regarding whether our use of derivatives poses any risk to the company, in the over 20 years that we have used them, we have found that these derivatives have been successful in helping us manage risks and have not posed any financial threat to the company. Our use of derivatives is governed by written policies that are reviewed regularly to assure that they protect the company's interests. Compliance with policies and results are overseen by our Financial Risk Management Committee. In addition, results are reported regularly to the Finance Committee of the Board of Directors. We have not had a negative surprise in connection with any of our hedging programs including the use of derivatives as tools to achieve the protection we seek. We purposefully distribute our counterparty risk across different companies to minimize concentration in one institution, but have not had any problems with any of the providers with whom we work.

Again, thank you for studying the critical details related to financial system reforms and for considering our perspective in this important debate. 3M respectfully urges Congress to preserve commercial users' ability to continue using derivative products to manage various aspects of corporate risk while addressing concerns about stability of the financial system. 3M looks forward to working with you and the Committee as you craft legislation on this issue.

Sincerely,



The Boeing Company
1200 Wilson Blvd.
Arlington, VA 22209-1989

June 24, 2009



The Honorable Mike Crapo
239 Dirksen Senate Office Building
Washington, DC 20510

Dear Senator Crapo:

Thank you for your letter that raises important questions regarding the use of over-the-counter ("OTC") derivatives. The Boeing Company is appreciative of your recognition of the need for companies to continue to have the ability to negotiate customized contracts in the OTC markets.

The Boeing Company has a need for OTC derivatives in order to create stable and predictable values for over twenty currencies and a variety of commodities. Such contracts are specifically tailored to our individual needs. The flexibility provided by OTC derivatives continues to help The Boeing Company compete globally.

With this general background, please find below our responses to the specific questions you have asked.

1. How does your company use customized over-the-counter derivatives to help stabilize prices and mitigate risk?

The Boeing Company ("Boeing") uses over-the-counter derivatives primarily to stabilize production and operating costs. We procure parts globally for the manufacture of our products, some of the procurement contracts are priced in foreign currencies. We use OTC derivatives to minimize the variability of the U.S. dollar cost of these foreign currency denominated procurement contracts. We also have exposure to variable priced commodities such as electricity, jet fuel, and aluminum and we anticipate using OTC derivatives to minimize the impact of commodities on our production and operating costs.

2. What are the possible effects of severely restricting access to customized over-the-counter derivatives on your ability to manage risk and on the prices you charge your customers?

By restricting access to customized OTC derivatives, there are a variety of impacts that may occur. The most significant impact being that Boeing is unable to manage its variable cost structure which would require us to pad the sales price of our products to absorb the variable costs. The padding of the sales price would significantly reduce Boeing's competitiveness of our

Page Two

commercial as well as our defense business. This could lead to significant job losses at Boeing, which could impact nearly every state. Another significant impact on Boeing would be the requirement to post cash collateral. As recently as February, Boeing would have had to post \$150M collateral; the posting of such significant collateral could significantly impact our business operations as is not available for our day to day business needs.



3. What safeguards are in place to ensure that your derivatives portfolio is a tool for hedging risk, rather than a source of risk for your company?

The Boeing Company has an explicit policy which prohibits speculative trading; derivatives may only be used to hedge risk. We also have a multi-tiered approval process which requires business unit approval up to the Controller level and Corporate Treasury approval prior to entering into any derivative contracts.

Should you require additional information, please do not hesitate to contact me in the future.

Sincerely,

A handwritten signature in cursive script that reads "Randall Durling".

Randall Durling,
Director-International Finance