

**REGULATORY REFORM AND
THE DERIVATIVES MARKET**

HEARING
BEFORE THE
**COMMITTEE ON AGRICULTURE,
NUTRITION, AND FORESTRY**
UNITED STATES SENATE

ONE HUNDRED ELEVENTH CONGRESS

FIRST SESSION

—————
JUNE 4, 2009
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Printed for the use of the
Committee on Agriculture, Nutrition, and Forestry



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

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U.S. GOVERNMENT PRINTING OFFICE

54-570 PDF

WASHINGTON : 2010

For sale by the Superintendent of Documents, U.S. Government Printing Office
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(II)

CONTENTS

	Page
HEARING(S):	
Regulatory Reform and the Derivatives Market	1

Thursday, June 4, 2009

STATEMENTS PRESENTED BY SENATORS

Harkin, Hon. Tom, a U.S. Senator from the State of Iowa, Chairman, Committee on Agriculture, Nutrition, and Forestry	1
Chambliss, Hon. Saxby, a U.S. Senator from the State of Georgia	3

Panel I

Gensler, Gary, Chairman, Commodity Futures Trading Commission, Washington, DC	7
---	---

Panel II

Bookstaber, Richard, New York, New York	34
Dines, David, President, Cargill Risk Management, Hopkins, Minnesota	36
Driscoll, Daniel A., Executive Vice President and Chief Operating Officer, National Futures Association, Chicago, Illinois	41
Lenczowski, Mark, Managing Director, JPMorgan Chase & Co., Washington, DC	31
Masters, Michael W., Managing Member/Portfolio Manager, Masters Capital Management, LLC, St. Croix, U.S. Virgin Islands	38
Stout, Lynn A., Paul Hastings Professor of Corporate and Securities Law, University of California-Los Angeles, Los Angeles, California	29

APPENDIX

PREPARED STATEMENTS:	
Cochran, Hon. Thad	62
Bookstaber, Richard	64
Dines, David	71
Driscoll, Daniel A.	77
Gensler, Gary	80
Lenczowski, Mark	95
Masters, Michael W.	101
Stout, Lynn A.	131
DOCUMENT(S) SUBMITTED FOR THE RECORD:	
Chambliss, Hon. Saxby:	
“Exchanges Warn On OTC Clearing”, article, <i>Financial Times</i> , June 3, 2009	138
Dines, David:	
Chesapeake Energy, prepared statement	139
“The Role of Speculation in the Recent Commodity Price Boom (and Bust)”	142
Association for Financial Professionals, written statement	177
Commodity Markets Oversight Coalition, written statement	179
National Association of Manufacturers, written statement	183

IV

	Page
QUESTION AND ANSWER:	
Chambliss, Hon. Saxby:	
Written questions for Gary Gensler	186
Roberts, Hon. Pat:	
Written questions for Gary Gensler	187
Written questions for David Dines	187
Gensler, Gary:	
Written response to questions from Hon. Saxby Chambliss	188
Written response to questions from Hon. Pat Roberts	189
Dines, David:	
Written response to questions from Hon. Pat Roberts	191

REGULATORY REFORM AND THE DERIVATIVES MARKET

Thursday, June 4, 2009

U.S. SENATE,
COMMITTEE ON AGRICULTURE, NUTRITION, AND FORESTRY,
Washington, DC

The Committee met, pursuant to notice, at 10:05 a.m., in room SD-106, Dirksen Senate Office Building, Hon. Tom Harkin, Chairman of the Committee, presiding.

Present: Senators Harkin, Nelson, Casey, Klobuchar, Gillibrand, Bennet, Chambliss, Thune, and Johanns.

STATEMENT OF HON. TOM HARKIN, A U.S. SENATOR FROM THE STATE OF IOWA, CHAIRMAN, COMMITTEE ON AGRICULTURE, NUTRITION, AND FORESTRY

Chairman HARKIN. The Senate Committee on Agriculture, Nutrition, and Forestry will come to order regarding a hearing on regulatory reform in the derivatives markets.

Although we see hope in the strong economic recovery steps we have taken, we are still struggling through a grave economic downturn. The lack of sufficient regulatory authority and oversight regarding the financial markets is widely acknowledged as a key factor in the global economic crisis. It is not credible to assert that the markets and present regulatory system have worked. When the Federal Government has had to inject some \$4 trillion—\$4 trillion—into the system to stave off a total collapse of the economy.

Recent problems indicate the need for fundamental reform. Fundamental reform. The 2008 run-up in oil prices left our economy bruised, our Nation keenly aware of not only its dependence on foreign oil but the struggle with speculation in the markets. Volatile agricultural commodity prices, high input costs, and problems with the wheat and cotton markets have exposed vulnerabilities in our agriculture futures markets. But possibly the most problematic, our national economy has been held hostage by poorly regulated financial markets and the irresponsible behavior of some market participants, particularly when it comes to financial derivative products like credit default swaps and other over-the-counter derivatives.

I think it has become obvious that we must restore proper regulatory oversight if we are going to get this economy built on a solid foundation. Simply put, the derivatives markets must work properly and in the open. Agriculture futures markets are fundamental to the functioning of every aspect of our agriculture economy.

Financial services now account for about as much as 20 percent of our economy, and if those markets are not healthy or properly regulated, I think the evidence is clear our economy suffers.

Now, the Commodity Futures Trading Commission plays a vital role in providing oversight in keeping these players honest. If we do not invest in the regulators and the enforces to expand that oversight to the over-the-counter markets, I think we are going to continue to pay a heavy price.

It is imperative that we pass strong financial regulatory reform in this body and not just piecemeal, patchwork reform, but comprehensive and fundamental reform that brings full transportation and accountability back to the markets. Earlier this year, I introduced the Derivatives Trading Integrity Act; I think one I also introduced last year. The bill would require all futures contracts to trade on regulated exchanges. Why do I want that? Because exchange-traded contracts are subject to a level of transparency and oversight that is just not possible in over-the-counter markets.

For many years, derivative contracts have traded very efficiently and openly on regulated exchanges. But we have seen the damage done by moves to circumvent properly regulated derivatives trading.

I would also say it is not sufficient to assert, as many swap dealers do, that the market for credit default swaps function properly and has experienced no major problems during the current crisis. As conceived by derivatives traders in the mid-1990's at JPMorgan Chase—well, it was JP Morgan then—the CDS was designed to assist in the smooth functioning of the credit market and presumably to make it easier to raise capital by issuing corporate bonds to fund investment in the production of goods and services, which is what we want the financial sector to do. What is the end means of our financial services sector? That is for the production of goods and services to add to our GDP. Otherwise, you are just in a gambling game.

So the fact is it was going to make it easier to raise capital by issuing corporate bonds to fund investment in the production of goods and services. But the facts belie that claim. While the total face value of CDS contracts more than tripled—triple—between 2005 and 2008, the share of gross private domestic investment in U.S. GDP stagnated and then fell by more than 15 percent. That is at the end of 2008.

I have a chart. I wanted to see what it looked like, so I have a chart. So you see here the share of investment in U.S. GDP, and then here you have got on the red line the notional value of the CDSs.

Now, for a while, they seemed to track pretty well, but right here in about 2005, investment goes down and the value of the CDSs go up. So I think you can safely say they were not adding anything to the value of the goods and services of our country at some point in time.

Nor do I agree with those who assert that more rigorous regulation of these markets will discourage innovation or hamper our economy. Well, if financial innovation improves the ability of companies to hedge their risks or improves the functioning of the market, then the incentive for creativity will be there. But if the prime

motivation for innovation is to speculate, to avoid taxes, or assume reckless risks, the public has an interest in regulating that sort of “creativity.”

I have often asked, Where was the market demand for credit default swaps? Where was the market demand for collateralized debt obligations? Where was the market demand for collateralized mortgage obligations? It was just sort of thought up.

You know, I have to digress here a second. I was just looking at the last issue of Newsweek magazine that has got Oprah on the front. I guess that sells the magazine. But it is called “The Revenge of the Nerd,” and it is about the quants. How many people in this country know what a quant is and what they did in terms of speculation, through these mathematical geniuses that came from various and sundry place, how they devised these financial instruments to slice and dice and make money on things that really were not adding to the goods and services value of this country. It is a great article. I would recommend your reading it.

As I said, if that creativity is there just to add for speculation purposes and for sort of gambling and for high rollers and people making a lot of money in a short span of time, but not really adding to the sound investment in our country, then, quite frankly, I think the public has a big interest in regulating that kind of creativity.

So we must protect consumers and lower systemic risk and enhance the price discovery function of the markets, reduce excessive speculation, give the regulators the authority and information they need to keep the markets free of fraud and manipulation. In doing so, we will maximize the economic value of the derivatives markets by making sure they are structured to manage risk rather than to magnify it and guarantee that bad actors are held accountable.

So we have a lot of work to do on legislative reform. It is imperative that we all work together to come up with a solution that will bring transparency, accountability, and stability to our derivatives markets. So I welcome this hearing and this testimony. I thank each of the witnesses for coming here today, and I look forward to hearing their thoughts. I cannot think of anything that—well, this Committee has to do—we have to reauthorize the child nutrition bill later this year. We are going to work on that. But we have got to do this. This has got to be done this year.

I have talked with my colleague, my counterpart in the House, Chairman Peterson. He feels the same way. So I just do not think that we can push this off any longer. We have got to strengthen the hand of the Commodity Futures Trading Commission. We have got to give them the authority, and I am going to be asking the new Chairman about that and about any resources that they need. But we have got to get the CFTC the authority and the resources they need to do this kind of regulation and oversight.

With that, I will yield to my distinguished Ranking Member, my good friend, Saxby Chambliss.

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

Senator CHAMBLISS. Well, thank you very much, Mr. Chairman, and you and I agree 100 percent that this is a critical issue, and

it is an issue that we have got to address and an issue that certainly calls for more regulatory measures, but I think regulatory measures that are not too intrusive to destroy markets rather than to continue to create and innovate in the markets. I know you had a conflict last night and were not able to be there, but we had a very good meeting with Secretary Geithner last night, along with our Senate Banking colleagues as well as our House Agriculture and Financial Services folks. We fully expect that the Secretary is going to come forward, I am sure with consultation of the new Chairman, with some recommendations in the next couple of weeks. We talked about some ideas that we have as policymakers there last night that are going to help influence, obviously, in a very strong way the direction in which the administration wants to go.

I am very confident that we are going to be able to come together with a very strong proposal that does make certain modifications that are not overburdensome, but yet at the same time will provide that protection that you referred to for all consumers as well as making sure that we have stability in the markets.

I do strongly believe that the Senate Agriculture Committee and the CFTC must be engaged in the development of any legislation addressing financial regulatory reform. This Committee has a responsibility to ensure proper oversight of the CFTC, and we must do more to fulfill this duty.

Today's hearing covers a wide range of issues: speculative trading in the commodities markets, changes to regulation of the over-the-counter derivatives, and the CFTC's authority over retail off-exchange transactions. Those are all worthy individually of hearings, and they are very complex issues that we are going to have to be dealing with in the legislative proposal that you alluded to and that I agree is going to have to come forward.

Among the most complex instruments, we have recently heard a great deal about credit default swaps, or CDS, which permit one party to transfer the credit risk of bonds or syndicated bank loans to another party. Given that AIG was heavily involved in CDS, it seems simple enough just to blame swaps in general for the current financial crisis. But, of course, it is much more complicated than that. Failing to distinguish between credit default swaps and the actual mortgage-related debt securities that these swaps were referencing has resulted in an oversimplification of the problem and subsequently an oversimplification of the proposed solutions.

Simply banning the use of all over-the-counter derivatives or forcing such contracts onto an exchange is unrealistic and unlikely to even address the underlying problem; that is, is this really a chance we are willing to take in these uncertain times, a chance that we would make things worse, dry up more capital, and force the cost of doing business higher?

Speaking of business functionally, curbing speculation is the physical commodity markets—speaking functionally, curbing speculation in the physical commodity markets is another area that we must approach very carefully. This is also not a simple topic. Determining how much speculation is necessary and how much speculation is excessive is an enormous challenge and something that we

will be talking with the Chairman as well as our other witnesses about this morning.

Some seem to have decided that all speculation is bad, but I would like to remind folks that without speculators in the marketplace, our farmers, ranchers, and energy users would find very little liquidity in these markets and would thereby not be able to utilize them effectively. Those individuals and businesses hedging risks and physical commodities, the parties that some claim they are trying to protect by running speculators from the market, are the ones who are likely to be hurt the most if speculative money dries up. I fear that this is another example in which oversimplification may be leading us to solutions of vast unintended consequences.

We must remember that during the past 18 months of bankruptcies, bailouts, and Government-assumed ownerships, the Nation's futures markets have functioned quite well. Price discovery has occurred, consumer funds have been protected, and there has not been a single bankruptcy of any clearing organization.

Does this mean there is not room for improvement? Of course not. Do I think the volatility in some markets over this lifetime warrants extensive analysis and possibly regulatory changes? Absolutely. While I may have concerns with some of the proposals that have been discussed relative to regulating both the use of over-the-counter derivatives and speculative trading, I am absolutely convinced that the market volatility and financial meltdown of the recent past make the case for more market transparency.

How can we in Congress gamble on the outcome of sweeping reforms without first properly identifying the cause of these problems? How can we identify the cause of the problem without authorizing and/or requiring more transparency through the collection of necessary data?

Yes, I have seen all the press accounts claiming the evils of indexed investments, swap dealers, and speculators, but what statistical data is used to support these claims? From what I can tell, many assumptions in the analysis to date are assumptions that may very well be accurate. But how do we verify this accuracy without access to the facts? Assumptions are simply not good enough when it comes to the responsibility Congress has to protect the integrity of these markets—integrity that would be compromised by lack of market liquidity or by increasing the cost of risk management or by forcing a migration of these markets overseas.

While I want to understand the causes that led us here, I do not believe anyone in this room—or anywhere else, frankly—has all the answers to what exactly went wrong. I am not willing to believe everything reported in the press unless the claims can be backed up with hard, verifiable data. To do otherwise is reckless. In fact, the data we have seen so far actually contradicts some of the claims people are so quick to believe and ultimately to blame for causing this mess that we are facing today.

Beyond requiring more transparency, I also believe this Committee should explore how most effectively to regulate swaps, some of which are statutorily excluded from CFTC regulation and oversight. We should review the manner in which hedge exemptions

from position limits are granted, and we need to determine how best to encourage the clearing of certain derivative products without jeopardizing either the use of these risk management tools or the sustainability of our clearinghouses.

If Congress is truly interested in addressing the problem as opposed to politicizing a solution, we can no longer ignore the complexities of these markets. We must devote time to understanding these instruments and their implications. We must seek to understand the legitimate purposes these complex instruments serve for large and small businesses in each of our States. That is why hearings such as this are absolutely essential. The last thing we should be doing is contributing a whole host of new, unappealing consequences in an already volatile marketplace.

Mr. Chairman, I particularly look forward today to hearing some of the practical aspects of utilization of these products that are on the market today, and I fully expect our witnesses to be able to tell us, No. 1, how they utilize them from the standpoint of making the economy of this country stronger by making their businesses stronger, and also how they think we can move in the direction of further regulation to ensure that confidence on the consumer side as well as stability and liquidity in the marketplace.

So, again, I thank you for bringing this matter forward. I know it will be the beginning of a dialog that fully recognizes the role of the CFTC but also that of the Agriculture Committee. I am very pleased that we have our new Chairman that we now have in place here to kick off this hearing this morning. Mr. Chairman, I say publicly congratulations and we are excited about you being where you are, and we look forward to working with you and hearing your testimony this morning.

Chairman HARKIN. Thank you very much, Senator Chambliss.

Now we will move to our witnesses, and first is our new Chairman of the Commodity Futures Trading Commission. Mr. Gary Gensler was sworn in as Chairman of the CFTC on May 26, 2009. Chairman Gensler previously served at the U.S. Department of the Treasury as Under Secretary of Domestic Finance and as Assistant Secretary for Financial Markets, subsequently served as a senior adviser to the Chairman of the U.S. Senate Banking Committee on the Sarbanes-Oxley Act reforming corporate responsibility, accounting, and securities laws. Chairman Gensler is the co-author of a book, "The Great Mutual Fund Trap"—which I just mentioned to him in private I have been reading parts of it, and I recommend it highly—which presents common-sense investment advice for middle-income Americans.

Mr. Gensler is a summa cum laude graduate from the University of Pennsylvania's Wharton School, with a Bachelor of Science in Economics, received a Master's of Business Administration from the Wharton School's graduate division in 1979.

Mr. Gensler, welcome back to the Committee. Congratulations again on your assumption of the chairmanship of the CFTC. Your statement will be made a part of the record in its entirety, and please proceed as you so desire.

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

Mr. GENSLER. Mr. Chairman, Ranking Member Chambliss, members of the Committee, thank you for your unanimous support in my recent confirmation, and thank you for inviting me here today to talk about this critical issue to the Nation's economy.

I believe that we must urgently enact broad reforms to regulate the over-the-counter derivatives marketplace. Such reforms must comprehensively regulate both the derivative dealers—those institutions that make markets in these products—as well as the markets themselves. I think that it is very important for the future of our economy and the welfare of the American people, and I pledge to work with this Committee and Congress to try to restore confidence in the financial regulatory system.

Many of these reforms will require statutory changes, of course, but, Senators, please also know that I have already directed the Commission staff to present all options under our current and existing authorities to protect market integrity and consumers from price volatility—that price volatility that may accompany a rebound in this overall economy as well, as we move forward. This is particularly the case within the physical commodities, whether it is wheat, grain, or energy markets.

A comprehensive regulatory framework governing the over-the-counter derivatives markets and over-the-counter derivatives dealers should apply to all dealers and all derivatives, and I believe that it should not matter what type of derivative is traded. That would include interest rate products, currency products, commodity products, equities, as well as credit default swaps, or that which cannot be foreseen yet, and any other swap or derivative product coming in the future.

Furthermore, it should apply to dealers in derivatives no matter whether they are trading in standardized products or in customized products. In my written testimony, I go further into that. But let me mention the four key objectives that I think we would wish to achieve here.

One is to lower systemic risk. We have to make sure that there is less risk in the overall system. Two is promoting transparency and efficiency in markets. Three is promoting market integrity and preventing fraud, manipulation and other abuses, setting position limits where appropriate. Fourth, protecting the retail public.

To achieve this, I foresee working with Congress on two complementary regimes: through the dealers that hold themselves out to the public in these products, we should set capital standards to lower risk margin requirements as they conduct business directly with other commercial enterprises; business conduct standards, which I want to return to; and recordkeeping and reporting. This would be for all derivatives, whether customized or standardized, whether they be interest rate product or credit default swaps.

On the dealer community, there are really just 20 or 30 large dealers, the business conduct standards would protect against fraud, manipulation, and other abuses. The recordkeeping and reporting, importantly, would allow the regulators to see a complete picture and aggregate this picture.

In addition, I do believe, though, we need to regulate the markets as well. This is a complementary regime to bring the standardized products, those products that can be brought into clearing and brought onto exchanges, further lowers risk. Clearing has the attribute that no longer would the financial system be so interconnected. Individual firms, rather than having exposures to each other, would have the clearinghouse that has to have the discipline of daily mark-to-market and daily posting of collateral.

Regulated exchanges and transparent regulated trading facilities or trading platforms bring additional transparency, and what we are proposing—and I believe the administration letter also spoke to this—is that there would be a real-time reporting of those transactions of the standardized products. So the full market could see on a real-time basis, as they do in the corporate bond market and they do in the securities market, the pricing of the products as clearly as they can.

Before I close this oral part, I want to say there are two other things, I think, that we need to work together on beyond regulating the over-the-counter derivatives marketplace and fully bringing this under regulation.

I believe that we will need to work together on the appropriate authorities to put in place aggregate position limits over the marketplace, particularly as it relates to physical commodity products, but also that we need to address some abuses in the retail area. Last year's fix with regard to foreign exchange trading, I think that we will need to extend that to other physical commodities. We thank you for some of those helps in Congress. Furthermore, to have clearer authority for the CFTC to make sure that foreign boards of trade comply with our transparency and position limit authorities here, effectively in statute to close what is called "the London loophole."

With that quick summary of a very complex subject, I look forward to working with this Committee and taking your questions today.

[The prepared statement of Mr. Gensler can be found on page 80 in the appendix.]

Chairman HARKIN. Thank you very much, Chairman Gensler, and as I said, I read your testimony thoroughly last evening, and I just found it very enlightening, and like I said, I think I agree with most of everything you have put in there. I have some questions I will ask about a couple of parts of it here. But as you know, I have expressed to you privately and I have expressed publicly that I appreciate, first of all, that this is the unanimous position of the Commission, as I understand. Is that right?

Mr. GENSLER. That is correct. I am pleased to report the testimony represents a Commission document.

Chairman HARKIN. I would be remiss if I did not recognize one of your Commissioners who is here, Michael Dunn, and to thank him for serving as the Interim Chairman of the CFTC during this period of time. I want to thank you very much, Commissioner Dunn, for doing that yeoman's work in that interim chairmanship.

You and I, Mr. Gensler, I think, agree on the need to enact significant regulatory reform—significant regulatory reform—of the derivatives market. I do not know if this is a divergence or not in

our approach, but it has to do with over-the-counter derivatives and whether they should be allowed to continue.

If we do allow over-the-counter trading, then I think the requirements that you have proposed would be at least the minimum, I think, of what we should be doing in terms of ensuring the integrity of those markets. But I just want to explore with you again on the record in public whether we might move all of this activity to a regulated exchange or an electronic trading system.

So I want to discuss that with you, but, again, I also want to get into what resources you might need also. I will not get into that in detail, but at some point we have got to think about what kind of resources you might need.

But you propose establishing criteria for determining whether a derivative is standardized or not. Now, I wrote these down: whether a contract is accepted for clearing by a regulated clearinghouse, the volume, the look alike nature of the contract, evaluating whether the difference between the OTC contract and the exchange contract are significant economically, or if the contract terms are disseminated to third parties. A lot of details are left out of that.

I still ask the question, I ask you as I asked it of Mr. Geithner, not before us but in a meeting in the Capitol: Define a "customized swap." What is a "customized swap" that cannot be traded on a regulated exchange? I still am wrestling with that.

Mr. GENSLER. Mr. Chairman, I think that we share your concern that we need to bring a regulatory regime to the entire market, those standardized and those tailored products, and that is why we are proposing to regulate the dealer community and be able to get the full picture, the full recordkeeping and reporting, even with an audit trail, so that we can police and enforce anti-fraud and anti-manipulation provisions, enforce position limit authority.

In terms of your question, we believe that there are tens of thousands of commercial interests in this country that promote their business needs by hedging within the futures marketplace and hedging within the swaps or over-the-counter derivatives marketplace. We need to bring regulation to that marketplace.

Individual commercial interests and municipalities sometimes want to tailor a product—it might be a specific product that hedges their risk in the interest rate markets, but it might be on a different day, it might be a different month than a standard product. Or it may be in the physical commodity market where it is an airline that wants a certain grade of jet fuel delivered at a certain location on a certain date. It is so specific and commercially even confidential that there is no liquidity, there are not four other parties that would do that exact contract.

So what we are proposing is that would still be regulated, it would still be regulated with regard to this first regime, where the dealers that are transacting this business have to comply with anti-fraud, anti-manipulation, that have to report and record all of this. The regulators would see a picture of the entire marketplace and be able to police that entire marketplace.

That commercial enterprise would get the benefit of transparency because the standardized products—over half the market, though it is hard to estimate exact figures, but a significant part of the market is standardized—would be brought into exchanges and re-

ported on a real-time basis, so the commercial enterprises get the benefit. But they may still want to tailor some features to a specific date or location in my little example that I gave.

Chairman HARKIN. I am still going to continue to press this issue, and I will with the other witnesses who come up. Give me an example of a customized, over-the-counter derivative contract that is so customized that it cannot be put on a regulated exchange.

Now, I understand that it may cost a little bit more for them to do that. But I think to me, the cost of that may eat into their profits a little bit. But to me, the need for the public to know that and for others to know it, for price discovery and transparency, it may be for a specific jet fuel, but that may have repercussions on other aspects of the oil market that could happen, depending upon how big that contract is.

So when you do that, I just have a hard time understanding what is so customized that it cannot be put out there in that market.

Mr. GENSLER. Mr. Chairman, the same reason that you are suggesting is why we think that even the tailored or customized products should be reported to the regulators so that the regulators can report the aggregate positions and see even the customized, in this case the example of the jet fuel. An exchange generally needs parties on both sides to come with bids and offers, and so really the key here is how much interest in a tailored product might there be.

So we believe we have to bring regulation to the entire marketplace, including these tailored products, and that we must have regulation of the dealer side so that we can also allow for commercial enterprises to still hedge their very specific and unique risks. At the same time, the commercial enterprises would be protected against fraud and manipulation. Market integrity would be protected by aggregate position limits across the markets. The regulators would be able to police these markets with seeing a real audit trail and a record of tailored and standard products.

Chairman HARKIN. On page 4 of your testimony—and I marked it last night—it says, “These standards”—regarding over-the-counter contracts—“also should require adherence to position limits established by the CFTC on OTC derivatives that perform or affect a significant price discovery function with respect to regulated markets.” But if these contracts then are needed for price discovery, if you need price discovery, as you say right there, that “affect a significant price discovery function,” wouldn’t the public interest require this price discovery to be on an open, properly regulated exchange and not on the over-the-counter exchange?

Mr. GENSLER. Our proposal is that anything that could get onto clearing, anything a clearinghouse would accept for clearing would be presumptively standard. So if a clearinghouse accepts it, it would be considered standard. We will have to have rules of governance for these clearinghouses, and we have called for these to be fully regulated clearinghouses. But anything that was accepted should be out there and be exactly what you say, Mr. Chairman, fully transparent to the public and also on exchanges and on these trading platforms.

Chairman HARKIN. Well, there is some concern about the clearinghouses are run basically by the banks and others. This is not an open exchange. So I am concerned about what your regulation would mean and how we find out, again, whether these over-the-counter derivatives are being regulated.

Mr. GENSLER. I think the Chairman raises a very good point. Right now the clearinghouses, of course, have come into being—and, fortunately, they have come into being. There are a number of them that have started out. But they are on a voluntary basis. So we are talking about working with this Committee and Congress on having mandatory and statutory provisions. Working together we should find the right balance on governance as well with regard to these clearinghouses so we do not have, as you highlight, some of the conflicts that may exist. We would want to guard against those in the governance features.

Chairman HARKIN. Well, we will follow up on that. That is pretty interesting.

I am sorry. I took almost 10 minutes, so I will recognize other people for 10 minutes rather than 5-minute rounds. This is a very intricate subject, and it takes a little time to develop.

Senator Chambliss.

Senator CHAMBLISS. Well, thank you, Mr. Chairman, and you are right, it is certainly above my brain's capacity to understand all the complexities of this industry. While you raise a good issue relative to customized swaps and derivatives, I think we are going to have some testimony from some folks today that actually use them, and they can dwell on the details. But I am pleased, Mr. Chairman, that you recognize that there is going to be a need for some custom items and products as we move forward.

We talked about this last night with Secretary Geithner, too, and he is of the same belief. It is the folks that are in the business every day that have the understanding of this rather than those who deal with so many other things on a daily basis.

Mr. Chairman, I sent a letter to—and let me compliment Former Acting Chairman Dunn for his great work, now Commissioner Dunn. We are pleased that obviously you were where you were and you are where you are, because it is folks like you and the current Chairman that understand these issues.

But I sent a letter back in April regarding several different issues, and you handed me the response this morning, so I am kind of going off what you just handed me here. But, basically, when we talk about costs, there are obviously issues on the trade side relative to costs, and we will talk more about that. But there are going to be significant costs on your side from the standpoint of whatever legislation we come up with, making further demands on you.

One thing I appreciate you going into detail about is if we are going to establish position limits and if we are going to make it mandatory upon the Commission to oversee and regulate items such as position limits, you have said that given the substantial increase in the number of commodities that would be required to have Federal speculative position limits, staff estimates that at least 20 full-time equivalent positions would be necessary to review the expanded scope of Federal position limits, grant hedge exemp-

tions, collect reports from persons granted hedge exemptions, and monitor for violations.

In addition, you go on to respond to my letter by talking about the further extension and regulation of speculative limits to OTC contracts and that also would be very significant and would require at least 60 additional staff, plus we would need to upgrade the systems that you have in place today to be able to handle that. Ballpark, do you have any idea what kind of additional funding we are looking for your budget to try to do just these things, which I think there is general agreement that we have got to move in this direction?

Mr. GENSLER. Senator Chambliss, I thank you for the letter that was sent to my predecessor and that I was able to deliver the estimates. The Commodity Futures Trading Commission, I believe, even with the generous support of this Committee and Congress is still sorely underresourced. We are in total at about 510 people. We just got authority to move up to 572, which just brings us back to the staffing levels that were in place in 1999, 10 years ago.

The futures markets that we regulate have gone up five-fold. The complexity has gone up significantly. We have six times more contracts today. But it is not just the number of contracts. It is global. We have gone from open outcry to electronic trading. So hopefully we will be working together with you and the appropriators in trying to find a way to address these very real resource needs.

If we do go further, as your letter asked about sitting more position limits, we made estimates of 20 or 60 people; you had two alternatives. Rather than speaking off the cuff, if we can get back to you on an exact sort of dollar figure that assigns to those two numbers, we would be glad to do that as follow-up.

Senator CHAMBLISS. Sure. Well, I think there is going to be general agreement that we have got to make some changes, and we agree here that you are underresourced now. But we are not going to put additional obligations on you without providing you additional funding. We are simply going to have to do that. Irrespective of what amount of money we are talking about, if, in fact, CDS or whatever part of the commodities market contributed to the financial collapse last year, it is going to be a lot cheaper to fund you to regulate than it will be to go through another situation that we are trying to recover from now.

Mr. GENSLER. Senator, I fully agree with you on that, that it would be a good investment of taxpayer dollars to guard against these risks.

Senator CHAMBLISS. One thing that has been of real concern to me from the standpoint of putting additional regulations in place is the fact that we might stymie, No. 1, innovation on the part of bright minds in the marketplace that are thinking of additional products, not just for the sake of making money on the end of selling them but providing a real service to businesses across our country and allowing them to utilize the marketplace, again, to offset risk.

If we, No. 1, take all the risk out of that, then I think we are going to be hampering the markets more so than helping them. Second, if we put in overburdensome regulations, then there is going to be the tendency of those folks, whether they are in my

hometown of Moultrie, Georgia, or Atlanta or New York, to simply go overseas and carry out the same transaction, but yet on another market that may not be regulated in the way we are talking about.

One thing that came up in our discussion last night—and I will not expect you to be able to talk in depth, but I would like your comment about this—is that if we are going to make changes to our markets in order to make sure that the same protections are in place for American consumers on overseas markets, then we need to go to our overseas markets, and we need to tell the Europeans that these are the changes we are going to make, and we hope you would look at the same type of regulatory process to try to coordinate and let us do not be overburdensome, but yet make the necessary changes so that our customers—or, excuse me, U.S. firm customers do not immediately go overseas and we lose that business and that ability to regulate those markets.

Any comments you have on the potential for that?

Mr. GENSLER. Senator, I think it is absolutely critical that we coordinate internationally with other regulators around the globe. Just yesterday, I actually met with the head of the European Commission on Internal Market and Services, Charlie McGreevy, on these matters. It was fortunate he was in town. But I know that Secretary Geithner and others are doing this. Commissioner Dunn is actually going overseas next week to take on some of this as well.

We need to coordinate and make sure there is not a race to the bottom somewhere else. I am encouraged by my meeting yesterday on that. I do think that we also have to really think about how we protect the American public and make sure that we get the right things in place there.

We need to not only allow but foster innovation so that the economy can grow but protect against risks, and the risks that we are talking about protecting against are the risk of fraud, the risk of manipulation, the risk that sometimes from speculation that becomes excessive speculation there may be burdens in terms of the volatility of markets. We are talking about protecting against the risk of unregulated actors like the affiliate of AIG, AIG Financial Products, that did not have any effective Federal regulation growing so large and being so excessively leveraged.

So while this is a complex proposal, regulating the dealers to lower risk, that means there is some capital. That means there is more cushion in the business that they have in their business model. That more capital may, as you suggest, lead to some more cost, but still allow for innovation, still allow fully for innovation, but lower the leverage in the system. I think one of the great lessons of the crisis of last year is the system overall, the financial system, got highly leveraged and too leveraged. Almost all the statistics will point to that.

So capital regimes and margin regimes lower risk; business conduct regimes lower the risk of fraud, manipulation, and the burdens of excessive speculation, but while still fostering innovation, fostering, as we have said in this approach, the allowance of tailored or customized products. So commercial interests can still hedge their risks.

Senator CHAMBLISS. I agree with you that certainly posting more capital is going to lower the risk, and I will not get you to go into any more detail than that because the other witnesses I expect will be able to give us some more information relative to that. But I want to make sure that we do not require too much in the way of reduction of risk that we just suck too much capital out of the marketplace and that we make sure that these folks that are utilizing whether it is over-the-counter or non-regulated today, that they still have the capital to operate their businesses in the way that they need to be operated.

I thank you, and I have got some more questions, but, Mr. Chairman, I will wait until the next round.

Chairman HARKIN. Thank you very much, Senator Chambliss.

The principle here we go on is time of arrival. Senator Casey was next, but he is not here right now. Then we will turn to Senator Johanns.

Senator JOHANNNS. Thank you, Mr. Chairman.

If I could maybe start out and do a little self-education here, because it is a hugely complicated topic we are talking about. But as I understand where you are kind of getting to here is, on the one hand, there is a set of regulations or an approach that you would like to be empowered to take relative to people or the companies that actually do business here. As I read the four items that you have mentioned, that really would deal with those dealers. Are we on the same page so far?

Mr. GENSLER. Yes, the dealers of which there are internationally maybe 20 or 30 large ones, they are out in the public domain, and by and large we know the names of those big financial institutions.

Senator JOHANNNS. Pretty straightforward working with them and laying out what the standards are going to be and the transparency and the capital that you have mentioned. So that for me is fairly understandable and fairly straightforward.

The second piece of this, though, I think it is really complicated, and that deals with regulation of products. How are you going to handle that, and what kind of authority do you want?

The first question I need to try to get an understanding about is as we look back over the last 8 to 10 to 12 months, if you were to identify the products that really were at the heart of the problem relative to the financial crisis, the AIGs, et cetera, what would those products have been?

Mr. GENSLER. Senator, I think that there are many factors that led to this economic and financial crisis, and only some of that was related to the products, because I do believe a great deal had to do with the excess leverage and excess borrowing and imbalances in the system overall. But in terms of specific products, I believe that the over-the-counter derivatives markets was a contributing factor, particularly with regard to credit default swaps explicitly. I think other products, if I can speak more expansively also, mortgage products specifically, the sales practices, and I think many homeowners and the retail public, often was misled, and even fraud in terms of the sale of those products, usually in the subprime market, but not always.

I think the securitized products, whether it is, as the Chairman mentioned, things called collateralized debt obligations and other

very sophisticated products there that are not specific discussions of this hearing today, because those are actually securities, and those are actually already regulated by the SEC.

I do believe the second regime is about bringing regulation to the markets, if I can use a term, rather than products. So it is bringing centralized clearing and a benefit of lowering risk that all of these derivatives or swaps come into a central counterparty and no longer is this interconnected web, but we try to have institutions use that central counterparty.

Some people say that we have had a system of too big to fail, but actually we have grown into a system that is also too interconnected to fail. So the central clearing is trying to make these counterparties less interconnected. You can think of it being less caught in a spider's web. The American public was caught in a spider's web of interconnected relationships last fall, and we should try to lower that as far as possible as we go and bring transparency to the exchanges.

Senator JOHANNNS. As I look at some of what happened—and you are right, gosh, picking out one thing is just not going to get you to an accurate viewpoint of what happened. But if I look at this—and hindsight is also 20/20. The amount of bad judgment exercised by people paid enormous amounts of money in salaries and bonuses is kind of breathtaking to me. How will what you are proposing protect the public from the exercise of that bad judgment?

Mr. GENSLER. Senator, I concur with you that there is a lot of bad judgment that went around. I think that at the heart, the way we protect the American public is having strict ability and clear, independent ability to protect the public against fraud and manipulation and the burdens that can come from excess speculation but also by putting in place this very real risk reduction, the capital and margin requirements both of the dealers and of the markets.

The American public should not be so at risk—they were terribly exposed by unregulated companies. AIG Financial Products basically was not regulated at the Federal level. Lehman Brothers and Bear Stearns derivative affiliates, basically lightly regulated at all at the Federal level. So we have to protect the American public. I believe this program, if enacted by Congress, would significantly do that with regard to over-the-counter derivatives. Certainly we need to do more about mortgage sales and some of these other areas that we talked about.

Senator JOHANNNS. Using AIG as an example, because what has happened to them is so very, very public, it was shocking to me to find out that they had this enormous risk exposure and basically no protect. If this thing started to implode, it was going to risk the viability of that entire company. You would have thought somebody would have paid attention.

If what you want to achieve here is accomplished, we give you the authorities that you are seeking, how would that have changed the situation with AIG, or would it have?

Mr. GENSLER. Well, I think that if these authorities were in place, and not just for this agency, the CFTC, but broadly, because of some of these authorities would be whether they be in a systemic regulator or elsewhere, to set capital, for instance—then AIG's Financial Products affiliate that did have, as you said—it was about

\$480 billion of credit default swaps. They would have had to have set capital to the side. They would have had to on a daily basis put aside margin and value those contracts. So as those contracts were going the other way, they would have been regulated.

I also think that while we have not studied it at the CFTC because we do not have any authorities over those products right now, but if you really look how the products were used and marketed, there is really in my mind some significant question about how they were marketed. They were largely marketed to lower capital standards in Europe and to be related to the products the Chairman talked about earlier, these collateralized debt obligations.

I think the credit default swaps have such unique features—a little bit like monoline insurance, a little bit like securities, they are certainly derivatives—that we are going to have to work together as regulators and with Congress to find some clear authorities on the trade practices with regard to credit default swaps.

Senator JOHANNNS. Thank you.

Mr. Chairman, thank you very much.

Chairman HARKIN. Thank you very much, Senator Johanns. That was an excellent question. That last one was great.

Senator Thune.

Senator THUNE. Thank you, Mr. Chairman. Thanks for holding the hearing. Chairman Gensler, thank you for being here. You are at the center of this storm and the historic run-up in commodity prices and oil prices last year that sort of caught everybody looking at how do we solve this, how do we prevent this in the future. It seems to me that the question is there clearly needs to be some kind of reform of the regulatory system that we have in this country with respect to a lot of these financial products that were sort of outside the realm of regulation. I guess the question is; how do we do this, what is the smart regulation? I am not someone who advocates regulation for regulation's sake. I think we have to think about how do we do this in a smart way, and it comes down to the fundamental question, in my view; how do we constrain risk?

It seems to me there are a number of ways that you could do that. You could have an exchange where there is more transparency and more accountability and where more of these transactions occur in the light of day. I think what happened was there was a lot of stuff that was going on in the dark.

Second, maybe it is in the form of margin requirements or capital standards, some of the things that you have alluded to, but I think we have to figure out how do we do that in a way that is responsible, that is smart, that gets at the heart of this problem, but does not push a lot of that capital to foreign exchanges, that does not create such an economic burden for a lot of the folks who are making markets in this country that they decide to go somewhere else to do it.

I think in order to make this work, it is critical, back to Senator Chambliss' questions, that we have international cooperation. So I guess my question is; how do we ensure that foreign exchanges are going to follow suit with the additional oversight and transparency regulations, specifically how do we go about doing that?

Mr. GENSLER. Senator, I share your view that this is about limiting risk, as you say, both in terms of the excess risk that you can limit through the capital and margin regimes, but also risks to the American public through protecting against fraud, manipulation, and other abuses.

I also share your view that we are going to need to and want to work with international regulators to see that there is not an arbitrage, meaning that people would go somewhere else rather than in these markets to avoid regulation.

I am encouraged by some of the initial conversations that I have had in my 8 days on the job. But I think that working with, the Chairman of the Federal Reserve and the Secretary of the Treasury, we are really going to have to work actively with our international colleagues to see that we can bring these reforms globally, and where there may be differences—because inevitably they have different political processes and legislative processes and regulatory processes—that we guard against those differences, not doing exactly what you said.

Senator THUNE. You have said throughout your testimony, you stressed the importance of protecting market participants from excessive speculation. I guess I am curious to sort of know how you define “excessive speculation.” We talked about the need for producers in States like Iowa and South Dakota to manage their risk. They use these markets for that purpose. But obviously speculation plays a role and did play a role, I think, in the problems that we encountered a year ago.

How do you define that, how do you get your arms around excessive speculation versus legitimate speculation?

Mr. GENSLER. The Senator asks a very good question. I share your view that financial investors, index funds, contributed and participated in the asset bubble of last year. I am concerned that as the good news of an economy that rebounds—and we hope, we all want this economy to rebound, that we might see a resurgence of these commodity prices. That is why I have already directed staff to really lay out for me as Chairman and for the Commission all the options that are available under current authorities to guard against this.

You know, Congress in the 1930’s, I believe, when they set up our predecessor, really best defined that. They said that there could be burdens to interstate commerce that come from excessive speculation, and Congress wrote into our statute that this could be unreasonable price fluctuations or the volatility that do not bear—I cannot remember the exact statutory words, but resemblance to the fundamentals.

Then Congress gave the Commission authorities to set position limits, and so it is through position limits that we try to guard against this, and we have actively used it over this time period.

Senator THUNE. Some have suggested that the CFTC and SEC ought to be merged into one regulatory body. What is your view on that?

Mr. GENSLER. Senator, I think whether we could have a debate here for a few days on what was the lead cause of this financial crisis, and I do not think any of us would put on the list that is near—I think we really have to focus for the American public on

lessons learned from this crisis, whether it is selling this product or this risk. So a merger for merger said to me while I think it will always be out there in the ether and be debated and discussed is not appropriate. I think we have a heavy agenda here working with Congress. Now, if somebody laid out why—if Congress and the President laid out why that would really help the American public, we would all want to work with that. But I do not see it really in the lead here of the reasons, and I do not think it is going to accomplish much for the American public today.

Senator THUNE. You got into a discussion earlier with the Chairman—and I think maybe with Senator Chambliss, too—about this distinction between standardized derivatives, customized derivatives, tailored derivatives, and the importance of having the ability for participants who enter into some sort of a customized association, that there would be a different way of regulating those. I guess the question comes back to is there a way of creating an exchange where these transactions could all be sort of managed in a way that is open and that is transparent and that allows for the public to be able to know what the pricing is and everything else.

What I heard you say was that you think it would be difficult to have that kind of a standardized—to create the sort of standardization of these products that would allow for them to be traded on some sort of an exchange, did I hear you correctly?

Mr. GENSLER. Well, Senator, I think that we can bring regulation—and it would be the identical regulation—to both tailored products and standardized products, identical regulation about protecting against fraud and manipulation, identical in terms of the capital charges of the dealer community, and we can even apply margin to both tailored products and standardized. The standardized products could have the margin through clearinghouses, and the tailored products could have it through the dealer community.

So I think actually it is a broad and very full regulatory regime—in fact, the same for tailored and standardized. What we need to encourage is much of the standardized product to be on centralized clearing because that continues to lower risk, and as much as possible onto exchanges or trading platforms, because that is an additional level of transparency, in addition to the transparency that the regulators will see it on, will aggregate it for the public, but additionally the standardized product, then you can see the real-time pricing.

It is a challenge. It is just a practical challenge. If it is tailored, you could put it on an exchange, and there would not be another party on the other side maybe. There might not be what is called a bid and an offer. So it is just a challenge. If we could do it, that additional transparency is helpful.

Senator THUNE. Well, I guess the bottom line is the transparency issue and price discovery, however those are regulated going into the future, that those elements be a part of any solution. So we look forward to working with you on this. Obviously, this is—it is a complex subject and one that many of us are trying to wrap our brains and arms around, and we appreciate your being here today and look forward to the testimony.

Mr. GENSLER. Senator, I thank you, and I look forward to working with you because I know these things are critical to your con-

stituents. We have to get everything to work in the wheat markets and the grain markets as well, and I know that has been a challenge, too, and we have got to focus on that.

Senator THUNE. I appreciate it.

Thank you, Mr. Chairman.

Chairman HARKIN. Thank you, Senator Thune.

Senator Bennet.

Senator BENNET. Thank you, Mr. Chairman. Thank you very much for holding this hearing and for your persistence on all of these issues.

Mr. Chairman, welcome. It is nice to see you. I enjoyed reading your testimony. I wanted to focus on something that you have touched on lightly in some of your responses to the panel, because I think that the issues of the products, the issues of fraud, transparency, and all of that are important, and we need to make sure that we are doing a good job with these tough issues.

If you look back at where we are today and the cause of where we are, I think it is impossible to avoid coming to the conclusion that what ailed us most was the amount of leverage in our system. From the consumer level, if you look at credit card debt and home mortgage loans, to the Federal Government which doubled its national debt, to financial institutions on Wall Street that went from being 12 times levered to being 30 times levered over a period of time, you cannot sustain that unless you assume that you are going to have a hockey stick of growth for the rest of our lives—which is not going to happen.

I was struck in Lynn Stout's testimony—Professor Stout is here—when she wrote that her research indicated that the only time a significant U.S. derivatives market has not been subject to regulation was during the 8 years following the passage of the Commodity Futures Modernization Act of 2000. I was struck by that because I wondered as I read it how much that deregulation was a cause of the sheer volume of leverage in the market, because people were able to go out and create instruments, or whether they are unrelated. I wonder if you had a view on that.

Mr. GENSLER. Senator, I think you are correct that leverage in the American economy is one of the big causes of the crisis. If you just look at the overall statistics, it is remarkable, and I will just use it to summarize it. But through much of all of our lives, the economy has had a debt of about 1-1/2 to 2 times its economy. So it is like a household that might have a \$50,000 income and have \$75,000 to \$100,000 of debt.

We got up to about four times, about 4 to 1, and coincidentally, the last time we did that was in the late 1920's, the last time we got to that. These are the statistics published by the Federal Reserve on a quarterly basis.

I think that over-the-counter derivatives were a way that financial institutions—not the homeowners, but the financial institutions—add to their leverage as well, and that the capital and so forth were not charged there, and though I believe—looking back now it is clear to me that those of us involved earlier—and I served earlier—should have done more to protect the American public. Over-the-counter derivatives actually were not regulated even before that act passed in any way, for capital or for business conduct.

So what we are really talking about today, and working with Congress, is a full shift, because just as in the 1930's when President Roosevelt came to Congress and said we had to regulate the commodities markets and the securities markets for the first time, we are talking about—the CFTC, and I believe this is consistent with the administration, is talking about now coming and let's do this in a thoughtful but in a full way to regulate this market.

Senator BENNET. As you think about the systemic risk question, moving from a world where all of our regulation—that may be an overstatement—much of our regulation and all of our deregulation was, in effect, procyclical, was pushing us farther and farther and farther along this curve. How do imagine what you are proposing here will work with some of the suggestions that have been made by the administration, by the Fed, about where to locate the regulator of systemic risk? How will all these pieces fit together—your work, the Fed, the FDIC, the SEC? Because I think only if we have some way of looking at how these pieces fit together will we ever get the big picture. We can do it product by product by product, but really there is this big fundamental piece of not wanting to put ourselves in a position again where we simply have too much leverage on the economy and then have to go through an incredibly agonizing contraction, which is where we are today.

Mr. GENSLER. Right, right. I think that you are absolutely right, that we have had a lot of failures in our financial regulatory system; it failed the American public in the biggest test in 80 years. We have to address far more than just this over-the-counter derivatives marketplace, and part of that, as you say, Senator, is to have a systemic regulator, to have some ability for those largest systemically relevant institutions, those institutions that could make the public hurt so much, to have additional oversight.

I know that there are various approaches to it. What I would associate at least myself—I am not speaking for the Commission now, but just as Chair—is that we absolutely need this in working with Congress to make sure that it has clear authorities on those most systemically relevant. Those authorities might just be additional authorities.

So, for instance, where the CFTC is regulating markets and regulating clearing institutions and so forth, as a market regulator, I think in this country, again, since President Roosevelt and Congress worked together in the 1930's, market regulators have had their mandate, both the SEC and the CFTC, and that was a really important mandate, protecting the public, protecting the integrity of these markets, but then we would have a systemic regulator of some sort that we would have to coordinate.

Senator BENNET. Thank you, Mr. Chairman.

Chairman HARKIN. Thank you, Senator Bennet.

Now we go to Senator Nelson.

Senator NELSON. Thank you, Mr. Chairman. Thank you for holding this hearing.

Mr. Chairman, it is nice to have you before us. I enjoyed our conversation earlier this year. I am interested in how we can find a way to regulate leverage, because leverage seems to be the operative word when you look at what happened with AIG. There was not a lack of leverage in their insurance operating subsidiaries be-

cause they are required by law and practice to put up reserves or capital against the commitments they made. But through the deregulation of 1988, I believe, with the decline of Glass-Steagall, with Gramm-Leach-Bliley, there was an effort then to be able to do as you chose at the top outside of the insurance operating subsidiaries.

Would you agree with that generally?

Mr. GENSLER. Senator Nelson, I believe with regard to AIG, they were regulated at the State level as an insurance company.

Senator NELSON. Exactly.

Mr. GENSLER. This has been a challenge, I know, for decades actually, and the Congress will probably want to take up in thinking about those systemically relevant firms, what if they are insurance companies and the relationship of Federal regulation to State regulation of insurance companies.

So I believe that AIG was sort of a case where there was an unregulated affiliate of an insurance company that was regulated at the State level. That unregulated affiliate, then it was sort of “Katy, bar the door.”

Senator NELSON. Yes, and, in fact, the deregulation permitted this operation that was not regulated to do whatever it chose to do without setting aside capital to support the obligations it incurred.

Mr. GENSLER. Senator, I think that as it relates to AIG, which was not under any—in the 1980’s, as you referred, not under, I believe back then, any Federal oversight. Later there was some, I would say, ineffective Federal oversight by the thrift supervisor. So I do not—I think really that it was an unregulated affiliate of an insurance company, and we have to make sure that going forward we regulate these derivative dealers, whether they are affiliated with an insurance company, whether they are affiliated with a hedge fund, affiliated with anything, if we are able to work with Congress and get this through.

Senator NELSON. Right, but that does not extend that somehow the Federal Government has to begin the process of regulating the insurance operating subsidiaries that are currently regulated by the States.

Mr. GENSLER. Not in this testimony or in my view. It is about trying to make sure that the derivative dealers come under a consistent regulatory oversight.

Senator NELSON. If they had the set-aside capital actuarially or in some fashion to support the obligations they were incurring, this would have been less likely to have happened the way that it has happened throughout the industry. Is that fair?

Mr. GENSLER. I think that is correct, Senator.

Senator NELSON. So establishing a way to require that capital will reduce the leverage that exists not only today but in the future as well. Is that fair, too?

Mr. GENSLER. I believe that is correct. I think to lower the leverage is setting those capital standards for the dealers, but also having margin posted, just as it is on a futures exchange. This has worked for decades in the futures exchange. There are problems even in regulated futures, but not about the capital and margining.

Senator NELSON. This was not related necessarily in every case to fraud, but in almost every instance you could say there certainly was some greed.

Mr. GENSLER. Well, I think that was the case broadly in this economic crisis.

Senator NELSON. I hope, as you look to regulate the tailored products as well as the standardized products, that there will be a system established to figure out the ratio for leverage against the obligations that are made. Do you believe you will be able to determine what the obligation is under tailored products?

Mr. GENSLER. I think, Senator, you raise a very good question, because one of the things about tailored products is they tend to be less liquid. They are sometimes harder to value.

Senator NELSON. There may or may not be much of a market for them.

Mr. GENSLER. There may not be much of a market, as the Chairman was talking about. I do think it is appropriate to take into consideration as regulators that if they are less liquid and they are tailored, that might lead to higher capital charges, just as any product that is less liquid and harder to value, because capital is meant to be a cushion against the risk if a firm fails or there are problems in the system.

So liquidity is a key, and just as the Chairman was talking earlier about whether the tailored products would be regulated, they would be consistently regulated; but if they are less liquid, it may be appropriate that the regulators say, well, you have to put a little bit more cushion aside on that.

Senator NELSON. Would you do this in the same way, let us say, that the National Association of Insurance Commissioners, which I used to head in a previous life, the way they do it through the Securities Valuation Office in New York that is part of the NAIC?

Mr. GENSLER. Senator, I dare say you are far more familiar with how that works. I am not familiar with the specifics there.

Senator NELSON. Well, they do value securities that do not have a market value based on one of the markets; in other words, private placements and the like. So tailored securities probably as much as standardized securities would fit into that sort of a category, where analysts would work their way through establishing what the leverage is, and then establishing capital requirements for that leverage.

Mr. GENSLER. I think, though I am not familiar with the specifics of that, I think that there should be consistently applied capital rules for the over-the-counter derivatives. Those that are on markets and those that are liquid, just like other products, the more liquid a product is, then—

Senator NELSON. The easier to value.

Mr. GENSLER. Easier to value, and it may necessitate a little less cushion, a little less margin. Certainly even in the futures markets right now there are different margins depending upon the volatility and liquidity.

I think one of the great lessons of this crisis is I believe that our overall capital regimes—and this is not within the CFTC, but our overall capital regimes let the American public down, and that we need to take, as Federal regulators, a closer look at those capital

regimes and make sure that they take into consideration particularly the less liquid instruments like collateralized debt obligations or structured product. Maybe they should have higher cushions or higher capital, and those that are easier to value, that are liquid instruments—

Senator NELSON. But you will have to have some mechanism, some way of—an analysis of establishing those values in an objective fashion, and I suppose you are going to be bothered by those that turn over too quickly to value them for any length of time, because you had them, they are gone, they have been sold. I just hope that you will find a way to consistently do that so that there is some objectivity and some reliability for establishing what the leverage requirements would be.

Mr. GENSLER. Right. Thank you, Senator.

Senator NELSON. Thank you, Mr. Chairman.

Mr. GENSLER. I thank you for your support.

Chairman HARKIN. Thank you, Senator Nelson.

Senator Gillibrand.

Senator GILLIBRAND. Thank you, Mr. Chairman, for holding this hearing, and thank you, Chairman Gensler, for being here and for testifying. These are very important issues. Few, if any, cities in the country have really felt the effects of the economic collapse more acutely than New York, New York City, the State that I represent. I want to talk to you a bit about how we can move forward so that we can create confidence in our markets and create a regulatory framework that will ensure success not only with the U.S. financial services industry but our economy overall, because we really do need to address the 8.5-percent employment rate nationwide, and we have to make sure our small businesses have the resources they need to grow and create jobs.

As we work to sustain the companies that form the backbone of our financial industry, we must ensure that the structures and the regulatory framework institute proper oversight and capital requirements while still promoting significant growth and expansion.

There has been a tremendous focus on the extraordinary losses that have resulted from the unregulated derivatives market, in particular the credit default swap markets, and rightly so. However, there also needs to be now significant attention paid to the regulation of these financial instruments, which have become an integral part of our financial system. We have to ensure that capital reporting requirements will allow derivatives to exist for legitimate participants, but discourage excessive speculation and protect our investors.

It is essential that we fully understand the implications on the end users, such as industrial companies who rely on derivatives to hedge commodity prices, interest rates, and foreign exchange rates. We must have an efficient and effective regulatory structure to ensure a vibrant economy, economic growth, adequate liquidity, and appropriate oversight and accountability.

So I first want to talk about what do you think and how do we allow legitimate participants versus those who are trying to game the system, and what sort of capital reporting requirements would allow custom derivatives to exist for legitimate purposes and par-

ticipants, but would discourage the excessive speculation and still be able to protect our investors.

Mr. GENSLER. Senator, if I might first start with thanking you for your support of my recent confirmation, and it is good to meet you. I lived in New York for 15 years. My three daughters were born in New York. Though I live in Maryland now, I have great affection and affinity for your State.

I think it is important to bring, as you say, greater regulation to this whole over-the-counter derivatives marketplace. I think we should best do that in two complementary regimes that would address, as you say, the legitimate interest of commercial parties to hedge their risks, but also have capital standards to lower the risk.

One is to have a regulatory regime of the dealer community—many that are in your great State—but of the dealer community so that those dealers have to have the capital to lower risk, to set margin, but also have business conduct standards to protect against fraud and manipulation. That regime covering the dealers would cover both standardized and tailored product. Tailored product or customized product would be allowed, but it would cover both of these as well.

I think that it is important, as you say, that commercial users have legitimate needs to do that, but we would want to bring as much of this product into centralized clearing and regulate the markets as well for that centralized clearing, because additionally that lowers risk. If we can lower risk through centralized clearing, that frees up capital in the dealer community, because if they can move product over to centralized clearing, that is a way to lower risk.

It also helps raise transparency to put that on exchanges where it is standardized product, and we would want to work with Congress to get this. So the presumption was if it could be on a centralized clearing, it could be on an exchange, we would do that.

Senator GILLIBRAND. What do you see at the upsides or downsides for actually requiring it to be on an exchange as opposed to just having it go through clearing?

Mr. GENSLER. We think that there are real benefits to also having it on an exchange. Of course, one of the features of our market system here in the U.S. is transparency, and the transparency of markets promotes economic efficiency. So we would have transparency by having information on 100 percent of the product, both tailored and standardized, available to the regulators. Making transactions available to the public lowers, we believe, some of the cost to the end users that you spoke about.

So bringing the standardized product onto exchanges means that any commercial user can see, Aha, 15 minutes ago, this is where—it might just be an interest rate swap, a standard product to hedge an interest rate for 5 years. They can see where that was. If you are a small hospital or municipality, you can say, Aha, that is where the pricing is and we should do the same.

Senator GILLIBRAND. But if you do require exchange trading, then you are really not going to have an opportunity for customized derivatives. So do you think you are going to lose enormous markets to overseas markets because you cannot accommodate that here?

Mr. GENSLER. Senator, we actually foresee that this approach would allow for, as you call it, customized or tailored product. Much of the derivatives marketplace right now is standardized, but there is still a very real need for end users to tailor their products.

So what we are calling for is 100 percent of the product, tailored and customized would be regulated through regulating the dealers. The product that could be brought onto exchanges would benefit because it would add transparency, but we would still foresee that end users would be allowed to tailor their needs. They might have a risk. I used earlier an example; it could be an airline that has a risk around a particular jet fuel to be delivered on a particular date in a particular location, that we would still allow for that, but still regulate and protect against fraud and manipulation and that the regulators would see it aggregated and publicly report the aggregated data.

Senator GILLIBRAND. I would like to turn specifically to one industry area, the trading of carbon permits, and the derivative products that may be based on them, and this may obviously become a major growth center for these markets.

How would these proposals affect the shape and the nature of carbon trading markets? Does the potential market for carbon derivatives have unique needs from other derivative products? What unique skills might the CFTC or another regulator need to effectively regulate this market?

Mr. GENSLER. Senator, I think that the CFTC has over many years developed a skill set and has a mission to oversee the derivatives marketplace, which we have called the "futures marketplace" for these years. In fact, there is already a small market in these permits or similar markets in Chicago called the Chicago Climate Exchange. There was a similar market that came up, oh, I think it is over 20 years ago now, out of some of the permits that came out of acid rain legislation of Congress.

As Congress moves forward and possibly further develops this, I would look forward to working with you and the Congress on how to get this right. But I think it would be important to protect against the same thing we protect against in the futures markets—fraud and manipulation. We should have the authority to set position limits, because these would be physically limited, these contracts would have a limited supply. So, again, hopefully bringing the same transparency and protections that we have currently to the futures markets.

Senator GILLIBRAND. Thank you, Mr. Chairman.

Chairman HARKIN. Thank you very much, Senator Gillibrand.

Now we will turn to Senator Klobuchar.

Senator KLOBUCHAR. Thank you very much.

Mr. Gensler, you have had a long morning. It looks like I am the last one here for you. I just wanted to thank you again, and I am glad that you are joining us. I think I expressed my frustration last time at your predecessor when I asked about more tools that he could have in his job. He did not seem interested, and yet we saw at the time oil prices going up, due in part to speculation and other problems with the regulation of the market. I do believe—I appreciate what you said about transparency and that we need to also take steps to minimize speculation when it is done not to benefit

consumers or the market, but instead to benefit a certain small segment of those that are doing the trading.

We need an effective CFTC, and then we also need to do something about some of these instruments, financial instruments that cause some of this problem. Specifically, when I talked with you during your confirmation hearing, we talked about credit default swaps. Now that it is a little calmer here, I wondered if you could talk about what you think needs to be done to better regulate credit default swaps.

Mr. GENSLER. Senator, again, thank you for your support in my confirmation process.

I believe that we need to bring regulation to the entire over-the-counter derivatives marketplace, so credit default swaps but also the interest rate product, currency swaps, commodity swaps that this Committee certainly has talked a lot about in the last 2 years, and equity products.

I believe that we can best do that, as I was just saying with the Senator from New York, that we have a regime to regulate the dealers. There are internationally maybe 20 or 30 major dealers. I do not mean to limit them, but that work in these products. Many of regulated for other reasons, but we need to explicitly regulate them for business conduct, capital, margin, and reporting for credit default swaps and the products for tailored and standardized products.

I think second we need a regime that brings as much of the product as possible, the standardized product, into centralized clearing to lower risk. There are some voluntary features of that now, but we also need greater transparency through exchanges, while still recognizing there will be tailored and customized products that would be fully regulated in the first regime, but might not get the added risk reduction in the second regime and the added transparency in the second regime.

I think credit default swaps might have some unique features. In addition to what we have laid out in testimony today, I think the regulators, certainly the CFTC and the SEC working together, really have to consider additional features even with regard to credit default swaps, because they perform so many functions like securities.

Senator KLOBUCHAR. You mentioned the systemic risks. What do you think of this idea of having some kind of systemic risk regulator at the Federal Reserve or someplace that looked at the market as a whole?

Mr. GENSLER. Senator, I think that there are many lessons out of this crisis that developed in the last several years, but I think one of the lessons is that we need at the Federal level some clear authorities and mandates from Congress as to when a regulator can step in to protect against systemic risk.

All of the regulators, the CFTC included, primarily were put in place not to protect against systemic risk but to protect against very important risks to the public, but other risks. I think if Congress, working with the administration, moves forward, we should have a party or a mechanism such that the most relevant firms that could lead to crises might have additional standards and addi-

tional risk limitations to be less interconnected to protect the American public.

Senator KLOBUCHAR. As we head into the summer now—a lot of my constituents have cabins; this one is for them—they start to see the oil prices going up again. Why do you think oil is going up, what do you think we can best do to protect ourselves?

Mr. GENSLER. I think at the core of the mission of the Commodity Futures Trading Commission is to make sure that the markets are fair and orderly and that there is integrity. In the energy markets, I do believe that in the past asset run-up that financial institutions participated in that asset bubble. I think as this economy starts to recover—and we all hope for and are working hard for it to recover—that we will see some movement in commodity prices.

But I have said to the staff already—I have been there 8 days—that we have to look at every available option within our current authorities to see how we can protect the public and assure that there are not—as is our mandate, to make sure that there are not burdens from excessive speculation. And though it is not well defined in statute, it is a key mission of ours. I have asked for every option to be on the table, and I appreciate that as the summer moves forward, we might see more movement in these prices.

Senator KLOBUCHAR. Thank you.

Chairman HARKIN. Mr. Gensler, thank you very much for being here today and for your very open and frank discussion of these issues. It is very refreshing to have that kind of openness and just frank responses and answers. I appreciate it very, very much.

As we move ahead in this, we will be taking action this year, as I said at the beginning. We need your input to us on authority, which you just mentioned here; if there is additional authority that you need to carry out your mission, we need to know that, and what additional resources that you need to carry out some new responsibilities that I think that we may be giving you at the CFTC, charging you with. So we need to know that.

I know budgets are tight. I do not want to promise the sun, the moon, and the stars and everything like that. But I think the public is aware of the need for better regulation and whatever small amount of cost that might be I think will be more than outweighed by the public benefits that come through a better regulatory regime.

So we need to keep our lines of communication open on those two things—authority and resources. And I would yield to Senator Chambliss.

Senator CHAMBLISS. Thank you, Mr. Chairman, and I think all of my questions have been answered. I did want to make just one comment, though.

The Chairman as well as Secretary Geithner have both expressed, as we have talked about, this customized versus standardized transactions, that a transaction should be deemed standardized if a clearinghouse is willing to accept it for clearing, and we talked about there are some clearinghouses out there now that are voluntarily accepting some of these transactions.

There was an interesting article in the Financial Times yesterday where three of these voluntary exchanges—the New York Ex-

change, the ICE Exchange, and the London Exchange—were warning Congress to be careful about this and careful about mandating and forcing too much of the over-the-counter derivatives into the clearinghouses, particularly because these tailored OTC derivatives being forced into clearinghouses that are ill equipped will really create a problem. And I would simply like to ask that a copy of that article be inserted into the record.

Chairman HARKIN. Without objection.

[The following information can be found on page 138 in the appendix.]

Chairman HARKIN. I could get into that, but we would probably get into a debate, and I do not mean to engender that right now. But I would say that I sat here in 1999 and 2000—I was not Chairman then, but I sat here and listened to all the reasons why we could not regulate. And I have the record. The question I asked of Mr. Greenspan when he sat here—not in this room—about the exposure and the regulation of these and what would happen if we did not do that. I am proud of the fact I am one of nine Members of the Senate who voted against deregulation of Glass-Steagall.

But I asked him that on the record, and I remember his answer. It is on the record. I have got it. He said do not worry—and I am paraphrasing. He said not to worry. He said these are smart people, and they will self-regulate because it is in everybody's interest to make sure that nobody else cheats.

Well, fooled once, your mistake. Fooled twice, my mistake.

Thank you very much, Mr. Gensler, for being here.

Mr. GENSLER. Thank you, Mr. Chairman. Thank you, Ranking Member Chambliss and members of the Committee. I look forward to working with you on this very important agenda for the American public.

Chairman HARKIN. I appreciate that very much, Mr. Gensler, and I want to thank the members of the Committee that showed up. I think this is one of the most important hearings that we are going to have this year. I thank the members of the Committee that showed up. I know everyone is busy around here, but I just cannot think of anything more vitally important that we are going to do this year than to address this issue.

Thank you very much, Mr. Gensler. Congratulations again.

We will call our second panel up; Ms. Lynn Stout, Professor at UCLA School of Law in Los Angeles, California; Mr. Mark Lenczowski—I hope I pronounced that right—Managing Director at JPMorgan Chase & Company; Dr. Richard Bookstaber, from New York; Mr. David Dines, President of Cargill Risk Management, and I will yield to Senator Klobuchar for purposes of introduction there; Mr. Michael Masters—oh, I understand he was traveling and evidently his connecting flight was canceled due to weather problems. He is on his way? OK.

Now Mr. Daniel Driscoll, Executive Vice President and Chief Operating Officer of the National Futures Association in Chicago.

If you will all take your seats, and, again, I would yield to Senator Klobuchar for the purposes of an introduction.

Senator KLOBUCHAR. Well, thank you very much, Mr. Chairman. I am just here to welcome Mr. Dines to the panel. He is from the Cargill Company, which is a very successful company located in

Minnesota, the biggest private company in the country. He was named President of Cargill Risk Management in April 1999. Cargill Risk Management is responsible for providing risk management products to producers, consumers, and investors in the agriculture and energy areas. He joined Cargill's Financial Markets Division in 1992, and in May 1994, he was asked to help start Cargill Risk Management, which is a new business venture for Cargill. And so we look forward to his words today.

Welcome to Washington.

Mr. DINES. Thank you, Senator Klobuchar. It is very nice to be here today. Thank you.

Chairman HARKIN. Well, we thank you all for being here. I know you have heard our interchange with Chairman Gensler. At the outset, I will say that all your statements will be made a part of the record in their entirety. I would like to ask if you could perhaps sum it up in 5 minutes, maybe, so we can have a round of questioning from the Senators.

I will just start in the order in which I introduced everyone, so we will start with Dr. Stout, and then we will move across the panel. Dr. Stout, please proceed. Welcome.

STATEMENT OF LYNN A. STOUT, PAUL HASTINGS PROFESSOR OF CORPORATE AND SECURITIES LAW, UNIVERSITY OF CALIFORNIA-LOS ANGELES, LOS ANGELES, CALIFORNIA

Ms. STOUT. Thank you, Mr. Chairman, thank you, members, for inviting me to testify today. My name is Lynn Stout. I am the Paul Hastings Professor of Corporate and Securities Law at the University of California at Los Angeles. My scholarly expertise actually includes the theory and the history of derivatives regulation. I also serve as an independent trustee of a large mutual fund that uses derivatives, so I have practical experience with the derivatives markets. And I have actually published several rather lengthy and, at the time to many people, I am sure, boring articles on derivatives regulation.

Please allow me to note that in these articles, which I published in the 1990's, I predicted that deregulating financial derivatives was likely to result in increased market risk, reduced investor returns, and price distortions and bubbles. I am as distressed as anyone that these predictions proved to be correct. However, I made the predictions because if you study the history and the theory of derivatives markets, you will inevitably reach four basic conclusions.

The first conclusion is that, despite industry claims—the industry seems to have a very short memory—derivatives are not new and they are not particularly innovative. There were derivative markets in the United States in the 19th century. Derivatives, of course, frequently go by many different names. The jargon that surrounds them is unnecessarily complicated. In the 19th century, however, they were called “difference contracts,” they were regulated by contract law.

I can cite to you the 1884 Supreme Court case of *Irwin v. Williar*, 110 U.S. 499, which essentially held that off-exchange derivatives were legally unenforceable unless the party entering the derivatives trade could prove they had a bonafide economic risk that they

were hedging against. So this is not a new issue, and the regulation of derivatives is not new.

Second, I can testify from my study of the history of derivatives that healthy economies regulate derivatives markets. This was true in Japan in the 15th century. It was true in the United States all the way up until the passage of the Commodities Futures Modernization Act of the year 2000.

Third, studying the theory of derivatives, it is true that derivatives trading can provide some economic benefits to the economy. Let me make a note. Clearly, derivatives trading can provide benefits to individual derivatives traders, just as gambling can provide benefits to individual gamblers. My focus—and I suspect the Committee's focus—is on the public good. And from the public's perspective, the primary economic benefit that you can get from derivatives trading is from risk hedging.

However, although the industry routinely claims that there are enormous risks hedging benefits, not to mention some offhand liquidity and price discovery benefits from derivatives trading, my research was unable to uncover any significant empirical evidence of the magnitude of these benefits. This is a claim I have been seeing be made by the industry for 20 years now. I thought I would update my research for this hearing.

They still have not generated any empirical evidence, any statistical evidence that demonstrates that the economic scope of these benefits is worth the costs that go along with them. And history teaches us that unregulated derivatives markets carry some very significant economic costs, including a very strong historical association with asset price bubbles, a very strong historical association with increased market risk and the failure of institutions. This goes back 500 years. We do not need to just focus on Orange County, Barings Bank, Long Term Capital, Enron, AIG, and Bear Stearns.

Third, derivatives regulation has historically been justified in part on the theory that encouraging speculation actually reduces economic productivity by diverting valuable resources, especially human creativity, time, and energy, away from more productive industries that contribute more to social welfare.

Fourth, derivatives trading is very clearly associated with increased levels of fraud and manipulation in the underlying markets.

Finally, the last lesson that the history of derivatives regulation can teach us is that successful derivatives trading regulation is possible and has been done. Generally, it has been accomplished quite successfully through a web of complex procedural rules that include reporting requirements, listing requirements, margin requirements, position limits—which I think are very important—insurable interest requirements, and limits on enforceability.

The joy of these rules is that they can be put in place *ex ante* so that derivatives traders know what is and is not required of them and can make plans. It does not call for excessive discretion on the part of an omniscient government regulator, and the rules are very time tested. They have done historically a very good job of permitting legitimate, socially beneficial derivatives trading for

risk hedging purposes while weeding out excessive speculation, excessive risk, and excessive manipulation.

If you will indulge me just briefly, I do think one thing that is really worth saying is people frequently discuss how complicated this issue is, and in the weeds, it is complicated. But the basic problem that we face from a policy perspective is actually quite simple. Although Wall Street surrounds derivatives with jargon, they are essentially one thing; they are a bet or a gamble on something that is going to happen in the future. And when I bet on a horse to win a race, my race ticket is my derivative contract. When I bet on the creditworthiness of a corporate borrower, my credit default swap is my derivative contract.

Betting can obviously be used to hedge against risk, so if I actually own a corporate bond and then I purchase a credit default swap, I have reduced my risk because if my bond goes down in value, my credit default swap goes up. But it is very important to recognize that derivatives can also be used and are especially attractive purely for speculative purposes. There actually is a clear economic definition of "speculation." It is trying to make money not by producing something or by providing investment funds to someone who is producing something, but instead by trying to predict the future better than someone else can.

As a practical matter, it can be difficult to establish that a particular derivatives trade is speculative in nature simply because traders are really good at making up alleged risks that they are supposedly hedging against. However, for 200 years, regulators have succeeded in coming up with ways to weed out true risk hedging from speculation, and this can be done, for example, at the macro level. I simply want to cite to you we may not know with exactitude which credit default swaps were exact hedges and which ones were speculation.

We can be quite certain by 2008 the CDS market was overwhelmed by speculation. We know this because the notional value of credit default swaps in 2008 was approximately \$67 trillion; whereas, the notional value of the bonds, both mortgage-backed bonds and corporate issue bonds that the credit default swaps were being written on, was less than one-fourth that size. It was \$15 trillion. When the derivatives markets is 4-1/2 times the size of the market for the underlying thing you are supposedly hedging the risk of, you know the market has been swamped by speculation with, I would say, sadly predictable results that we are now trying to sort through today.

So I think that is probably a good enough start.

[The prepared statement of Ms. Stout can be found on page 131 in the appendix.]

Chairman HARKIN. That is a great start. OK. Thank you, Dr. Stout.

We now turn to Mr. Lenczowski, Managing Director of JPMorgan Chase. Mr. Lenczowski.

**STATEMENT OF MARK LENCZOWSKI, MANAGING DIRECTOR,
JPMORGAN CHASE & CO., WASHINGTON, DC**

Mr. LENCZOWSKI. Thank you, Chairman Harkin, Ranking Member Chambliss, and members of the Committee. My name is Mark

Lenczowski, and I am a Managing Director and Assistant General Counsel at JPMorgan Chase & Co. Thank you for inviting me to testify at today's hearing.

For the past 30 years, American companies have used OTC derivatives to manage interest rate, currency, and commodity risk. Increasingly, many companies incur risk outside their core operations that, left unmanaged, would negatively affect their financial performance and possibly even their viability. In response to marketplace demand, financial products, such as futures contracts and OTC derivatives, were developed to enable companies to manage risk.

OTC derivatives have become a vital part of our economy. According to the most recent data, 92 percent of the largest American companies and over 50 percent of mid-sized companies use OTC products to hedge risk.

JPMorgan's role in the OTC derivatives market is to act as a financial intermediary. In much the same way financial institutions act as a go-between with investors seeking returns and borrowers seeking capital, we work with companies looking to manage their risks and with entities looking to take on those risks. Recently, clients, such as Chesapeake and Medtronic, have expressed great concern about the unintended consequences of recent policy proposals, particularly at a time when our economy remains fragile. In our view, the effect of forcing such companies to face an exchange or a clearinghouse would limit their ability to manage the risks they incur in operating their businesses and have negative financial consequences for them via increased collateral posting. These unintended consequences have the potential to harm an economic recovery.

Let me first discuss some of the benefits of OTC derivatives. Companies today demand customized solutions for risk management, and the OTC market provides them. Customization does not necessarily mean complexity. Rather, it means the ability to tailor every aspect of the transaction to the company's needs to ensure that the company is able to match its risks exactly.

For example, a typical OTC derivative transaction might involve a company that is borrowing in the loan market at a floating interest rate. To protect itself against the risk that interests rate will rise, the company will enter into an interest rate swap. These transactions generally enable the company to pay an amount tied to a fixed interest rate, and the financial institution will pay an amount tied to the floating rate of the loan. If rates rise steeply, they have some protection and can focus on their core operations.

OTC derivatives are used in a similar manner by a wide variety of companies seeking to manage volatile commodity prices and foreign exchange fluctuations.

In addition to customization, the other main benefit of OTC derivatives is flexibility with respect to the collateral that supports a derivative transaction. In the interest rate swap example, the financial institution may ask the company to provide credit support to mitigate the credit risk that it faces in entering into this transaction. Most often, that credit support comes in the same form as the collateral provided for the loan agreement. Thus, if the loan agreement is secured by property or equipment, that same collat-

eral would also be used to secure the interest rate swap. This collateral is high quality. It is the basis for the extension of credit in the loan agreement. As a result, the company does not have to incur additional costs in obtaining and administering credit support for the interest rate swap. This is a very significant benefit and without it, many companies will choose not to hedge their risks because they cannot afford to.

It is important to note that although derivatives currently are offered on U.S. exchanges, few companies use these exchange-traded contracts for two main reasons. Exchange-traded products are, by necessity, highly standardized and not customized. As a result, companies are unable to match the products that are offered on exchanges to their unique risks. Second, clearinghouse collateral requirements are onerous, and necessarily so. Clearinghouses require that participants pledge only liquid collateral such as cash or short-term Government securities to support their positions. However, companies need their most liquid assets for their working capital and investment purposes.

While we believe that exchanges play a valuable role in risk management, not all companies can or want to trade on an exchange. Currently, companies have the choice of entering into their hedging transactions on an exchange or in the OTC market. For most companies, OTC derivatives are critical to their risk management, and risk management is critical to their operations in volatile times. We believe that companies should continue to be allowed to have the choice to use these products.

This discussion of the benefits of OTC derivatives is not to deny that there have been problems with their use, and it is essential that policymakers examine the causes of the financial crisis to ensure it is never repeated. We have noticed reports in the press that derivatives dealers are working to avoid regulation. This is absolutely wrong. The efforts that have been reported on are part of a 4-year effort with regulators to enhance practice in the OTC derivatives market. The latest letter is just the last quarterly submission outlining our efforts to enhance market practice.

To that end, we propose the following, which is consistent with the administration's position and Chairman Gensler's testimony today.

First, financial regulation should be considered on the basis of function not form.

Second, a systemic risk regulator should oversee all systemically significant financial institutions and their activities.

Third, all standardized OTC derivatives transactions between major market participants should be cleared through a regulated clearinghouse.

Lastly, enhanced reporting requirements should apply to all OTC derivatives transactions.

JPMorgan is committed to working with Congress, regulators, and other industry participants to ensure that an appropriate regulatory framework for derivatives is implemented. I appreciate the opportunity to testify, and I look forward to your questions. Thank you.

[The prepared statement of Mr. Lenczowski can be found on page 95 in the appendix.]

Chairman HARKIN. Thank you very much, Mr. Lenczowski.
Now we turn to Dr. Richard Bookstaber. Dr. Bookstaber.

STATEMENT OF RICHARD BOOKSTABER, NEW YORK, NEW YORK

Mr. BOOKSTABER. Mr. Chairman and members of the Committee, I thank you for the opportunity to testify today. My name is Richard Bookstaber. During my career I have worked extensively in risk management, and I was also one of the pioneers in the development of derivative products on Wall Street. I am the author of the book "A Demon of Our Own Design; Markets, Hedge Funds, and the Perils of Financial Innovation." That book, published in April of 2007, warned of the potential for financial crisis from derivatives and other innovative products. Although I have had extensive experience in both investment banks and hedge funds, I come before the Committee in an unaffiliated capacity and represent no industry interests.

My testimony will focus on reducing complexity and increasing transparency in the derivatives markets through standardization and exchange trading. Derivative instruments—and I use the term to include options, swaps, and structured products—can improve financial markets. They can allow investors to mold returns to meet their investment objectives, to more precisely meet the contingencies of the markets. They can isolate and package risks to facilitate risk sharing.

However, derivatives also can be used for far less lofty purposes, like allowing firms to lever when they are not supposed to lever; take exposure in markets where they are not supposed to take exposure; and avoid taxes that they are supposed to pay. In short, derivatives are the weapon of choice for gaming the system. These objectives are best accomplished by designing derivatives that are complex and, thus, opaque so that the gaming will not be readily apparent.

Such complexity, as I point out in my book, makes the financial markets crisis prone. Complexity hides risks and creates unexpected linkages between markets. Because derivatives are the primary source of this complexity, to reduce the risk of crisis we must address the derivatives markets. We need a flight to simplicity.

The proposed centralized clearing corporation, while a welcome step, is not sufficient to do this. It may address counterparty concerns, but it will not sufficiently address issues related to standardization, transparency, price discovery, and liquidity. To do that, we need to have standardized derivative products and have those products traded on an exchange. Standardization will address the complexity of derivatives. Exchange trading will be a major improvement in transparency and efficiency, and it will foster liquidity by drawing in a wider range of speculators and liquidity suppliers. These steps will shore up the market against the structural flaws that derivatives-induced complexity creates.

Now, one stated objection to standardization and exchange trading is that having some products out in the light of day will only increase the demand for the more shadowy and opaque products. Another objection is that the push toward standardization will reduce innovation. These concerns lead to demands by some to abol-

ish all OTC derivatives and by others to shrink from exchange trading. There is no need to move toward either of these two extremes. We can have a combination of standardized exchange-traded instruments along with the continued development of customized OTC instruments.

Abolishing OTC derivatives is not wise. There will be legitimate reasons for customized derivatives and no doubt innovations will emerge with broad value to the financial markets. The point is not to stifle innovation but to assure it is directed toward an economic rather than a gaming end.

Standardized exchange-traded derivatives will create a hurdle for any nonstandard over-the-counter product. The over-the-counter product will have worse counterparty characteristics, be less liquid, have a higher spread, and have inferior price discovery. To overcome these disadvantages, the nonstandard OTC product will have to demonstrate substantial improvements in meeting investment needs compared to the standardized product. Also, and importantly, stricter controls can be placed on nonstandard OTC derivatives. For example, the regulator may mandate the disclosure of OTC positions and require a demonstration of why they are being used instead of a standard product.

While there will still be the opportunity for innovation and for the application of the more complex derivatives, I believe that for most legitimate purposes the standardized products will be found to be adequate.

Now, financial institutions might have to be pulled less than willingly into any initiative to standardize derivatives or to move derivatives from over-the-counter onto an exchange. They have an incentive to keep derivatives over-the-counter and not standardized. For the bank, the more complex the instrument, the greater the chance the bank can price in a profit for the simple reason that investors will not be able to readily determine the fair value. And if the bank creates a customized product, then it can charge a higher spread when an investor comes back to trade out of the product.

For the trader, the more complex the instrument, the more leeway he has because it will be harder for the bank to measure his risk and price his book. And for the buyer, the more complex the instrument, the easier it is to obfuscate everything from the risk and leverage of their positions to the non-economic gaming objectives they might have in mind.

In conclusion, we should move toward standardization and exchange trading of derivatives. And we should do this because it is the reasonable direction to go, not as a reaction to the current crisis and not predicated on whether derivatives were the villains of this crisis or merely innocent bystanders.

The argument for standardization and exchange trading of derivatives is compelling. But there remains much we do not know. Therefore, it is important to move slowly, learning by doing rather than pushing for quick, wholesale solutions.

There are markets that are beyond the purview of the CFTC, indeed that are beyond our borders, so the natural pace will be a gradual one.

Thank you for the opportunity to provide this testimony, and I look forward to your questions.

[The prepared statement of Mr. Bookstaber can be found on page 64 in the appendix.]

Chairman HARKIN. Thank you very much, Dr. Bookstaber.

Now we turn to Mr. David Dines, President of Cargill Risk Management. Mr. Dines, welcome.

**STATEMENT OF DAVID DINES, PRESIDENT, CARGILL RISK
MANAGEMENT, HOPKINS, MINNESOTA**

Mr. DINES. Thank you, Mr. Chairman. My name is David Dines, President of Cargill Risk Management. I am testifying on behalf of Cargill, Incorporated, and I want to thank you for the opportunity to be here today.

Cargill is an extensive end user of derivatives and relies heavily upon efficient, competitive, and well-functioning futures and over-the-counter markets. One of the major challenges for policymakers and regulators is that the term “over-the-counter” covers a vast array of products across a number of markets. This broad definition highlights why it is extremely difficult to seek a one-size-fits-all regulatory or legislative solution that still allows all interested parties to manage or hedge their genuine economic risks.

One major concern with the recent proposal by the Treasury Department is that it appears to seek a regulatory solution for all OTC products in response to systemic risk posed by one particular market; credit default swaps.

It is important to note that while we have witnessed the greatest economic crisis in 80 years, OTC contracts in the agriculture, energy, and foreign exchange markets performed well, did not create systemic risks, and, in fact, helped many end users manage and hedge their risks during this very difficult time.

In today’s hearing, we will focus our comments on three of the four objectives of the recent Treasury proposal. We support the stated objectives and believe that steps could be taken to meet these goals, without denying end users’ access to an effective and competitive market.

The Treasury Department’s first objective is to prevent activities in the OTC markets from posing risk to the financial system. The outline seeks to apply mandatory clearing of all standardized products and impose robust margin requirements to meet this objective.

The imposition of mandatory clearing and mandatory margining of tailored hedges will have a significant drain on working capital. Mandatory margining will have the unintended consequence of actually increasing financial risks as companies choose not to hedge due to working capital requirements.

The potential magnitude of this drain on working capital should be carefully weighed by all policymakers. I would like to submit for the record a letter from the National Association of Manufacturers as well as a recent letter from Chesapeake Energy, an Oklahoma-based end user of OTC derivatives and the largest independent producer of natural gas. The Chesapeake Energy letter provides an excellent example of how imposing mandatory margining could severely drain capital that could otherwise be invested to grow a business.

[The following information can be found on page 139 in the appendix.]

Mr. DINES. In the one example provided here, over \$6 billion would have been taken away from running and expanding a job-creating business, and instead be left idle in a margin account until the maturation of the OTC contract—a contract which had already been secured with collateral. Expand this example across all businesses that use OTC products and the amount of capital diverted from growing the U.S. economy would be severe, unless companies reduced their hedging and risk management.

There is a misconception that OTC products do not have credit provisions and are never collateralized or margined. A significant number of OTC transactions are collateralized, margined, or make use of credit agreements to secure the contract with collateral being moved daily to adjust for the change in market value.

With regard to mandatory clearing of standardized products, defining which products are “standard” and which products are “customized” is a complex issue that must be thoroughly examined by the appropriate Federal regulator to avoid disrupting market segments that continue to perform well.

The loss of tailored hedging tools will also greatly impact the ability of companies to comply with current accounting standards. The Treasury Department outline also indicates that substantial capital requirements could be placed on all OTC dealers.

There is a concern that the new regulatory framework could be developed such that only financial institutions could remain active dealers. The agriculture and energy hedging sectors have active non-financial institution OTC dealers who offer healthy competition in the market, and it would be inappropriate to eliminate these competitors from the OTC market through legislative or regulatory action.

To meet the Treasury Department’s first objective of protecting the financial system, regulatory requirements should be risk based and not one size fits all. Additional monitoring and transparency is warranted; however, restricting working capital through major increases in mandatory margining in these markets is counter-productive.

Objective 2: The Treasury Department’s outline seeks to impose more recordkeeping and force trades onto regulated exchanges to promote efficiency and transparency within the OTC markets. We recommend more recordkeeping and better disclosure, although the regulator should be directed to focus on areas with the greatest risks. As previously mentioned, mandatory movement of activities from the OTC market to an exchange-traded market does not seem warranted in those markets that have not created systemic risks to the financial system.

Objective 3: The Treasury Department’s outline seeks clear authority to police fraud and market manipulation and the authority to set position limits on OTC derivatives. Cargill recently filed comments with the CFTC on a proposed rulemaking that addresses this objective where we support position limits for non-commercials, much greater transparency and reporting for over-the-counter markets, and we offered detailed suggestions for implementation.

In summary, Cargill recommends that additional legislative and regulatory actions in the OTC market are risk based and not treat all products identically; seek to add minimal costs and disruptions

to those products that have not posed systemic risk to the financial system.

Two, mandatory clearing and margining would severely reduce hedging activity, would greatly restrict working capital at a time when it is in very short supply, and is not warranted for OTC products that have not created systemic risk.

Third, the CFTC, through its existing rulemaking, is proposing much needed steps and should continue to work on ensuring the enforcement of position limits in related exchange-traded markets, principally agriculture and energy products, and improving transparency and reporting of OTC products.

We appreciate the opportunity to testify today and look forward to working with the members of the Senate Agriculture Committee and other policymakers as this issue develops. Thank you.

[The prepared statement of Mr. Dines can be found on page 71 in the appendix.]

Chairman HARKIN. Thank you very much, Mr. Dines.

Now we will turn to Mr. Michael Masters. You did show up.

Mr. MASTERS. Coming from the West Coast.

Chairman HARKIN. I understand you took an overnight flight.

Mr. MASTERS. Yes, I had a little trouble getting here with the thunderstorms last night.

Chairman HARKIN. Welcome, Mr. Masters, of Masters Capital Management, and as I said earlier, your statements will be made a part of the record in their entirety, and please, if you would take 5 to 7 minutes or something like that, I would appreciate it very much.

Mr. MASTERS. Sure.

Chairman HARKIN. Thank you, Mr. Masters.

**STATEMENT OF MICHAEL W. MASTERS, MANAGING MEMBER/
PORTFOLIO MANAGER, MASTERS CAPITAL MANAGEMENT,
LLC, ST. CROIX, U.S. VIRGIN ISLANDS**

Mr. MASTERS. Thank you. Good morning, Chairman Harkin and members of this Committee. The derivatives markets present Congress with two very critical and very distinct problems; systemic risk and excessive speculation.

Last fall, the world financial system teetered on the brink of collapse. This near-meltdown had a catastrophic effect on our Nation's economy, causing the loss of trillions of dollars in retirement savings and millions of American jobs. At the peak in 2008, the notional amount of over-the-counter derivatives outstanding totaled over two-thirds of a quadrillion dollars. These positions formed an interlocking spider web of enormous exposures amongst the 20 to 30 largest swaps dealers and represented an extreme amount of leverage since very little margin collateral backed up these huge bets.

This unregulated shadow banking system was effectively destroyed in the fall of 2008. It threatened to destroy the regulated financial system with it. However, regulators pumped trillions of dollars into the shadow banking system to allow OTC derivatives dealers to make each other whole on their bets. This was necessary to prevent a domino effect of dealer collapses that would have destroyed the world's financial system.

Congress owes it to the American people to ensure that this never happens again. The risk of a financial system collapse must be eliminated, not regulated. Everyone agrees that clearing needs to take place in order to increase the transparency of these markets. But not all clearing is created equal. This clearing process must include two important provisions.

First, clearing must involve novation wherein the derivatives clearing organization becomes the central counterparty to both sides of the trade. This will eliminate the interlocking spider web of exposures among swaps dealers because every dealer's exposure will be to the central counterparty and not to each other.

Secondly, clearing must involve daily margin where every day the central counterparty collects margin payments from those dealers whose bets are going against them. This ensures we never have another AIG.

If this system had been in place in 2008, then it would have been virtually impossible for the financial system to melt down.

Wall Street will seek to block mandatory exchange clearing by arguing that swaps are highly customized and cannot clear. This is false. The standard that regulators should adopt is not one of standardization versus customization, but one of clearable versus non-clearable. Chairman Gensler said during his confirmation hearing that if an OTC derivative can clear, then it should clear. Treasury Secretary Geithner said if an OTC derivative is accepted for clearing by one or more fully regulated CCPs, it should create a presumption that it is a standardized contract and, thus, required to be cleared. This is the right standard and will result in a vast majority of swaps clearing through an exchange. Exchange clearing will lead to price transparency, tighter bid-ask spreads, and greatly reduced cost for end users of the swap markets. There will also be greater liquidity due to lower trading cost and reduced emphasis on credit concerns.

Now let us look at excessive speculation. America experienced a bubble in food and energy prices during 2008. This was caused by excessive speculation in the derivatives market for these commodities. These markets have become dominated by speculators, and prices no longer reflect supply and demand.

Now, in 2009, the problem is once again raising its ugly head. Today, the supply of crude oil in the U.S. is near a 20-year high, while the demand is near a 10-year low, according to the IEA. Yet the price of oil has risen an amazing 85 percent this year, from the mid-30's to the mid-60's. There has been a chorus of voices from oil market participants, economists, and even OPEC squarely pinning the blame on speculators for unjustifiably driving oil prices higher. If Congress allows this to continue, then high oil prices threaten to throw our economy back into the double-dip recession and potentially ruin the Obama stimulus.

Your constituents are flat on their backs financially and will not tolerate gasoline prices rising to \$3 or \$4 again. The excessive speculation problem can be eliminated by imposing aggregate speculative position limits. These limits must cover all trading venues which will require closing all the existing loopholes to ensure that every venue in regulated equally.

The swaps loophole is an exemption granted by the CFTC which gives swaps dealers free rein to buy and sell commodity futures in unlimited quantities. The best way to close it is to mandate that all OTC commodity derivatives clear through an exchange. This needs to happen to eliminate systemic risk, but it also needs to happen so that regulators can actually apply position limits. When a swap clears, the exchange breaks that transaction into component parts and becomes the center counterparty to both sides of the trade. This enables regulators to see both sides and enforce aggregate speculative position limits.

The London loophole occurs when foreign boards of trade are permitted to trade contracts that are virtually identical to U.S. futures contracts. The solution is simple, foreign exchanges must be required to supply all the same data that designated contract markets provide to the CFTC, and they must enforce speculative position limits.

Right now, the possibility for cross-border regulatory coordination is at an all-time high. G-8 Ministers issued a statement last week along with OPEC calling for greater regulation to crack down on excessive speculation in the energy markets.

The CFTC must set the limits for all consumable commodities, not the exchanges. Speculative position limits should be set for the commodity as a whole rather than one particular grade or delivery or location, for instance, crude oil, not just West Texas Intermediate. Speculative position limits need to be aggregated across trading venues.

In summary, the best way to eliminate the risk of another financial system collapse is to mandate that all OTC derivatives clear through an exchange with a novation and daily margin. And the best way to prevent another bubble of excessive speculation is to make aggregate speculative position limits apply across all trading venues.

The CFTC has 70-plus years of experience regulating exchange clearing and policing markets for excessive speculation. The SEC and Federal Reserve have little to no experience in these two key areas. In fact, the SEC has allowed passive commodity investments in ETFs, ETNs, and commodity mutual funds.

They have signed off on double-leveraged crude oil EFTs like the DXO that allow any investor to make leveraged speculative bets in crude oil within their retirement accounts. This does not show good judgment from a consumer protection or a market protection standpoint. For these reasons, the CFTC is the best and most appropriate regulator for the job.

Thank you. I look forward to your questions.

[The prepared statement of Mr. Masters can be found on page 101 in the appendix.]

Chairman HARKIN. Well, thank you very much, Mr. Masters, for summarizing a very extensive statement you had here, which I read last night, which I found extremely interesting.

Now we turn to our final person here. This is Mr. Daniel Driscoll, Executive Vice President and Chief Operating Officer of the National Futures Association. Mr. Driscoll, welcome.

STATEMENT OF DANIEL A. DRISCOLL, EXECUTIVE VICE PRESIDENT AND CHIEF OPERATING OFFICER, NATIONAL FUTURES ASSOCIATION, CHICAGO, ILLINOIS

Mr. DRISCOLL. Thank you very much, Chairman Harkin, Ranking Member Chambliss, and all the members of the Committee for allowing us to participate here and to ask you to close a loophole where fraudsters are able to offer over-the-counter derivative contracts to the retail public.

NFA is the industry-wide self-regulatory organization for the U.S. futures industry, and we also regulate over-the-counter retail forex products. NFA is first and foremost a customer protection organization, and we take that mandate very seriously.

Now, the other witnesses today have talked primarily about OTC derivative products that are offered to and traded by large, sophisticated institutions. But I am here to tell you that there is also a growing aspect of the OTC derivatives markets that is directed toward the retail public, and those customers are being victimized in a totally unregulated environment.

Now, for many years, retail participants in the futures markets have enjoyed all of the benefits of the Commodity Exchange Act. Their contracts were traded on regulated exchanges and cleared by regulated clearing organizations. Their brokers had to meet the fitness standards of the Act and were regulated by the CFTC and NFA. However, today, there are too many customers that do not receive any of the benefits of regulation, and we need to do something about that.

The main problem stems from a court case often referred to as the Zelener case, which was a Seventh Circuit Court of Appeals Case involving a CFTC enforcement case alleging forex fraud. In that case, the district court ruled that the customers were, in fact, defrauded but that the CFTC did not have jurisdiction because the contracts were not futures contracts.

In that particular case, the contracts were offered to the retail public for speculative purposes. They were rolled over and over again so that delivery never took place. Basically they were the functional equivalent of a futures contract.

Unfortunately, the Seventh Circuit ignored those characteristics and ruled that the written contract itself should determine the nature of the contract, and because the contract did not guarantee a right of offset, they ruled that they were not futures contracts, and the CFTC lost that particular case. There were other courts that followed the Zelener decision and came up with similar rulings over the next several years.

Last year, Congress closed the forex loophole but, unfortunately, the loophole is not limited to forex so that customers dealing in other OTC products, such as gold and silver, are still in a regulatory mine field, and we need to bring regulatory protections to those customers as well.

Back in 2007, NFA predicted that if Congress plugged the Zelener loophole for forex but left it open for other products, the fraudsters would simply move over to Zelener-type contracts in other commodities, and that is exactly what has happened. Now, we cannot quantify the exact numbers of that fraud because these firms are not regulated and are not registered. But we are aware

of dozens of firms that offer Zelener contracts in metals and energy.

Recently, we received a call from a man who lost over \$600,000, substantially all of his savings, investing with one of these firms. We have seen a sharp increase in customer complaints and mounting customer losses involving these products since Congress closed the loophole for forex.

NFA and the exchanges have previously proposed a fix which would close the Zelener loophole for these non-forex products. Our proposal codifies the approach the Ninth Circuit took in *CFTC v. Co-Petro*, which was the accepted state of the law until Zelener. In particular, our approach would create a statutory presumption that leveraged or margined transactions offered to retail customers are futures contracts unless delivery is made within 7 days or the retail customer has a commercial use for the commodity. This presumption is flexible and could be overcome by showing that delivery actually occurred or that the transactions were not primarily marketed to retail customers or were not marketed to those customers as a way to speculate on price movements.

This statutory presumption would not cover securities and banking products, it would not interfere with inter-bank currency markets, and it would not cover the retail forex contracts that are already covered or exempt under Section 2(c). I would also say that our proposal would not invalidate a 1985 interpretive letter issued by the CFTC, which Monex and other similar firms currently rely on to sell gold and silver to their clients. Essentially, that letter set forth a factual pattern which culminated in the actual delivery of the precious metals within 7 days and title to those metals going over to the retail customer so that it would not be covered under our statutory proposal.

In conclusion, while we support Congress' efforts to deal with systemic risk and create greater transparency in the OTC markets, Congress should not forget that there is a very real risk to the retail public participating in another segment of these markets. The Committee can play a leading role in protecting customers from the unregulated boiler rooms that are currently taking advantage of the Zelener loophole for metals and energy products. We look forward to further reviewing our proposal with Committee members and staff and working with you on this important matter.

Thank you.

[The prepared statement of Mr. Driscoll can be found on page 77 in the appendix.]

Chairman HARKIN. Thank you very much, Mr. Driscoll. Thank you all for your testimony. I cannot help, Mr. Driscoll, but to comment upon your statement. I offered an amendment on the last farm bill to close Zelener. We passed it in the Senate.

Mr. DRISCOLL. Yes, thank you very much.

Chairman HARKIN. Well, we did it, and we went to conference and lost it in conference. All we were able to keep out of that was just the forex contracts that you are talking about. Again, I think that was a mistake, and I said so at the time. But it did not have the votes. So I am glad to hear your testimony again today calling for a broader closure of the Zelener loophole that the Seventh Circuit opened up for everybody. It went beyond currency, and they

applied it to everything else. So I appreciate your comments today, and hopefully maybe if we move some legislation this year, we can also finally close that loophole.

Mr. DRISCOLL. Thank you, Senator Harkin.

Chairman HARKIN. I just could not help but comment on that.

It seems like everyone here is basically saying that there is a legitimate need for derivatives trading, I think, if I am not mistaken, but that it would be well regulated, transparent, but there is some need for some liquidity in the marketplace that might be provided by that. I am reminded of what one person said to me, a Congressman said to me, a former Congressman said to me one time about liquidity. He said, "You know, liquidity is good, but too much liquidity can be bad." He said, "It is like I take an aspirin every day. My doctor says I should take an aspirin every day for liquidity. But if I took a whole bottle every day, it might be kind of dangerous to my health." So I have often thought about that kind of analogy.

I also think about the analogy that Dr. Bill Black testified to last fall when we had our first hearing on this. Someone had commented upon, well, we do not want to stifle the free flow of capital, to which Dr. Black responded, "Well, I do not know," he said, "if we really want the free flow of capital; maybe we want the more efficient flow of capital." And he used the analogy of traffic flow.

He said, "You know, if we want the free flow of traffic, do away with all the stop lights. Do away with the stop signs. Do away with the speed limit signs. You will have a very free flow of traffic. But you are going to have a lot of wrecks." And he analogized that to the financial markets, that we need regulation, we need the stop lights and the slow-down signs and the danger signs and things like that, not so much for the free flow of capital, but for the more efficient flow of capital.

Now, with that as a backdrop, I understand the need for liquidity. I also appreciate, Dr. Stout, your testimony. A lot of this gets clouded in jargon. We say, oh, this is complex and all that. But it kind of boils down to certain essentials all the time. And I will start here with what Mr. Lenczowski testified to, and that is that many banks relied on credit default swaps instead of fully meeting capital requirements.

So we have heard a lot of discussion here about, well, we should not have to come up with capital requirements too much. I think maybe Mr. Dines maybe testified to that; I think maybe somebody else did, that requiring too much capital requirements might stifle the transactions and the more open flow of capital and hedging. But many banks relied on these credit default swaps instead of meeting the capital requirements under the Basel II rules—I had to learn this, too, what Basel II was—thus contributing to the buildup of excessive leverage and risk.

So I guess a question for all of you basically is this; how do we control the risk to the financial system and our broader economy when institutions rely on derivatives too much and we do not have as much capital coming forward? So that is really what we are trying to wrestle with here.

Now, again, I will make another statement as sort of a backdrop to what I am getting at here. There have been a couple of articles in the Wall Street Journal and New York Times recently, and they

concluded that the banks and other over-the-counter swaps dealers oppose certain reforms for the basic reason that the greater transparency and disclosure involved in exchange trading would impair their ability to make profits. That is, if the parties on the other side of transactions had a better idea of what prevailing prices are for swaps, then the banks and swap dealers would not be able to charge as much as they can if they kept them off the exchange, in the dark and out of sight.

I want to state emphatically I am not opposed to the financial sector making profits. They have done very well in the last few years, I might note, but I think there is also a countervailing tremendous public interest at stake here. When we have to come up with \$4 trillion to rescue the economy, a bill that we will be paying and our kids and our grandkids will be paying for some time, then I think it argues that we have to balance this desire for making profits, which is fine, with the countervailing balance of the public interest here.

So I do not see this as a really complex issue. What it basically is, on the one hand we have the public interest in protecting the economy from these risks; on the other hand, the quest of the financial sector to make maximum profits. And to me that is just how I see it. It is not much more complex than that. And as I delved more into derivatives and credit default swaps, I then found out that all these things, whether they are credit default swaps, collateralized debt obligations, collateralized mortgage obligations, all these things, hardly any of those existed before 1990. Most of them came up in the 1990's.

I keep asking the question; where was the demand? Where was the demand for these products? I found out there really was not any, just that these quants that I referred to earlier came up with ingenious ways of slicing and dicing all these little derivatives, these tranches, and no one really knew what the value of them was.

I have often said jokingly that I never knew when I was growing up that someday I would need Honey Nut Cheerios. I thought Cheerios was just fine. But all of a sudden, I found out I need Honey Nut Cheerios. Well, that is OK. I do not mind that. That is an innovation. They were able to sell that, no one is hurt, that is fine. But if innovation in this financial sector does not pertain to some underlying value or benefit to the goods and services of the GDP, then it just seems to me to beg for more regulation and oversight.

I did not mean to go on so long on that, but if I had a basic question for all of you, and I will just go down the line; how do we balance this off? How do we provide for liquidity, the aspirin a day but not a bottle a day? How do we provide for innovation that might pertain to underlying value, but not innovation that just allows someone to gamble and make a lot of money, and keep our markets regulated in the public interest, how do we balance those off?

Dr. Stout.

Ms. STOUT. I think that history gives us some very good guidelines because we actually did that pretty well between 1933 and 1934 and the mid-1990's. And I think the legislation that you are pro-

posing, which in many ways reinstates some of those old-fashioned, time-tested, highly successful strategies, is a very good start.

I want to just point out, it is interesting, Simon Johnson of the MIT Sloan School has estimated that between 1973 and 1985, the finance sector of the U.S. economy accounted for 16 percent of corporate profits, and that in the last decade that has increased to 41 percent of all corporate profits were earned by the finance industry.

Although I do not have the exact breakdown, I suspect that many of those profits were actually trading profits earned by hedge funds and by the proprietary divisions of investment banks. Where did they come from? I will simply point out that hedge funds were earning between 10 and 20 percent annual returns over the last decade. Average investors, who are my investors—I am a trustee of a mutual fund; that is the Moms and the Pops who buy our mutual fund interests—they got 3 to 4 percent a year. I do not think that you can assume that is a coincidence.

Chairman HARKIN. Mr. Lenczowski, how do we balance these?

Mr. LENCZOWSKI. Well, first, thank you, again, Chairman, for allowing me to testify. I think first I would to state that at JPMorgan we broadly support the initiatives of the administration and of Chairman Gensler to undertake regulatory reform.

Chairman HARKIN. By the way, I would be remiss if I did not compliment JPMorgan because you are the ones back in the 1990's that did not get involved in that credit default swap mess. And I think you were very prescient on that, so I would be remiss if I did not compliment you on that.

Mr. LENCZOWSKI. On behalf of our institution, thank you.

But to go back to the points you were making, Chairman Harkin, the first thing on capital, and I think just to state as a bank we are subject to very stringent capital requirements already, and I think, if I might, the capital that Mr. Dines was referring to and perhaps Senator Chambliss referred to earlier, we are talking about capital that is coming out of non-banks, out of the end users, the companies in our country that create jobs. And if they were to trade on exchange—which they currently have the right to do, but if they were to be forced to trade on an exchange, they would have to take capital out of their corporations and pledge it to the exchange. That is the way the exchange operates.

So when we talk about a drain on capital, it is not our capital. It is the capital of companies like Cargill, Chesapeake, and they told you how much that would be. It is billions of dollars.

The other point I would make, Chairman Harkin, on demand, the history of the over-the-counter business has been one that has grown in response to customer demand from the relaxation or the dropping of the gold standard in the 1970's and responses to oil price shocks and inflation led to unprecedented volatility in currency rates, in interest rates. This is what led to the interest rate and currency markets to grow, to serve customer needs. These are markets that exist to serve customers, and we serve as a financial intermediary.

You mentioned CDOs. In the early part of this decade, we had a time of very, very low interest rates, of investors looking for enhanced yield and willing to take on extra risk. And the CDO market, the CMO market, and many other structured markets arose in

response to the investor demand for higher yield with higher risk. We have seen what has happened as a result of the collapse in real estate prices.

Last, I would just close, this part at least, by saying that, again, we support clearing. It is an important tool that we currently use. We derive great benefits from it, from credit risk reduction and an operational standpoint, but we think it would be a mistake to impose that kind of a one-size-fits-all requirement on our economy.

Chairman HARKIN. Dr. Bookstaber.

Mr. BOOKSTABER. I would disagree to some extent with the last statement. I believe that there is a component of the development of "innovative products" that is very much along the lines of what you, Mr. Chairman, depicted, where the banks or investment banks realize that if they can differentiate themselves, that if they are selling something that other people are not selling, and if it is sufficiently complex, they can price it in a way that people will have difficulty understanding if it is fairly priced or not, and they will be able to trade it with a higher spread because the client does not have many other avenues for trading. So liquidity basically is a negative aspect and complexity is a positive aspect when it comes to profit for the bank or the investment bank.

On the other side, as I think you also pointed out, part of the investor demand that has come for some innovative products has occurred along the "Hey, I got a problem" sort of approach; that is, somebody is trying to say, "You know, I want to lever but I am not allowed to lever. Can you help me out here?" And on that basis, you get new innovations that are helping for these gaming purposes.

I believe that there is a need for innovation, that we can have innovation, but regulators need to, No. 1, find a means to have innovation that is directed toward economic purposes as opposed to gaming purposes. And I do not know the proper method for doing that. I think that it is clear that we need to have capital, margin, haircuts, whatever sort of method is used, to back derivatives and other exposures rather than having them be off balance sheet without sufficient capital background.

I agree also with one point that Mr. Dines said, that it is reasonable to have a distinction between different types of products, though not on the basis of what caused a problem in the past versus what did not, because we do not want to drive through the rearview mirror. But there are some products in some markets that inherently are more systemic by nature. Interest rates and currencies are just by nature going to be more systemic than corn, wheat, and commodities of that type. So we more urgently need to have the ability in those markets to control and to aggregate so that we can detect patterns of crowding that may move us from having an issue where it becomes systemic because many firms are all on the same side of the boat.

Chairman HARKIN. Thank you very much, Dr. Bookstaber.

Mr. Dines.

Mr. DINES. Thank you. I guess I would start by just confirming what was said by the other panelists, and what I said in my testimony is that we, again, do not believe that you can take a one-size-fits-all approach to solving this. The regulatory changes that apply

to credit default swaps may not be and I do not think are appropriate for the energy and agricultural markets. We believe that there should be greater transparency and reporting to the regulators, and we have said that we think that there should be position limits for non-commercials.

We believe that this will go a long ways toward solving the issues. We do not think that mandatory margining and clearing is necessary, and we think that will have unintended consequences of reducing people's hedging, companies' hedging, and that will cause significant risks.

Chairman HARKIN. Unless I misinterpreted what you said, Mr. Dines, you are basically proposing that we separate financials out from commodities.

Mr. DINES. I am saying that we need to take a different approach to these different segments, and what might be appropriate for credit default swaps may not be appropriate for the energy and agriculture markets. I think some do have more systemic type risks than others.

Chairman HARKIN. Yes, I understand.

Mr. DINES. OK. Thank you.

Chairman HARKIN. Mr. Masters.

Mr. MASTERS. Thank you, Senator. I think there are two parts to the question. One is liquidity and one is innovation.

First of all, let us just get out the word "innovation." Innovation is a word that Wall Street uses to talk about anything they do in the financial markets. Innovation by itself has sort of a positive connotation when people think about innovation. But innovation is not always good. You know, Ford had the Edsel. There have been many, many products developed in our economy over the last few hundred years that were not good products. Why is it that everything that Wall Street creates is a good product? There are a lot of bad products. So I would just like to get that out to begin with.

In fact, I would argue that since many of these innovative products affect consumers in a very direct and a very real way, including loss of jobs, savings, and so forth, where is the financial FDA for this? You know, who is looking at what the aftereffects of these products are? Because it is certainly not Wall Street. They are just looking at their bottom line.

With regard to innovation itself, the exchanges themselves have produced plenty of innovation as well. It has not just come from the over-the-counter market.

So, at any rate, I would just like to get that out, but with regard to liquidity, one of the things that some of the folks that have testified have mentioned is the whole issue on financing cost for corporations, and what many may not realize is that those financing costs are borne by someone. When you buy a swap from someone, the other side of that swap, if it is a large investment bank, those funds are not free.

So all that financing cost that people say, oh, we are going to have financing cost and margin and so forth, you are already paying that if you are an over-the-counter customer to a bank. You just may not see it. In addition, you are paying other things that you may not see, notably, profit margins.

So the issue that we argue with regard to mandatory clearing for standardized derivatives is—I think you would actually lower the costs because you would have more people that would be able to trade with each other with regard to swaps. You would increase the liquidity. You would certainly lower the bid and offer. And so I actually think that, contrary to raising costs for corporations, you would actually lower costs for corporations ultimately.

We had that experiment with the New York Stock Exchange when bid offers went from eighths to quarters and halves to decimals, and volume has tripled and liquidity has tripled. So I think you look at that example and you have a better idea of really what the future could be, and you have many, many more participants in the market, not just investment banks, that are allowing liquidity.

Chairman HARKIN. Excellent point. Thank you.

Mr. Driscoll.

Mr. DRISCOLL. Chairman Harkin, I have been a futures regulator for almost 40 years, and I can tell you that when I first started out—this is sort of the flip side of the innovation angle—there were no such things as interest rate products in the futures markets; there were no stock index products. The whole panoply of products out there that I think everyone, without exception, agrees are very valuable, not only to the futures markets but to the participants in the futures markets and to the American and the worldwide economies. So there obviously is a plus side to innovation.

From the regulatory standpoint, I believe that it is key that all of these markets be subject to a prudent level of regulation. It does not mean that every market has to have exactly the same regulations. Equity securities and futures do not have exactly the same types of regulations. And I think the focus on systemic risk and transparency by Congress, the administration, and the CFTC is exactly the right one.

I am a big proponent of clearing organizations and exchange-traded markets. That is primarily what we regulate. So anything that can be done to encourage moving as much business as feasible onto regulated markets and to have those instruments cleared would be a positive thing, recognizing that I am—and I am not the biggest expert in that area—that I am sure that there are any number of more non-standardized products that would be difficult to put on an exchange.

Thank you.

Chairman HARKIN. Thank you all very much. I took an inordinate amount of time with that, but I yield to my friend Senator Chambliss.

Senator CHAMBLISS. Let me start with you, Mr. Lenczowski. You mentioned in your written testimony that the industry is seeking to clear more credit default swaps. Would you expand on other ongoing efforts to curb systemwide risks relative to CDS in addition to the clearing?

Mr. LENCZOWSKI. Yes, thank you, Senator. Over the past 4 years, the dealers have been working with investors to come up with market improvements for the credit default swap market, and several of those improvements have been made. First, the amount of undocumented trades has been drastically reduced. There have been

protocols agreed as to the way to treat novations or transfers of trades. There has been a huge improvement in the amount of trades that are electronically confirmed, which significantly decreases operational cost.

Then just recently, there has been a major change and restructuring of the way that the market operates so as to standardize cash settlement as the form of settlement of credit derivatives and to standardize all economic terms, essentially, for credit default swaps.

The result is that the product has become standardized to the point where we think that more and more over-the-counter credit default swaps will be cleared. The ICE U.S. Trust Clearinghouse started operation earlier this year already clears over \$800 billion of CDS transactions. That number is going to grow. Old trades are being backlogged into the system to further increase the pervasiveness of clearing. So the entire progression of the market has been toward increasing clearing, increasing transparency, additional recordkeeping and transparency from the standpoint of pricing, prices are now available on the Internet, freely accessible for the largest entities that are traded.

So it has been a steady progress working between dealers and investors, working with the regulators to improve the market.

Senator CHAMBLISS. Does your firm use the ICE OTC clearing?

Mr. LENCZOWSKI. Yes, we do.

Senator CHAMBLISS. How is that working from a practical standpoint?

Mr. LENCZOWSKI. It has been working very well. Again, clearing is distinctly in our interest to do. When the transactions are standardized and when counterparties to our transactions are able to clear, we derive great benefits from clearing. And we have used the ICE clearinghouse for credit default swap clearing, and we also use other clearinghouses for other asset classes. So, for example, in the interest rate swap market, we use the London clearinghouse called LCH Clearnet, which clears a huge volume of interest rate derivative transactions. Something like 50 percent currently of the dealer-to-dealer swaps are cleared. And in the commodity markets, we are clearing through facilities operated both by ICE and by the CME group called ClearPort.

So all this evidence is a move toward clearing. We think it is—amongst the dealers, it is definitely in the interest of everyone to reduce risk, to increase transparency.

Senator CHAMBLISS. There seems to be a perception out there that the only derivatives that need to be customized are the very complex and most complex products. Are there not simple foreign currency or interest rates swaps that still need to be customized for your clients?

Mr. LENCZOWSKI. Yes, absolutely. And actually Chairman Gensler earlier described one of those transactions, a simple interest rate swap which has been around now for almost 30 years, is very well understood, not a complicated transaction at all. But it is extremely customized as to every economic term, and that is to give the end user, the company that is entering into that swap, the maximum hedge for its risks, and also to get the best accounting treatment. An entire accounting framework has grown up around

derivative transactions and hedging transactions, and over-the-counter instruments are the best way for companies to take advantage of that accounting framework.

There is another example I could cite. Chairman Harkin was looking for examples of why something has to be done over the counter. In the natural gas markets, at this point dozens of public utilities engage in long-term natural gas purchase contracts where they are able to procure natural gas at prices below the prevailing market price on a monthly basis for the next 15 to 20 years. These are very long term purchase contracts, and they are able to do that through the use of over-the-counter natural gas and interest rate derivatives. These are contracts that ultimately benefit millions of consumers of natural gas, customers of these utilities. They are well understood. They are approved through the Tax Code amendments passed in 2005, and they serve an incredible benefit to communities throughout the U.S.

Senator CHAMBLISS. There has been a lot of conversation and critique of the markets over the past year with respect to what is called “excessive speculation,” and that speculators drove up the physical commodities to record high prices. Now, you deal in the market on a daily basis, I assume sometimes as a speculator, sometimes not. Explain what you see with respect to speculation, why it is necessary and what is happening with regard to this issue of excessive speculation.

Mr. LENCZOWSKI. Yes, Senator. And I might preface it by first saying that we strongly support efforts to combat and prosecute manipulation. Market manipulation is in no one’s interest, and certainly from a market participant standpoint, it is extremely detrimental to all of our activities. And—

Senator CHAMBLISS. Obviously, there is a difference between manipulation and speculation.

Mr. LENCZOWSKI. Yes, and speculation is necessary for markets to perform. To take a very basic example, the farmers of this country, when they farm grain, will need to sell it ultimately to bakeries, for example. The baker and the farmer need to match up, one to sell grain, the other to purchase grain. The chances of them matching exactly for all of their purchases are extremely low. Speculators expand each side of that market. They buy and they sell. And they provide the liquidity that is necessary for markets to operate. So all markets require some degree of speculation. Excessive speculation certainly is something to be combated, and we would support that.

Senator CHAMBLISS. Mr. Dines, you deal in the markets every day with respect to risk management tools that you use in your business. I would like for you to give us a practical example of one of these customized contracts that you use. And if those customized contracts were not available to you at Cargill, what effect would that have on your business?

Mr. DINES. Happy to do so. Thank you.

Everyone here knows that Cargill is a processor of corn, and we are in the markets buying corn every day. In essence, we are buying corn at the average price over a given period since we are in buying it every day.

The best hedge for us if we wanted to protect against prices going higher would be a product against the average, not a product against a discrete point in time, which is what you can get on the exchange.

We can go into the OTC markets and buy what is known as an average price option. An average price option comes at a 30–to 40–percent discount to what is available on the exchange. It is a more precise hedge for what we need because it is against the average. It is real cost savings up front, and this cost savings might be the difference between what gets us to hedge and what does not get us to hedge. So that is a real example.

Now, we cannot go in and buy that product on the exchanges. Average price options do not exist. Furthermore, in the OTC markets, we can tailor that product to give us the exact level of protection that we want and for the exact end date that we want. Let us say that we wanted to do it on new crop corn, but we only wanted to go through the pollination period of July. If we went to the exchange, we would have to buy a product that ends in November. We could tailor this product to end in July. We are saving ourselves 4 months of time value of extra cost that goes into that product.

So those are real examples of the types of things that you can do in the over-the-counter market that you cannot do on an exchange-traded type market.

Senator CHAMBLISS. What if that were not available to you? What would be the effect of that unavailability?

Mr. DINES. It would be a far less precise hedge and a more costly hedge, and I know you would find market participants doing less hedging because of the costs.

Senator CHAMBLISS. We talked earlier about position limits and increased margins and what-not, and I think you used the phrase that this could create—would create a real drain on working capital.

From the standpoint of Cargill, do you have any idea of what kind of conceivable working capital drain you would be looking at for the volume that you do business in every day?

Mr. DINES. I think at times it could be significant. I guess maybe I would take you back to last March when we and other grain companies actually had to stop buying deferred grain from farmers, because of the run-up in grain prices and the demands on working capital to cover margins calls. Luckily, we were able to move some of our hedges to the OTC markets where we were able to put in place alternative credit arrangements and become reopened for business. And I think the important point here is that we would like to have the flexibility.

We do plenty of hedging on the exchanges. We do lots of hedging in the over-the-counter markets. The idea for us is that we like to have the flexibility, and that is very, very important for Cargill, but I do not have a number in mind, but I could tell you it would be significant.

Senator CHAMBLISS. Mr. Masters, you have conducted an analysis in which you extrapolated data from CFTC's commitment of trader report to determine speculative activity in the crude oil mar-

ket. Your analysis seems to assign values based upon index fund portfolios.

Now, do you assume that speculative activity was primarily occurring only in the index funds as opposed to the single-name commodities?

Mr. MASTERS. Thank you, Senator. We are assuming that the index funds were a primary participant last year with regard to commodities. There were also speculators in single-name commodities as well. We looked at the index fund data that was provided from the CFTC.

Senator CHAMBLISS. Well, what data is used to support your assessment that oil prices should have been falling last year when most expectations and market analyses showed prices continually increasing throughout the year due to geopolitical uncertainties, record OPEC stocks, a devalued dollar, and the increase in demand during the summer last year?

Mr. MASTERS. That is a good question. The issue with regard to prices in the futures market has to do with the supply and demand of futures. In the grains and the oil markets, the futures price is the price that determines spot, unlike other derivatives, unlike many other markets. You know, Platts, who is the largest spot pricing service, says in part, "We price off futures markets." Many spot market participants we talked to said, "We almost entirely price off futures markets off some basis."

So I think that what we did was we looked at the money flows going in and the money flows going out, and our sense was based on the data that there was an enormous amount of money going into the crude oil markets over the time, and after Congress looked at this issue and I think started really complaining about it to a certain extent, I think it led a great deal of money to come out of those markets, none of which had much to do with actual supply and demand. They amplified the price on the way up, and they greatly amplified the price on the way down.

Senator CHAMBLISS. Mr. Bookstaber, we talked with Chairman Gensler about the responsibility for determining whether or not a product is standardized or customized, and we talked about the clearinghouse that is going to clear it being the determinant of that.

What is your thought about that, are they the proper ones to determine whether something is customized or standard?

Mr. BOOKSTABER. The notion of standardization is a fairly loose one. The key is whether you can construct sufficient tagging for the product so that many other products can be put into the same basket and traded in a similar way. You know, ultimately the decision for standardization will be if it is on an exchange, is it sufficiently different from other products that people gravitate toward it as an item to trade? I do not know who the authority would be to say, oh, this is standard versus this is customized. It is something that still has to be defined.

Senator CHAMBLISS. OK. Mr. Driscoll, in talking about the Zelener fix, as the Chairman says, we had a very significant discussion on this issue last year during the farm bill debate, and we addressed the concerns of the lookalike forex contracts, and I am not sure in your statement that you made earlier, where you said that

there has been an increase in the number of complaints since Congress closed the loophole, whether you are talking about since the farm bill was enacted last year or are you referring to some previous date where a loophole was closed?

Mr. DRISCOLL. I was referring to last year in the farm bill. We have seen a large increase since a year ago today.

Chairman HARKIN. You mentioned gold and silver as commodities where there is the potential for fraudulent transactions. Any other commodities that need to be considered in that same respect?

Mr. DRISCOLL. Precious metals are by far the largest product that is being used in these non-forex Zelener type of contracts, but we have also seen energy type of products as well. And our view is that essentially you have to close the loophole for all commodities that are traded in futures markets because if you close off the ones that are currently existing, then next year we will be coming back and saying the fraudsters have now gone to other markets, because the people that trade these sorts of contracts and run these sorts of schemes are ones that are looking for a regulatory vacuum, and they have made careers of doing this. So we believe the loophole has to be closed for all commodities.

Senator CHAMBLISS. Ms. Stout, do you feel that all OTC markets create a systemic risk?

Ms. STOUT. No, probably not. I think something—that is actually a question that is not even necessarily something we have to address. I think a proper system of regulation of derivatives trading would prevent systemic risk from arising in any particular market. And I personally tend to favor what I think of as automatic circuit breaker rules of this sort rather than regulation that takes the form of creating some omniscient entity, some omniscient Government overseer who is supposed to investigate things on an ad hoc basis and look for potential problems.

I think with the right set of circuit breakers, the sorts that have been mentioned today—listing requirements, margin requirements, position limits—we do not have to worry about looking out for the development of systemic risk in particular markets because the system would look out for us.

Senator CHAMBLISS. Do you agree that some risk in markets is a good thing?

Ms. STOUT. Pardon me while I put on my pointy headed corporate finance professor hat. No, risk is never good. However, sometimes risk is inevitable if you want to accomplish something useful, like curing cancer or building a company that builds airplanes. But, no, risk itself is never good. We would like to get rid of all of it, if we could, and the real trick, I think, is to eliminate all the unnecessary risks while not throwing the baby out with the bath water and eliminating risk in productive areas and with regard to productive endeavors that we want people to undertake.

Senator CHAMBLISS. Well, having been in business myself, I have never made any money without taking a risk, and I just think it is extremely difficult and would be extremely expensive if we tried to take the risk out of it.

Mr. Chairman, I think that may be—I think that is all I had.

Chairman HARKIN. Thank you very much.

Mr. Masters, in your summary, you said, "What I have outlined in my testimony are not brand-new solutions; one, exchange clearing with novation and margin and, two, speculative position limits have proven effective over many decades of experience. In many ways, what we need to do is turn back the clock on several of the deregulatory measures that were undertaken in the last 15 years. The unintended consequences of those deregulatory decisions have been devastating for America." I agree.

Now off of that, I want to challenge you, Mr. Dines, on what you just outlined on this average price option. You say it is not offered by the exchanges. Well, why is it not offered by the exchanges? We have a chicken-and-egg thing here. See, now, I have said we ought to put all these on exchanges, you see. Well, if you are allowed to have them on over-the-counter markets, that is where they are. But who is to say that this average price option could not be developed as a product on a regulated exchange? That way you have more transparency, you would have more people involved, you would have more liquidity because you would have more people in that game. But as long as we have it in the over-the-counter market, with some opaqueness, lack of transparency, of course, the exchange is not going to offer it.

I had Mr. Duffy here last fall when we discussed this very thing, and I asked him that pointed question. I said in terms of my legislation, to put them on a regulated exchange, I asked him very pointedly. I said could your exchange—could the regulated exchange, not just his but the regulated exchanges handle this, and his answer was yes.

So, again, I have always asked, I keep asking this question—I asked two questions. One, define a customized swap. I still have not had one real defined yet, what is customized that does not have some impact someplace in the economy. If you have a customized swap on an interest rate or something like that, it may be between two individuals, but it may have other effects on a lot of other investors in other places. The same way with your hedging on the corn market. It could have a lot of effects.

I would submit that if you have it on a regulated exchange with more transparency and people know about it, quite frankly, I think your business will do better. I, quite frankly, think it will, and I think that the sellers will also do better, too, because it will be open and aboveboard. And we can call for margin requirements. Now, you had this problem with capital requirements. But that can be set. We can temper that, I think, through regulation on not having onerous capital requirements, but having some capital requirements, putting some skin in that game.

So, again, I want to challenge you on why you cannot do this on a regulated exchange.

Mr. DINES. Well, you could put average price options on exchanges. That could very well happen. But the degree of customization goes beyond that, and it goes to protection periods, it goes to protection levels, it goes to maybe how the average is determined. And the issue is that you can have multiple, multiple different variations of an average price option.

I want to be very careful. It does not mean that they are more complex. It means that they are tailored to precisely meet that hedger's needs.

I think it is impossible for the clearinghouses and the exchanges to do this. I do not think they can handle multiple forms, and the OTC market does it. We do it every single day. Our customers will say I want it to expire this particular day, I want it with this protection level, I want the averaging period to start here and end here. And to put that on an exchange will require standardization.

You go into the exchanges today, you can pick from a certain set of end dates. You can pick from a certain level set of protection levels. But you do not have the degree of customization you cannot customize. They just are not set up to do it.

So that I think is the primary difference. It is the ability to really work with customers to customize the product.

Chairman HARKIN. Dr. Bookstaber.

Mr. BOOKSTABER. I think a good example of the distinction—the gray area between standardized and customized is the equities option market. The CBOE is, as exchange traded. In that market you cannot get an exercise price of, say, 51.3.

Chairman HARKIN. Say that again? You cannot—

Mr. BOOKSTABER. The exercise prices for the options are in increments, maybe 5- or 10-point increments.

Chairman HARKIN. OK.

Mr. BOOKSTABER. So somebody could argue, wait a minute, this is not fulfilling my objective because I do not want an exercise price of 50 and I do not want an exercise price of 55; I want 52.23.

Well, of course, if you go to customized, the standardization is going to limit things to some extent, but the challenge is to go to Cargill, to go to the clients of JPMorgan, and to say let us look at the whole layout of the customizations that you do. Can we find a reasonable set of standard securities that get close enough to what people want that in the majority of cases they are fairly satisfied? Maybe somebody wants a time to maturity of 11.1 months, and another wants it of 10.9 months; 11 months might do the job for them.

So it is true that you cannot get standardization to meet every of the infinite possible numbers of times to maturity and the infinite number of possible exercise prices. But once you get to fine enough differentiation, that may be sufficient to deal with the large majority of what people demand.

Chairman HARKIN. Mr. Lenczowski.

Mr. LENCZOWSKI. Thank you, Chairman. I would agree with Dr. Bookstaber that there could be a degree of standardization that is achievable. But even with that standardization, the company that is looking to hedge its risk will still have to post the margin to the clearinghouse. And you mentioned, Chairman, that we could maybe regulatorily affect that margin. It is actually incredibly important that that margin be what the clearinghouse says it is because the clearinghouse has to act as the ultimate credit support to everyone. So it sets its margin requirements based on what it feels through its risk models the risk of a particular transaction is.

So the clearinghouse sets that margin requirement, and then it requires the most liquid form of collateral, because as soon as a de-

fault occurs, the clearinghouse has to instantaneously apply that collateral against the defaulted position. There is no ability to wait and sell some property or land. It has to happen instantaneously. Again, that preserves the clearinghouse's stability.

So while, again, I agree that there could be standardization and it could actually suit certain customers' needs, many customers just do not have that liquidity, that cash right now, and that is why, among other reasons they use the OTC market.

I think there was a mention that the OTC market is not collateralized or that it has—that the customers pay for that margin somehow. In fact, many times when these customers go to the OTC market, the collateral that they pledge is the exact same collateral that they have pledged to secure their loan obligations. Many customers borrow on a secured basis. They pledge land or equipment, fixtures, receivables, even intellectual property. That is all good collateral. It is very good. That supports our lending agreement, our money we lend to them.

It serves both as credit support for the loan and also for the derivative, and that is the efficiency and the flexibility that OTC derivatives provide to corporate America. And that is why we think corporate America chooses the OTC markets instead of the exchange markets. It is not because there is anything wrong with the exchange markets. It is just that the OTC markets are more flexible and are able to address exactly the risks that the company wants to hedge.

Chairman HARKIN. Did you have any observation on this at all, Dr. Stout.

Ms. STOUT. No, not on this.

Chairman HARKIN. Dr. Bookstaber.

Mr. BOOKSTABER. If I can just indulge on this, I think this point—of course, it is better if you can post illiquid collateral. Of course, all of us would like to have that. But there is a problem if the instrument is highly liquid and can be liquidated very quickly, and what you have as collateral is very illiquid. This is what leads to liquidity crisis cycles. I have \$800 million that I have as collateral at a bank. I am in a market that for some exogenous reason drops by 10 percent. The bank says, "Come up with more capital, or we will start to liquidate." And suddenly they say, "Oh, but it is land. We cannot liquidate it in the same timeframe as this instrument."

So it is painful and, of course, we do not want to have it be the case, but I think if you have liquid securities, you have to have liquid collateral on the other side.

Mr. LENCZOWSKI. If I could, Chairman, just to respond.

Chairman HARKIN. Sure.

Mr. LENCZOWSKI. The size of our loan book at JPMorgan is roughly 10 times the size of our derivatives exposure, and much of that loan book is supported by this collateral that Dr. Bookstaber mentioned. It is relatively illiquid, but it is excellent quality collateral. We lend on that basis.

So what we allow our customers to do is to use that same collateral to support their derivative transactions. That is useful for them. It is not an unsafe and unsound banking practice. In fact,

our examiners who are onsite would be all over us if it was anywhere close to that.

So I would like to just clarify that this is very good collateral that we are receiving from our customer base and that it is a very big part of what makes these transactions happen for companies.

Chairman HARKIN. Let me ask that, Mr. Lenczowski. So you admit it is not liquid, and how much can that be leveraged? How much can you leverage something that is illiquid that is an asset or land or whatever, how much can you leverage that?

I think I can understand it if it is capital, but I do not know that I can understand it if it something else.

Mr. LENCZOWSKI. That is an excellent point, Chairman Harkin. Our credit officers make that exact determination. We have statistical models and other means of assessing what our probable exposure could be. We use many forms to do that, but we are able to decide from a credit standpoint how much we could do. Again, these determinations are reviewable by our regulators and we ensure that are done within safe banking practices.

Mr. DINES. Chairman Harkin, could I just add to that point for a second? We have probably 250 to 300 institutional type customers that we are providing products to. We margin with about 80 percent of those customers today. We are moving collateral back and forth with them. We are sending them daily position reports so they know what the value of their derivatives are. Again, they know the value. They are moving the collateral back and forth.

They are giving us liquid cash as collateral, or we are giving them liquid cash as collateral. The difference is that we do not think that a highly rated food or industrial company should be held to the same margining terms as a lower-quality, more leveraged company. And so we are flexible in our credit terms for them, so we may not make them post initial margin. We may give them a million-dollar threshold before they need to post margin. But we are still applying very strict credit standards. We are margining with them. But we are flexible in the way that we do that, and that is very, very important. A million dollars to a company today means a lot from an investment standpoint.

So that is the way that we are managing it. That is the benefit of the OTC market versus a standardized exchange, because if you think about the standardized exchange, it has to go for the lowest common denominator, because it is dealing with all sorts of companies all different levels of credit quality. So it has to build its risk, its margining on the worst possible credits that might be part of that clearinghouse or exchange, where in the OTC market you do not have to do that.

Chairman HARKIN. Ms. Stout.

Ms. STOUT. I think the last comment is very helpful for helping keep a perspective on what we are discussing here. You referred to a million-dollar savings today for Cargill. We are dealing with a crisis that I believe the figure that you mentioned this morning, Mr. Chairman, was \$4 trillion. I do not think anyone would dispute that for some businesses at some times, some forms of derivatives are definitely beneficial. I think the critical question has got to be how do we measure the benefits against the harms.

I am very sympathetic. I wish I could ensure that Cargill could always have the perfect hedge. But if maybe you have to inconvenience yourself a little bit and deal with a suboptimal hedge sometimes, and the social benefit we get is that we do not get another Lehman Brothers, another Bear Stearns, another AIG. Well, sometimes you have to put with a little bit of difficulty.

We are at a watershed moment, Mr. Chairman, I think, that is comparable to the situation we faced in the 1930's. Over the past decade, I think we can argue that the finance sector of our economy came close to cannibalizing the real economy. Derivatives were definitely part—not the only part, but one of the larger parts of that cannibalization process.

It is clear that we cannot sustainably go doing things the way we have done them for the last 10 years. You know, the definition of “insanity,” doing the same thing and expecting different results. Every time in history in my research that we have attempted to deregulate derivatives, we have gotten the same results.

So on the theory that the perfect is the enemy of the good, any regulatory development that can begin to bring back the exposure that we have today, the exposure to systemic risk, to reduced economic productivity, to price bubbles, to fraud and manipulation, anything that can begin to ratchet that back would be a very good thing.

Chairman HARKIN. Anyone else? Yes, Mr. Masters.

Mr. MASTERS. I just want to make a couple points. With regard to the whole notion of multiple prices, volume-weight average prices, in the equities business we have probably in excess of 100 different ways on listed exchanges of trading those various kinds of orders. We can do algorithms that do all sorts of things that can literally wait every 2 minutes for an order and then only take the offer or sit on the bid all day, or hide or bob or weave or whatever. All those things are possible on listed exchanges. We do them every day in our own business.

Second, I would like to make this point because I think it is important. With regard to the notion of options at different strikes and so forth, we are one of the largest option traders in the United States, listed options, and one of the issues with regard to options is when you trade in over-the-counter option, there is someone on the other side that knows your position. That is a huge issue. I do not want them to know my position because if they know my position and it is just me and him, if something goes wrong I have got a problem, and he knows exactly what my problem is. And that goes on every day.

So there is a huge competitive advantage to a bank or a swaps dealer to have that position on with a customer because they are able to reverse engineer the customer's knowledge and flows. So having that liquidity, having an exchange being able to trade with perfect—being able to hide, if you will, I can trade on these options exchange, and people do not know who I am. And I can trade using various different orders. That is a great benefit, and it would be a great benefit to many other customers once they understand that little dynamic that goes around on Wall Street.

Chairman HARKIN. Pretty interesting.

Yes, Mr. Lenczowski? Then we will have to call this off.

Mr. LENCZOWSKI. Thank you, Mr. Chairman. Just a couple of points.

First, the exchanges have been trading equity options for quite a while now, and they are free for anyone who can open an account there. Certainly we have no desire in monopolizing the equity market in the over-the-counter business, and any customer who feels they will do better on an exchange should trade there and should feel free to trade there. What we do not want is to eliminate that choice from the customer. There are some customers who might choose facing an exchange-traded exact same product to trade in the over-the-counter market. And to that extent, that kind of a choice should be continued to be allowed.

Then, second, just to confirm, there is a straw man argument or some example that the banks are against regulatory reform or swap dealers are against regulatory reform. That is absolutely untrue. We support broadly the initiatives that the administration has announced and Chairman Gensler described today. I have outlined them in our written submission, and I would just like to reassert again that we do agree completely that something has to be done. We just want it done in the right way for the economy.

Chairman HARKIN. Any last words? I thought this was a very enlightening session. We could probably go on for some time. As a matter of fact, I have got Secretary Vilsack over in the Appropriations Committee that I have got to go over and listen to his testimony on his budget.

But as you know, we are wrestling with this, but I guess I end where I started. We cannot continue to do what we have been doing. We have got to make some changes, and there have got to be, I think, some fundamental changes in the way we do this.

Now, I have taken the position, you all know my bill, what I attempted to do in that legislation. However, I am always willing to look at other sides of that issue. But I guess from my own personal standpoint, I still come down to the more open we are, the more transparent we are, the more information that people have out there in a regulatory framework, the better off we are all going to be. And somehow we have got to, as Mr. Masters said, I think, get back to where we were before in some kind of a regulatory framework. And that is what we are going to have to wrestle with, exactly how we do that. No one wants to stifle innovation, as I said, but we have got to ask what that innovation is for.

Second, no one wants to get rid of speculation. We need speculators, but we do not want that bottle of aspirin every day. We just need maybe one. So we have to figure out how we provide that kind of liquidity in some kind of a regulated manner also.

So these are the things we are wrestling with. I think this panel added greatly to our thoughts on this and our pursuit of trying to figure out what we can do. I just would say to all of you that as we proceed on this, any other thoughts and suggestions you may have, please let us know, and we will be developing this legislation some time this year, probably not until this fall. We have the health care bill, and we have got a lot of other things we have to do, and we have to do the child nutrition reauthorization, too, this year. But this is something we have got to attend to, and I have talked to Mr. Peterson on the House side, and he wants to move

something this year, too. So I invite your constant input and consideration of what we are doing here.

Again, I thank you all very much for being here today. As I said, it was a great panel. I appreciate it very much, thank you; the Committee will stand adjourned.

[Whereupon, at 1:29 p.m., the Committee was adjourned.]

A P P E N D I X

JUNE 4, 2009

Statement of Senator Thad Cochran

Senate Committee on Agriculture, Nutrition and Forestry

June 4, 2009

Mr. Chairman, thank you for holding this hearing to review the current structure of futures market oversight and considering testimony about how best to improve transparency. It is critical that these markets remain a viable option for farmers and business operations choosing to hedge risks.

This is a subject that attracted our attention following last year's experience with such a volatile commodity market. This hearing will allow us the opportunity to hear from the Chairman of the Commodity Futures Trading Commission (CFTC) and other experts to learn more about options for increasing market transparency and oversight.

While I agree that more transparency is needed, we must avoid overreaching and eliminating the opportunity for participants to enter

contracts. Production agriculture utilizes these markets to maximize profitability, and I urge the CFTC to use their current authority to address concerns as Congress continues to consider additional legislative action.

I look forward to the testimony of our witnesses.

Testimony of Richard Bookstaber

**Submitted to the Senate of the United States,
Committee on Agriculture, Nutrition, and Forestry
For the Hearing: "Regulatory Reform and the Derivatives Markets"
June 4, 2009**

Mr. Chairman and members of the Committee, I thank you for the opportunity to testify today. My name is Richard Bookstaber. During my career I have worked extensively in risk management. In the 1990's I was in charge of market risk management at Morgan Stanley and then oversaw firm-wide risk at Salomon Brothers, continuing in that capacity for a short time after it was absorbed by Citigroup. Following that, I oversaw risk at two buy-side firms, Moore Capital Management and Ziff Brothers Investments, and ran an equity hedge fund at FrontPoint Partners. Most recently I worked at Bridgewater Associates, a large hedge fund headquartered in Westport, Connecticut. I left Bridgewater at the end of 2008.

Before working in risk management, I was one of the pioneers in the development of derivative products on Wall Street. Moving from academics to Morgan Stanley in 1984, I designed, priced and hedged derivatives, and had experience with derivatives in the equity, fixed income, commodity and foreign exchange markets. I wrote one of the first books on derivatives, *Option Pricing and Strategies in Investing*, (Addison-Wesley, 1981).

I am the author of *A Demon of Our Own Design – Markets, Hedge Funds, and the Perils of Financial Innovation*. Published in April, 2007, this book warned of the potential for financial crisis from the explosion of derivatives and other innovative products.

Although I have had extensive experience on both the buy-side and sell-side, I come before the Committee in an unaffiliated capacity, and represent no industry interests.

My testimony will focus on the need for reduced complexity and increased transparency in the derivatives markets. This can be accomplished by standardization of derivative instruments and ultimately by having derivatives trade on the exchange. Many of the issuers and users of derivatives have incentives for derivatives to remain complex and opaque, but these incentives are related to flawed objectives.

Complexity: The Problem with Derivatives

Derivative instruments – and I use the term broadly to include the swath of what are often termed ‘innovative products’ such as options, swaps and structured products – can improve the financial markets. They can allow investors to mold returns to better meet their investment objectives, to more precisely meet the contingencies of the market. They can break apart and package risks to facilitate risk sharing. In the parlance of academic finance, they allow investors to better span the space of the states of nature. These objectives were the focus in the nascent years of derivatives, in the decade or so after the development of the Black-Scholes-Merton option pricing methodology and the establishment of the Chicago Board Options Exchange.

As time progressed, however, derivatives found use for less lofty purposes. Derivatives have been used to solve various non-economic problems, basically helping institutions game the system in order to:

- Avoid taxes. For example, investors use total return swaps to take positions in UK stocks in order to avoid transactions taxes.
- Take exposures that are not permitted in a particular investment charter. For example, index amortizing swaps were used by insurance companies to take mortgage risk.
- Speculate. For example, the main use of credit default swaps is to allow traders to take short positions on corporate bonds and place bets on the failure of a company.
- Hide risk-taking activity. For example, derivatives provide a means for obtaining a leveraged position without explicit financing or capital outlay and for taking risk off-balance sheet, where it is not as readily observed and monitored. Derivatives

also can be used to structure complex risk-return tradeoffs that are difficult to dissect.

These non-economic objectives are best accomplished by designing derivatives that are complex and opaque, so that the gaming of the system is not readily apparent.¹

Viewed in an uncharitable light, derivatives and swaps can be thought of as vehicles for gambling; they are, after all, side bets on the market. But these side bets can pose risks that extend beyond losses to the person making the bet. There are a number of ways the swaps and derivatives end up affecting the market:

- Those who create these products need to hedge in the market, so their creation leads to a direct affect on the market underlying the derivative.
- Those who buy these instruments have other market exposures, so that if they are adversely affected by the swaps or derivatives, they might be forced to liquidate other positions, thereby transmitting a dislocation from one market into another.
- The market price of some derivatives can have real effects for a company. For example, the credit default swaps are used as the basis for triggering debt covenants, so if the swap spread for a company's debt rises above a critical level, it can have an adverse effect on the company. Indeed, a dislocation in the credit default swap market can have a more immediate and severe effect on a company than will a dislocation in its stock price, because the credit default swap spread has an impact on the ability of the company to obtain financing.²

¹ For example, the last point, hiding risk-taking activity, is facilitated by the opacity of the risk-return tradeoff for derivatives. Any derivatives trader worth his salt can construct a derivatives position that will seemingly print money, in all likelihood generate cash flow month after month, but will get that cash flow by taking on a subtle risk which will rarely be realized, but when realized will have a profound negative effect. Without proper modeling, this risk will not be manifest until it is too late. This means that derivatives are the weapon of choice for investors who are faced with a need to book immediate gains.

It also means derivatives are a quick sale to naïve investors. There is no need to look back to P&G or Orange County for examples of this. I recently gave a talk to a group of central bankers from small countries, a number of whom had been plied with derivatives called dual currency swaps, though these were really options that gave the countries a payout in the worse performing of two currencies. In exchange for taking this relative currency risk, the countries received an incremental return of a few basis points. I did not do the calculation, but my bet is that this incremental return left a substantial buffer for the banks that sold the swaps. And that the countries entered into the swaps without recognizing the level of risk they were taking on.

² For this reason, there needs to be strict oversight of credit default swaps to guard against manipulation. Such oversight is far easier for if they are traded on an exchange.

- Derivatives can change the behavior of the market. For example, when various bonds are packaged into Collateralized Debt Obligations, they become linked in a way that they might not be absent this packaging. As a result, the diversification potential within the market can be lower and the potential for contagion between market segments can increase.
- Those who are writing OTC derivatives are in effect providing insurance to the buyers, but without any regulatory requirements on minimum capital. Those writing these instruments may not be in a well-capitalized position to pay out in the event that the option goes into the money.

Regulation of Derivatives

Standardization and Exchange Trading

As I point out in *A Demon of Our Own Design*, complexity is one of the demons that makes our financial markets crisis prone. Complexity hides risks and creates unexpected linkages between markets. Derivatives are the primary source of this complexity, so to reduce the risk of crisis we must address the derivatives markets. We need a flight to simplicity.

The proposal for a centralized clearing corporation, while a welcome step, is not sufficient to do this. It may reduce counterparty concerns, but it will not provide the necessary level of standardization, transparency, price discovery and liquidity. To do that, we need to have standardized derivative products, and have those products traded on an exchange. Standardization will address the complexity of derivatives. Exchange trading will be a major improvement in the transparency and efficiency, and will foster liquidity by drawing in a wider range of speculators and liquidity suppliers. These steps will shore up the market against the structural flaws that derivative-induced complexity have created.

Nonstandard OTC Derivatives and Innovation

One stated objection to standardization and exchange trading is that if a door remains open for complex OTC derivatives, then having the standardized products out in the light

of day will only accentuate the demand for the more shadowy and opaque products. An opposing objection is that the push toward standardization will squelch innovation in the financial markets. These concerns lead to demands by some to abolish all OTC derivatives, and by others to shrink from exchange trading. There is no need to move toward either of these two extremes.

Abolishing OTC derivatives is not a wise direction for regulation. There will be legitimate reasons for customized derivatives, and no doubt innovations will emerge with broad value to the financial markets. The point is not to stifle innovation, but to assure it is directed toward an economic rather than gaming end. Nor need exchange trading move activity into the shadows. Properly executed, we can have a combination of standardized exchange-traded instruments along with the continued development of customized OTC instruments.

Standardized exchange-traded derivatives will create high hurdles for any nonstandard OTC product a bank wants to push into the market. The OTC product will have worse counterparty characteristics, be less liquid, have a higher spread, and have inferior price discovery. To overcome these disadvantages, the nonstandard OTC product will have to demonstrate substantial improvement in meeting the needs of the investor compared to the standardized product.

In addition, stricter control and disclosure can be placed on nonstandard OTC derivatives both through investor demand and by regulatory mandate. Investors may demand that derivatives taken on their behalf be of the standardized exchange-traded form, or may require that if a nonstandard alternative is employed, it first be approved by the firm's risk manager. The regulator may mandate the disclosure of such derivatives positions and require a demonstration of how these instruments are being used and why they are being used in place of the standard instruments.³ The disclosure might be public – investment

³ The argument here is not for case-by-case approval of nonstandard products, nor for a regulator to dictate which derivatives can be traded OTC. The regulator does not have to make a determination that any one derivative is being employed for bona fide hedging purposes, or that the use of an OTC derivative is in some sense legitimate. By having on-going disclosure and justification, the investors and the regulators can see emerging patterns of abuse. There will be a point where a firm's use of the nonstandard products will move beyond the norm and will start to draw questions.

firms could justifiably balk at such disclosure now, but that justification is lessened if the firms have the choice of employing exchange-traded derivatives to avoid the disclosure – or, alternatively, the disclosure can be restricted only to the regulator.⁴

Even with these hurdles, there will still be the opportunity for innovation and for the application of the more complex derivatives where their value is compelling. But I believe we will not find many instances where a complex OTC derivative is pushed forward, because for most legitimate purposes the standardized products will be found to be adequate.

Incentives for Creating Complex OTC Derivatives

The current proposal for moving derivatives onto an exchange reminds me of a similar effort I made shortly after I arrived at Morgan Stanley twenty-five years ago. I proposed a simplified structure that would have allowed the interest rate swaps that were traded at the time to be replaced by a handful of standardized instruments. I met with the head of the swap desk and others running the Fixed Income Division to propose that this structure be put forward to allow exchange trading of swaps. I thought the proposal, which would have made the markets more transparent, liquid and efficient, would be greeted warmly, even enthusiastically. Was I wrong. I had yet to appreciate the incentives the industry has to make derivatives as complex and ‘one-off’ as possible.

For the bank, the more complex and custom-made the instrument, the greater the chance the bank can price in a profit, for the simple reason that investors will not be able to readily determine its fair value. And if the bank creates a customized product, then it can also charge a higher spread when an investor comes back to trade out of the product. For

The disclosure could include standardized tagging of positions that will facilitate aggregation and analysis. In this regard, see “Mapping the Market Genome”, <http://rick.bookstaber.com/2009/02/markup-languages-and-mapping-market.html>.

⁴ Disclosure of exposures in a form that allows aggregation across firms is critical for systemic risk regulation. As it stands now, we do not have the ability to sort through the web of counterparty risk or the extent of leverage and crowding in markets. The required data is readily accessible by the regulator for exchange-traded positions, but more aggressive disclosure is required to obtain these data for OTC positions. On the need for disclosure for systemic risk management, see *Testimony of Richard Bookstaber, Submitted to the Senate of the United States, Senate Banking, Housing and Urban Affairs Subcommittee on Securities, Insurance and Investment, for the Hearing: “Risk Management and Its Implications for Systematic Risk”, June 19, 2008.*

the trader, the more complex the instrument, the more leeway he has in his operation, because it will be harder for the bank to measure his risk and price his book.⁵ And for the buyer, the more complex the instrument, the easier it is to obfuscate everything from the risk and leverage of their positions to the non-economic objectives they might have in mind.

These incentives explain why there is an ongoing arms race in innovative products and why the financial institutions might have to be pulled less than willingly into any initiative to standardize derivatives or to move derivatives from over-the-counter onto an exchange.

Conclusion: The Pace of New Regulation

We should move toward standardization and exchange trading of derivatives. We should do this because it is the reasonable direction to take, not as a reaction to the current crisis, and not predicated on whether derivatives did or did not behave in any particular way, or whether they were villains or innocent bystanders. The role played by the current crisis is to provide the impetus for action, for making improvements to the derivatives market independent of the final verdict that history passes down with respect to these recent, tumultuous years.

The arguments for standardization and exchange trading of derivatives are compelling. But there remains much we do not know. Therefore it is important to move slowly, one market at a time; learning by doing rather than pushing for quick, wholesale solutions. Because there are markets that are beyond the purview of the CFTC, indeed beyond our borders, the natural pace will be a gradual one.

⁵ This suggests compensation should be withheld until a derivatives position is closed out and the profit is realized.



Testimony

Before the Senate Agriculture Committee

On

Regulatory Reform and Derivatives Markets

June 4, 2009

**Mr. David Dines, President
Cargill Risk Management**



My name is David Dines, President of Cargill Risk Management. I am testifying on behalf of Cargill, Incorporated and have been in the hedging and risk management services industry for 15 years.

I want to thank you for the opportunity to testify today.

Cargill is an international provider of food, agricultural, and risk management products and services. As a merchandiser and processor of commodities, the company relies heavily upon efficient, competitive, and well-functioning futures markets and over-the-counter (OTC) markets.

Cargill is an extensive end-user of derivatives products, and is also active in offering risk management products and services to commercial customers and producers in the agriculture and energy markets.

One of the major challenges for policymakers and regulators is that the term “over-the-counter market” covers a vast array of products across a number of markets.

This broad definition highlights why it is extremely difficult to seek a one size fits all regulatory or legislative solution that still allows all interested parties to manage their genuine economic risks.

- **One major concern with the recent proposal by the US Treasury Department is that it appears to seek a regulatory solution for *all* OTC products in response to systemic risk posed by one particular market: credit default swaps.**

It is important to note that while we have witnessed the greatest economic crisis in 80 years, and perhaps the most volatile commodity market Cargill has ever seen, OTC contracts in the agriculture, energy, and foreign exchange markets performed well, did not create systemic risks, and in fact helped many end-users manage and hedge their risks during this very difficult time.

For the purposes of our testimony today relative to the US Treasury proposal, we will focus our comments on two categories of OTC products where Cargill is an active market participant:

- Agriculture and energy products
- Foreign exchange products

The Treasury proposal seeks to achieve four broad objectives:

1. Prevent Activities Within the OTC Markets from Posing Risk to the Financial System
2. Promoting Efficiency and Transparency Within the OTC Markets
3. Preventing Market Manipulation, Fraud, and Other Market Abuses
4. Ensuring That OTC Derivatives Are Not Marketed Inappropriately To Unsophisticated Parties

We support these stated objectives and believe that steps can be taken to meet these goals, without denying end-users’ access to an effective and competitive market. While we have not seen the specific details of the Treasury Department’s proposal, we offer these observations based on the information available under each of the specific objectives.

Objective 1: Prevent Activities Within the OTC Markets from Posing Risk to the Financial System



The Treasury Department's outline seeks to apply mandatory clearing of all standardized contracts, impose robust margin requirements, including initial margin requirements for both standardized and customized contracts.

- The imposition of mandatory clearing and mandatory margining of tailored hedges will have a significant drain on working capital at a time when capital is highly constrained and credit is in short supply. There will be a liquidity drain on those companies who have taken conservative business approaches and choose to prudently hedge their economic risks. Mandatory margining will have the unintended consequence of actually increasing financial risks as companies choose not to hedge due to working capital requirements.
- The potential magnitude of this drain on working capital should be carefully weighed by all policymakers. Cargill is a member of the National Association of Manufacturers (NAM) and has worked closely with a coalition of NAM members concerned about the ability of end-users to efficiently access the OTC market.

I would like to submit for the record a letter from the NAM on this issue, as well as a recent letter from Chesapeake Energy, an Oklahoma-based end user of OTC derivatives and the largest independent producer of US natural gas.

The Chesapeake Energy letter provides an excellent example of how restricting access to credit by imposing mandatory margining could severely drain capital that could otherwise be invested to grow a business. In the one example provided here, over \$6 billion would have been taken away from running and expanding a job-creating business, and instead be left idle in a margin account until the maturation of the OTC contract. While not posting cash, Chesapeake had pledged collateral valued at more than \$11 billion to secure their derivative counterparties.

Expand this example across all of the businesses that use OTC products and the amount of capital diverted from growing the US economy would be severe, unless companies reduced their hedging and risk management.

- There is a misconception that OTC products do not have credit provisions, and are never collateralized or margined. A significant number of OTC transactions are collateralized or margined with collateral being moved daily to adjust for the change in market value. With futures, margining terms are standardized across all participants, while in the OTC markets credit and collateral terms vary and are set according to the credit quality of the hedger.
- With regard to mandatory clearing of standardized products, defining which products are "standard" and which products are "customized" is a complex issue that must be thoroughly examined by the appropriate federal regulator to avoid disrupting market segments that continue to perform well.
- The loss of tailored hedging tools will greatly impact the ability of companies to comply with current accounting standards (Financial Accounting Standard 133). This accounting policy requires hedges to precisely match the underlying risk in order to reduce income volatility.



The Treasury Department outline also indicates that substantial capital requirements could be placed on all OTC dealers.

- While some level of capital requirements might be appropriate, there is a concern that the new regulatory framework could be developed such that only financial institutions could remain active dealers. The agriculture and energy hedging sectors both have active non-financial institution OTC dealers who offer healthy competition in the market. No non-financial institution dealers have required any taxpayer-based financial assistance from the Federal government. It would be inappropriate to eliminate these competitors from the OTC market through legislative or regulatory action.

Recommendation: *Regulatory requirements should be based on risk to the financial system and not one-size-fits-all.*

Additional monitoring and transparency in the OTC markets (agriculture, energy, foreign exchange, and interest rates) is warranted and Cargill supports these efforts, but restricting working capital through major increases in mandatory margining in these markets is counterproductive.

Improved monitoring and transparency accomplishes the goals for the objective, without the increased expense and capital demands of clearing.

Objective 2: Promoting Efficiency and Transparency Within the OTC Markets

The Treasury Department's outline seeks to impose more recordkeeping and force trades on to regulated exchanges.

Recommendation: *More record keeping and better disclosure would be helpful, although the regulator should be directed to focus on areas with the greatest risks.*

As previously mentioned, mandatory movement of activities from the OTC market to an exchange-traded market does not seem warranted in those markets that have not created systemic risks to the financial system.

Objective 3: Preventing Market Manipulation, Fraud, and Other Market Abuses

The Treasury Department's outline seeks clear authority to police fraud, market manipulation, and other market abuses and the authority to set position limits on OTC derivatives that affect a significant price discovery function with respect to futures markets.

Recommendation: *We support the CFTC having clear authority to police fraud, manipulation and other abuses.*

The Commodity Futures Trading Commission is already using its existing authority and is receiving public comment on an Advance Notice of Proposed Rulemaking to address the enforcement of position



limits, address concerns about excess speculation, and help maintain the integrity of price discovery in the futures markets.

Cargill filed public comments with the CFTC on this proposal. In our comments, we support:

- Position limits for non-commercials
- Much greater transparency and reporting for over-the-counter markets.

A graphical summary, including the highlights of the comments, is included at the end of today's testimony as Appendix A. The entire comments are on file with the CFTC, and we would be happy to distribute them to members of the Senate Agriculture Committee.

Objective 4: Ensuring That OTC Derivatives Are Not Marketed Inappropriately To Unsophisticated Parties

Recommendation: Products should be marketed and continue to be available to those parties who meet the current regulatory parameters as eligible market participants.

Summary:

1. Derivatives play an important role in helping companies manage risks. Exchange-traded derivatives are essential in price discovery and help facilitate basic risk management, while over-the-counter derivatives are essential to hedgers because they can be customized to fit a company's specific risk management needs.
2. Additional legislative and regulatory actions in the OTC market should:
 - a. Be risk-based, and not treat all products identically
 - b. Improve transparency and reporting
 - c. Seek to add minimal costs and disruptions to those products that have not posed systemic risks to the financial system
3. Mandatory clearing and margining:
 - a. Would severely reduce hedging activity
 - b. Would greatly restrict working capital at a time when it is in very short supply
 - c. Is not warranted for OTC products that have not created systemic risk
4. The CFTC, through its existing rule-making, is proposing much-needed steps and should continue to work on:
 - a. Ensuring the enforcement of position limits in related exchange-traded markets, principally agriculture and energy products
 - b. Improving the transparency and reporting of OTC products

We appreciate the opportunity to testify today and look forward to working with the Members of the Senate Agriculture Committee and other policymakers as this issue develops.



Appendix A:

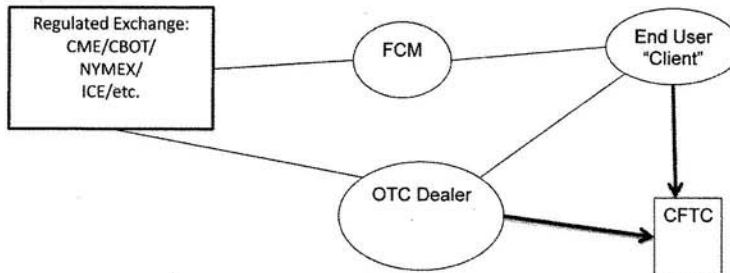
**CFTC Advance Notice of Proposed Rulemaking:
Whether to Eliminate the Bona Fide Hedge Exemption for Certain Swap Dealers and
Create a New Limited Risk Management Exemption from Speculative Position Limits**

Highlights of Cargill's Suggested Changes as Outlined in Comments on CFTC Concept Release:

1. OTC dealer reporting to the CFTC once clients reach a significant size
 - Ensures compliance with exchange-related position limits
2. End user reporting to the CFTC once their activity reaches a significant size
 - Greater transparency
 - Ensures that if multiple dealers are used, the regulator knows the activity
 - Similar to Large Trader Position Reporting requirement
3. *Bona Fide* hedge definition limited to those physically involved with underlying commodity
4. OTC exemption that allows OTC dealers to facilitate customer transactions. A speculative position limit would apply if a dealer is trading on its own behalf, and not addressing client risk.

Graphical Summary of Recommended Changes:

Bold (Blue) Lines Indicate New Reporting/Compliance





**TESTIMONY OF DANIEL A. DRISCOLL
EXECUTIVE VICE PRESIDENT AND CHIEF OPERATING OFFICER
NATIONAL FUTURES ASSOCIATION**

**BEFORE THE
COMMITTEE ON AGRICULTURE, NUTRITION & FORESTRY
UNITED STATES SENATE**

JUNE 4, 2009

My name is Daniel Driscoll, and I am Executive Vice President and Chief Operating Officer of National Futures Association. Thank you Chairman Harkin and members of the Committee for this opportunity to appear here today to present our views on closing a regulatory gap that allows fraudsters to sell unregulated OTC derivatives to retail customers.

Since 1982, NFA has been the industry-wide self-regulatory organization for the U.S. futures industry, and in 2002 it extended its regulatory programs to include retail over-the-counter forex contracts. NFA is first and foremost a customer protection organization, and we take our mission very seriously.

Congress is currently expending significant time and resources to deal with systemic risk and to create greater transparency in the OTC derivatives markets. Those are important economic issues, and we support Congress' efforts to address them. Understandably, most of the debate centers around instruments offered to and traded by large, sophisticated institutions. However, there is a burgeoning OTC derivatives market aimed at unsophisticated retail customers, who are being victimized in a completely unregulated environment.

For years, retail customers that invested in futures had all of the regulatory protections of the Commodity Exchange Act. Their trades were executed on transparent exchanges and cleared by centralized clearing organizations, their brokers had to meet the fitness standards set forth in the Act, and their brokers were regulated by the CFTC and NFA. Today, for too many customers, none of those protections apply. A number of bad court decisions have created loopholes a mile wide, and retail customers are on their own in unregulated, non-transparent OTC futures-type markets.

The main problem stems from a Seventh Circuit Court of Appeals decision in a forex fraud case brought by the CFTC. In the *Zelener* case, the District court found that retail customers had, in fact, been defrauded but that the CFTC had no jurisdiction because the contracts at issue were not futures, and the Seventh Circuit affirmed that decision. The "rolling spot" contracts in *Zelener* were marketed to retail customers for

purposes of speculation; they were sold on margin; they were routinely rolled over and over and held for long periods of time; and they were regularly offset so that delivery rarely, if ever, occurred. In *Zelener*, though, the Seventh Circuit ignored these characteristics and based its decision on the terms of the written contract between the dealer and its customers. Because the written contract in *Zelener* did not include a guaranteed right of offset, the Seventh Circuit ruled that the contracts at issue were not futures. As a result, the CFTC was unable to stop the fraud.

Zelener created the distinct possibility that, through clever draftsmanship, completely unregulated firms and individuals could sell retail customers forex contracts that looked like futures, acted like futures, and were sold like futures and could do so outside the CFTC's jurisdiction. For a short period of time, *Zelener* was just a single case addressing this issue. Since 2004, however, various Courts have continued to follow the Seventh Circuit's approach in *Zelener*, which caused the CFTC to lose enforcement cases relating to forex fraud.

A year ago, Congress closed the loophole for forex contracts. Unfortunately, the rationale of the *Zelener* decision is not limited to foreign currency products. Customers trading other commodities—such as gold and silver—are still stuck in an unregulated mine field. It's time to restore regulatory protections to all retail customers.

Back in 2007, NFA predicted that if Congress plugged the *Zelener* loophole for forex but left it open for other products, the fraudsters would simply move to *Zelener*-type contracts in other commodities. That's just what has happened. We cannot give you exact numbers, of course, because these firms are not registered. Nobody knows how widespread the fraud is, but we are aware of dozens of firms that offer *Zelener* contracts in metals or energy. Recently, we received a call from a man who had lost over \$600,000, substantially all of his savings, investing with one of these firms. We have seen a sharp increase in customer complaints and mounting customer losses involving these products since Congress closed the loophole for forex.

NFA and the exchanges have previously proposed a fix that would close the *Zelener* loophole for these non-forex products. Our proposal codifies the approach the Ninth Circuit took in *CFTC v. Co-Petro*, which was the accepted and workable state of the law until *Zelener*. In particular, our approach would create a statutory presumption that leveraged or margined transactions offered to retail customers are futures contracts unless delivery is made within seven days or the retail customer has a commercial use for the commodity. This presumption is flexible and could be overcome by showing that delivery actually occurred or that the transactions were not primarily marketed to retail customers or were not marketed to those customers as a way to speculate on price movements in the underlying commodity.

This statutory presumption would not affect the interbank currency market dominated by institutional players, nor would it affect regulated instruments like securities and banking products. It would also not apply to those retail forex contracts

that are already covered (or exempt) under Section 2(c). It would, however, effectively prohibit leveraged non-forex OTC contracts with retail customers when those contracts are used for price speculation and do not result in delivery.

I should note that NFA's proposal does not invalidate the 1985 interpretive letter issued by the CFTC's Office of General Counsel, which Monex International and similar entities rely on when selling gold and silver to their customers. That letter responded to a factual situation where the dealer purchased the physical metals from an unaffiliated bank for the full purchase price and left the metals in the bank's vault. The dealer then turned around and sold the gold or silver to a customer, who financed the purchase by borrowing money from the bank. Within two to seven days the dealer received the full purchase price and the customer received title to the metals. In these circumstances the metals were actually delivered within seven days, so the transactions would not be futures contracts under NFA's proposal.

In conclusion, while NFA supports Congress' efforts to deal with systemic risk and create greater transparency in the OTC markets, Congress should not lose sight of the very real threat to retail customers participating in another segment of these markets. This Committee can play a leading role in protecting customers from the unregulated boiler rooms that are currently taking advantage of the *Zelener* loophole for metals and energy products. We look forward to further reviewing our proposal with Committee members and staff and working with you in this important endeavor.

STATEMENT OF GARY GENSLER
CHAIRMAN, COMMODITY FUTURES TRADING COMMISSION
BEFORE THE
SENATE COMMITTEE ON AGRICULTURE, NUTRITION AND FORESTRY
June 4, 2009

Good morning Chairman Harkin, Ranking Member Chambliss, and Members of the Committee. Thank you for your unanimous vote of confidence on my recent confirmation and for inviting me to testify. I am here today testifying on behalf of the Commission.

The topic of this hearing is of utmost importance during this crucial time for our economy. We must urgently enact broad reforms to regulate over-the-counter (OTC) derivatives. Such reforms must comprehensively regulate both derivative dealers and the markets in which derivatives trade. This is vitally important for the future of our economy and the welfare of the American people. I pledge to work closely with this Committee and the Congress on these reforms to build and restore confidence in our financial regulatory system.

In addition to working toward this much needed reform, I also will work to ensure that the Commodity Futures Trading Commission (CFTC) continues to fulfill its basic mission under the Commodity Exchange Act (CEA) to protect the integrity of the futures markets. I look forward to working with you to improve the capabilities and authorities of the CFTC to ensure that both our futures markets and the OTC derivatives markets are transparent and free from fraud, manipulation and other abuses.

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, we must implement two complementary regulatory regimes: 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 clearing houses. 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, other types of market abuses, as well as to impose position limits to prevent the

burdens of excessive speculation. 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 we must explicitly regulate the institutions that deal in derivatives. 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 Commodity Exchange Act 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 recordkeeping 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. These standards also should require adherence to position limits established by the CFTC on OTC derivatives that 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 recordkeeping 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 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. We should require that all derivatives that can be moved

into central clearing be required to be cleared through regulated central clearing houses 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, 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 actions that may create significant risks.

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. This well-established practice of having the agency which regulates an exchange or trade execution facility also regulate the clearing houses for that market should continue as we extend regulations to cover the OTC derivatives market. In implementing these responsibilities it may be appropriate as well to consider possible additional information and other requirements of any systemic risk regulator that may be established by Congress.

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. These practices are similar to the way clearinghouses for futures exchanges operate.

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.

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. 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. This system might be similar to the Trade Reporting and Compliance Engine (TRACE) system currently required for timely reporting in the OTC corporate bond market.

The CFTC also should have authority to impose recordkeeping 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 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. 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.

Over the past few years, price spikes and unprecedented volatility in the commodity markets have hurt farmers, consumers and businesses. Record-high prices have not only inflicted costs upon American consumers and businesses, but record-high volatility has impaired the ability of many farmers and other businesses to use the futures markets to manage their price risks. As Chairman, I intend to ensure that the CFTC vigorously protects the integrity of the price discovery process in the futures markets and protects the public against fraud, manipulation and other abuses. I intend to ensure the agency does all it can to prevent excessive speculation from causing an undue burden on interstate commerce.

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 requirement. We will accomplish this in two ways. First, regulators should be given full authority to prevent fraud, manipulation and other abuses and to impose recordkeeping 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, the CFTC should have clear, unimpeded authority to impose recordkeeping 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 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 and other Federal regulators.

Authority

To achieve these goals, the Commodity Exchange Act should be amended to provide the CFTC with positive new authority to regulate OTC derivatives. The term "OTC derivative" should be defined, and the CFTC should be given clear authority over all such instruments. To the extent that specific types of OTC derivatives might best be regulated by other regulatory agencies, care must be taken to avoid unnecessary duplication and overlap.

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 pre-existing 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 the CFTC and other 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 CFTC with clear, unimpeded authority to impose reporting requirements and to prevent fraud, manipulation and other types of market abuses;
- Providing CFTC 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.

Beyond the need to bring broad reform to OTC derivatives dealers and markets, I would like to raise with the Committee two other important matters.

Retail fraud. In the 2008 Farm Bill the Congress clarified the CFTC's jurisdiction over fraud in retail foreign currency transactions. Since the passage of the Farm Bill, unscrupulous firms have been offering the same type of fraudulent "rolling spot" commodity contracts that were prohibited in the Farm Bill, but in other commodities that were not covered by the bill. Since the enactment of the Farm Bill, the CFTC has received more than 50 complaints from the public relating to potential fraud from such contracts. The regulatory reform package should include a provision to expand the CFTC's jurisdiction over this type of retail fraud to all types of commodities.

Foreign Boards of Trade. As part of regulatory reform legislation, the Congress should also provide the CFTC with clear statutory authority to ensure that traders that are trading on a foreign board of trade through trading terminals in the U.S. comply with the same U.S. position limits and reporting requirements when trading a foreign contract that settles against any price of a contract traded on a U.S. exchange. Foreign boards of trade should not be permitted to operate in the U.S. unless they impose and enforce comparable position limits on these contracts and provide comparable trading data to the CFTC as is regularly provided by the U.S. exchanges. This is often referred to as "closing the London loophole." Traders in the U.S. should not be able to avoid U.S. position limits or reporting requirements by moving their trades onto a foreign exchange.

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 the CFTC and other federal agencies 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 questions.

**Testimony of Mark Lenczowski
JPMorgan Chase & Co. (JPMC)
Senate Agriculture Committee
June 4, 2009**

Chairman Harkin, Ranking Member Chambliss, and Members of the Committee, my name is Mark Lenczowski, and I am a Managing Director and Assistant General Counsel at JPMorgan Chase & Co. I provide legal advice to our over-the-counter (OTC) derivatives businesses, primarily with respect to interest rate, foreign exchange and commodity transactions. Thank you for inviting me to testify at today's hearing.

Benefits of OTC Derivatives to Our Economy

For the past 30 years, American companies have used OTC derivatives to manage interest rate, currency, and commodity risk. Beginning in the early 1970s, global economic forces began to affect American companies, regardless of business type or scope of operations, and two key events are especially noteworthy:

- (1) the United States dropped the gold standard in 1971, which led to floating exchange rates;
- (2) severe oil price shocks led to increased volatility in commodity prices and interest rates.

These events presented complex financial risk management challenges that, left unmanaged, would have negatively affected many companies' financial performance and possibly even their viability. In response to marketplace demand, financial products, such as futures contracts and OTC derivatives, were developed to provide companies with tailored and flexible risk management tools.

Since their inception, OTC derivatives have been used by companies that are exposed to risks in the course of their day-to-day operations that they are unable to manage themselves. As a result, interest rate, currency and commodities derivatives became important and commonplace tools for these companies in 1980s and 1990s. Credit derivatives were developed over the past 10-12 years and -- when used responsibly -- have served a similar, useful role in managing credit risk. Since then, OTC derivatives have become a vital part of our economy. According to the most recent data, 92% of the largest American companies and over 50% of mid-sized companies use OTC products to hedge risk.

The role of entities like J.P. Morgan in the OTC derivatives market is to act as financial intermediaries. In much the same way financial institutions act as a go-between with investors seeking returns and borrowers seeking capital in the OTC derivatives market, we work with companies and other end-users looking to manage their risk with entities looking to take on those risks.

In this role, we work with many American and global companies and help them manage their risks. Recently, many of our clients have expressed great concern on the affects of the proposed legislative and regulatory changes on their businesses. Clients such as BP, Chesapeake, Constellation and Cargill are very worried about the unintended consequences of these policy proposals, particularly at a time when our economy remains fragile. In our view,

the effect of forcing such companies to face an exchange or a clearinghouse would limit their ability to manage the risks they incur in operating their business and have negative financial consequences for them via increased collateral and margin posting. These unintended repercussions have the potential to harm an economic recovery. We welcome the opportunity to discuss these issues today.

Let me first discuss in detail some of the benefits of OTC derivatives.

(1) Tailored Risk Management

Companies today demand customized solutions for risk management, and the OTC market provides them.

Interest rates

As an example, a typical OTC derivative transaction might involve a company that is borrowing in the loan market at a floating interest rate. This product is similar to a variable rate home mortgage. To protect themselves against the risk that interest rate will rise, the company will enter into an interest rate swap. These swaps generally enable the company to pay an amount tied to a fixed interest rate, and the financial institution will pay an amount tied to the floating rate of the loan. Similar to the homeowner in a variable rate mortgage, if rates rise steeply, they have some protection. Every aspect of the swap can be tailored to the company's needs to ensure that the company is able to match its risks exactly. It is that customization that makes OTC derivatives so useful to companies.

Currencies and commodities

OTC transactions are used in a similar manner by a wide variety of companies seeking to manage volatile commodity prices and foreign exchange fluctuations.

For example, a company may be importing raw materials into the United States to manufacture a product that is sold all around the world – such as aircraft. That American company will want to protect themselves and their shareholders from bearing undue risk if the price of the dollar fluctuates against the currencies it uses to buy raw materials. With no change to its business model, it could find itself in a situation where the price to produce the planes is higher than the profit it makes from selling those planes, simply due to exchange fluctuations outside its control. It could also find itself exposed to changing prices in commodity raw materials, such as steel or fuel. Any responsible company would act to prevent putting itself in this kind of jeopardy and its employees, clients and shareholders at great risk.

In this example, the aircraft company will purchase a currency derivative in the OTC foreign exchange market that allows it to lock in the exchange rate for each of the currencies that it is exposed to. The company would also likely purchase a commodity derivative that will lock in the price of the raw materials. These transactions allow the aircraft company to focus on its core competency – building planes – rather than fearing foreign exchange or commodity price risk.

It is important to note that although interest rate and currency derivatives currently are offered

on US exchanges, few corporations use these exchange-traded contracts for two main reasons:

- Exchange-traded products are, by necessity, highly standardized and not customized. As a result, companies are unable to match their unique risks to the products that are offered on exchanges; and
- Exchange/clearinghouse collateral requirements are onerous. Clearinghouses (including those that support exchanges) require that participants pledge only liquid collateral, such as cash or short-term government securities, to support their positions in the market without regard to the credit quality of the company. However, companies need their most liquid assets for their working capital and investment purposes. Requiring a company to post cash as collateral means taking that cash out of the company's core business, which hurts the company and its employees.

(2) Collateral

In addition to customization, the other main benefit of OTC derivatives is flexibility with respect to its ability to provide collateral to support its derivative transaction. In the interest rate swap example, the financial institution may ask the company to provide credit support to mitigate the credit risk that it faces in entering into this transaction. Most often, that credit support comes in the same form as the collateral provided for the loan agreement. Thus, if the loan agreement is secured by property, fixtures and/or receivables, that same collateral would also be used to secure the interest rate swap. As a result, the company does not have to incur additional costs in obtaining and administering credit support for the interest rate swap.

The flexibility of the credit support arrangement provided by OTC products is best highlighted by contrasting it to the posting requirements the company would have faced had it executed its interest rate swap transaction on an exchange. The CME Group and its predecessor institutions pioneered risk management products and currently trade a wide variety of interest rate futures and options contracts, including interest rate swap futures, and all companies are free to enter into these contracts. (In fact, JPMC is one of the biggest users of these exchange-traded risk management contracts). However, the exchange requires a high degree of standardization in the contracts it trades, and requires that transacting entities post cash or cash-equivalent collateral to support their trades. In addition, collateral calls may be made up to twice daily, to account for market fluctuations. This requirement of readily marketable collateral is necessary to ensure the clearinghouse is protected from risk; the clearinghouse or clearing member must instantaneously apply that collateral in the event of a participant default.

A clearinghouse is a very highly collateralized central counterparty that becomes the buyer to every seller and the seller to every buyer. In order for the clearinghouse to perform its credit risk mitigating role in the financial system, it is essential for the clearinghouse to be able to calculate accurately how much collateral it needs from a participant to secure the transactions on which it faces that participant. This can only be done for derivatives that are sufficiently standardized and liquid to enable the clearinghouse to obtain prices quickly so that it can calculate how much collateral is needed. This cannot be done with illiquid or non-standard transactions.

Thus, in the example above, if the company had executed its hedge on the exchange, it would have had to post cash or readily marketable collateral upfront and up to twice daily thereafter.

By entering into the transaction in the OTC market, the company is able to use the same collateral that it already posted to secure its loan, with no additional liquidity demands or administrative burdens. This collateral is high quality, being the basis for the extension of credit in the loan agreement, but posting it does not affect the company's operations or liquidity. This flexibility to use various forms of credit support significantly benefits companies.

(3) Basis Risk

Another benefit to companies is that unlike exchange-traded derivatives, OTC derivatives match very closely the actual risks that companies need to manage. Without this fit, companies are exposed to so-called "basis risk" -- that is, the difference between the risk that is incurred and the benefit of the hedge. To the extent that there is misalignment of the risk and the hedge, companies will bear the risk of the difference, which could be significant, depending upon the volatility of prices and the level of standardization of the hedge. In fact, the precision of the "fit" determines whether companies qualify for hedge accounting, delineated in FAS 133, which has been developed to address the accounting for hedging transactions. Because of the tailored solutions available through the OTC market, using OTC derivatives is the easiest and most effective way for companies to achieve hedge accounting. Without hedge accounting, companies will see significant volatility in their financial reporting, obscuring the true value of their business.

While we believe that exchanges play an invaluable role, not all entities can or want to trade on exchange. Currently, end-users have the choice of entering into their hedging transactions on an exchange or in the OTC market. For most end-users, OTC derivatives are critical to their risk management, and risk management is critical to their operations in volatile times. We believe that end-users should continue to be allowed to have the choice to use these products.

Problems with use of OTC Derivatives

The discussion of the benefits of OTC derivatives is not to deny that there have been problems with their use, and it is essential that policymakers examine the causes of the financial crisis to ensure it is never repeated. While JPMC does not believe that OTC derivatives were the cause of the financial crisis, it is clear that AIG's near-failure and the consequent investment by US taxpayers involved a subset of credit default swaps as well as poor risk management by its counterparties. In addition, the regulatory framework did not subject AIG to a thorough, comprehensive review--the kind of regulatory oversight to which a national or state bank's derivatives activities are currently subject.

Despite the failures at AIG, it is critical to point out that the markets in these products have continued to be available for end-users, and defaults have been processed as the market infrastructure envisioned.¹ Nonetheless, we believe there is an urgent need for reform to

¹ For example, Lehman Brothers had a portfolio of OTC interest rate derivatives transactions that had an aggregate notional value of \$9 trillion and that was cleared through LCH Clearnet, a clearinghouse that clears the majority of OTC interest rate swap transactions entered into between financial intermediaries. Upon Lehman's bankruptcy, the clearinghouse auctioned the portfolio, pursuant to its rules, and eliminated the market risk without having to tap its guaranty fund. In addition, Lehman's bankruptcy triggered settlement of credit default swaps that referenced Lehman. It is estimated that there was up to \$400 billion of such transactions outstanding, in gross notional terms, but at settlement, after netting all positions, the

address systemic risks that have been revealed by the financial crisis and that reform should encompass OTC derivatives.

Proposals

JPMC believes it is imperative that the root causes of the financial crisis be addressed and that regulatory reform address systemic risk while preserving the benefits of OTC derivatives for end-users. To that end, we propose the following:

- **Financial regulation should be considered on the basis of function not form.** That is, the appropriate regulatory framework should be determined on the basis of what an entity does rather than what legal entity form it takes.
- **A systemic risk regulator should oversee all systemically significant financial institutions and activities.** We believe it is necessary to establish a systemic risk regulator charged with the responsibility to oversee all systemically significant financial institutions and that this regulator should have the capability to impose capital requirements on these institutions, to oversee their transactions with each other and with their customers, and to impose conditions on those transactions, such as collateral requirements.
- **All standardized OTC derivatives transactions between systemically significant financial institutions or professional intermediaries should be cleared through a regulated clearinghouse.** The standardization requirement is necessary because, as discussed above, only transactions with a degree of standardization are capable of being risk-managed by the clearinghouse and thus be eligible for clearing.
- **Enhanced reporting requirements should apply to all OTC derivatives transactions.** For cleared transactions, the clearinghouse would have data on aggregate trading volumes and positions as well as specific counterparty information. Non-cleared transactions should be reported to a trade repository on a frequent basis, and the repository should publish aggregate market data. The systemic risk regulator as well as market regulators such as the CFTC or SEC should have access to the trade-specific data, and regulators should also have the ability to request more detailed information as required.

Industry Actions

In addition to these proposals for federal legislative action, we believe that financial intermediaries can and should act in concert with regulators to begin to provide a more effective framework for the clearing of OTC derivatives products. Clearing of clearing-eligible transactions provides additional stability to the American financial system. By way of example, in the interest rate swap market, we clear 70% of new transactions. A significant portion of credit default swaps (CDS) have become standardized over time, and we have worked since

total payments owed were between \$6 and \$8 billion dollars. The calculation and payment process occurred in an orderly manner with no reported problems.

2005 with other financial institutions and the Federal Reserve to establish a central counterparty (CCP) to clear standardized CDS. The ICE Trust clearinghouse launched on March 9th and has begun clearing CDS. We anticipate that a significant majority of dealer-to dealer CDS trading volume will ultimately be cleared as products are migrated to the clearinghouse. In the commodity derivatives market, we clear a significant amount of our inter-dealer OTC derivatives as well.

CDS Clearing

As the ICE Trust clears more clearing eligible CDS contracts, we anticipate that in the near future the large majority of dealer to dealer clearing eligible CDS contracts will be cleared as a matter of routine. Clearing is a highly transparent process, and anyone with access to the internet can view data free of charge. The data relates to daily volume traded, as well as the price used by the clearinghouse for calculating how much collateral the clearinghouse will require from each dealer. The links to the websites showing that data:

<https://www.theice.com/marketdata/reportcenter/reports.htm?reportId=98>
<http://www.markit.com/information/products/cds/cds-page.html>

Interest Rates Clearing

Currently this market clears using the London-based LCH SwapClear service. For outstanding trades as at the close of 2008, SwapClear clears approximately \$160 trillion in notional, which equates to roughly 50% of inter-dealer swap trades globally.

Commodities Clearing

During the three month period ending in February 2009, OTC commodity derivatives dealers cleared on average approximately 40% of their OTC energy derivatives transactions and 35% of other commodity derivatives (excluding metals and agricultural products). We anticipate these percentages will increase over time.

FX Clearing

Clearing has not been an industry practice because FX/currency OTC contracts tend to have shorter maturities, which generally decreases counterparty risk, and counterparty risk is the primary driver for the development of clearinghouses. However, discussions on this have begun among dealers and regulators.

JPMC is committed to working with Congress, regulators and other industry participants to ensure that an appropriate regulatory framework for derivatives is implemented. I appreciate the opportunity to testify and look forward to your questions.

Testimony of

**Michael W. Masters
Managing Member / Portfolio Manager
Masters Capital Management, LLC**

before the

**Committee on Agriculture, Nutrition and Forestry
United States Senate**

June 4, 2009

Testimony of Michael W. Masters - Senate Agriculture Committee - June 4, 2009

Good morning, Chairman Harkin, Ranking Member Chambliss and Members of this Committee. I welcome the opportunity to appear before you today and testify on the very important topic of derivatives regulation.

EXECUTIVE SUMMARY

The derivatives markets present Congress, financial regulators and the Obama Administration with two very critical and very distinct problems. The first problem involves **systemic risk**, the risk of the world's financial system crashing, as we nearly experienced in the last four months of 2008. The second problem involves **excessive speculation**, whereby price bubbles occur in consumable commodity derivatives markets, pumping up the prices that Americans pay to feed their families, fuel their cars and heat their homes. While excessive speculation is not new, it has given rise to the very serious issue of **passive "investment"** in derivatives on consumable commodities.

The **systemic risk** problem can be virtually eliminated by mandatory exchange clearing with novation and daily margin posting. Nearly all over-the-counter (OTC) derivatives can clear through a Designated Clearing Organization (DCO). My testimony will detail exactly what elements of clearing are required to eliminate the risk to the financial system as a whole.

The **excessive speculation** problem can be eliminated by imposing aggregate speculative position limits. These limits must cover all trading venues and apply at the control entity level. Fifteen years ago almost all derivatives trading for consumable commodities such as crude oil, copper and corn took place on fully regulated futures exchanges where each commodity had a single liquid contract with strict speculative position limits in place. Today, derivatives trading on consumable commodities takes place across multiple venues. In order to effectively impose aggregate speculative position limits, all of those venues must be regulated equally, which will require closing all of the loopholes that have been opened up over the last 15 years.

To address the problem of **passive "investment"** in derivatives on consumable commodities, policymakers must first understand the critical distinction between financial derivatives and derivatives on consumable commodities. Once that is understood, it will become clear that the solution to the passive investment problem is the severe restriction of such damaging buy-and-hold "investment" strategies.

CURRENT BACKDROP

Near Collapse of the World Financial System

The world financial system, with Wall Street at its core, teetered on the brink of collapse during the last four months of 2008. This near meltdown had a catastrophic effect on our nation's economy, causing the loss of trillions of dollars in retirement savings and millions of American jobs, and requiring trillions of dollars in taxpayer money to flow to Wall Street to avoid a complete collapse.

The sums of money that have flowed to Wall Street during this crisis are almost beyond comprehension. The United States has doled out more money to fix Wall Street than we spent to fight all the wars in our nation's history, including World War I, World War II and the War in Iraq.

Many, including President Obama, have referred to this as the greatest economic crisis since the Great Depression. Congress owes it to the American people to understand and eliminate the existing weaknesses in our financial system in order to ensure that Wall Street never inflicts this kind of pain upon Main Street again.

The 2008 Bubble in Food and Energy Prices

The rapid deterioration of credit markets, which pushed our financial system to the brink, was greatly exacerbated by the meteoric and unjustified rise in food and energy prices during 2008. I testified extensively last year on the role of speculation in driving up the prices of life's basic necessities and the damaging effects that this had on our nation's economy. Time does not permit me to share all those facts and figures this morning, but I would refer you to my previous testimonies and the three reports that I have co-authored on the subject.¹

At this time, however, I would like to share a few key observations related specifically to the price of oil. According to the National Bureau of Economic

¹ May 20, 2008 – Testimony before Senate Homeland Security Committee
June 23, 2008 – Testimony before House Energy Subcommittee
June 24, 2008 – Testimony before Senate Homeland Security Committee
July 31, 2008 – Report entitled "The Accidental Hunt Brothers: How Institutional Investors Are Driving Up Food and Energy Prices"
September 10, 2008 – Report entitled "The Accidental Hunt Brothers – Act 2: Index Speculators Have Been a Major Cause of the Recent Drop in Oil Prices"
September 16, 2008 - Testimony before Senate Energy Subcommittee
February 4, 2009 – Report entitled "The 2008 Commodities Bubble: Assessing the Damage to the United States and Its Citizens"
February 4, 2009 – Testimony before House Agriculture Committee
All three reports can be downloaded from www.accidentalthuntbrothers.com.

Testimony of Michael W. Masters - Senate Agriculture Committee - June 4, 2009

Research (NBER), the United States entered an economic recession in December of 2007.² So U.S. economic output was dropping during the first six months of 2008. During that time, the worldwide supply of oil was increasing and the worldwide demand for oil was decreasing.³ With the world's largest oil consumer in an economic recession and with supply rising and demand falling, the price of oil should have been falling. Instead, oil defied the economic recession and defied the laws of supply and demand and rose an astronomical \$50 per barrel from the mid-\$90s to a peak of \$147 per barrel in just six months.

Beginning in mid-July, the oil bubble popped and the price of oil tumbled over \$110 per barrel from the mid-\$140s to a low of \$33 per barrel in less than six months. Never before in history has the price of oil fallen so far or so fast. Tim Evans, who is an energy analyst with Citigroup, summed it up the best, saying, "This is a market that is basically returning to the price level of a year ago, which it arguably should never have left, . . . We pumped up a big bubble, expanded it to an impressive dimension, and now it is popped and we have bubble gum in our hair."⁴

As I have documented extensively in my reports and previous testimonies, I believe the major factor behind this bubble in oil prices was the flow of speculative money into and out of the oil futures market.

The Potential 2009 Bubble in Oil Prices

While the threat of Congressional action in the summer of 2008 might have been a major catalyst for popping last year's speculative bubble in oil, nothing was actually done by Congress to put an end to the problem of excessive speculation. As a result, there is nothing to prevent another bubble in oil prices in 2009. In fact, signs of another possible bubble are already beginning to appear.

According to the Energy Information Administration (EIA), the available supply of crude oil in the United States is at a 20-year high, while the demand for crude oil is at a 10-year low.⁵ The International Energy Agency (IEA) sees a similarly bleak supply and demand outlook for the world as a whole.⁶ And yet, despite this glut of unwanted oil, the price has risen an amazing 85% per barrel from the mid-\$30s to mid-\$60s. In fact, oil prices increased more in the month of May than in

² "Determination of the December 2007 Peak in Economic Activity," Business Cycle Dating Committee, National Bureau of Economic Research, November 11, 2008. <http://www.nber.org/cycles/dec2008.html>

³ "World Oil Balance 2004-2008," Energy Information Association - United States Department of Energy, April 13, 2009. <http://www.eia.doe.gov/emeu/ipsr/t21.xls>

⁴ "The Official Demise Of The Oil Bubble," David Gaffen, Wall Street Journal, October 10, 2008.

⁵ "Are Wall Street speculators driving up gasoline prices?" Kevin G. Hall, McClatchy Newspapers, May 20, 2009.

⁶ "Investor Hopes for Rising Oil Demand Aren't Borne Out by Reality," Ben Casselman, Wall Street Journal, June 1, 2009.

Testimony of Michael W. Masters - Senate Agriculture Committee - June 4, 2009

any other month for the last 10 years. How is this possible, given our current economic woes and the tremendously negative supply and demand picture?

There has been a chorus of voices from market participants, economists and even OPEC, squarely pinning the blame on speculators for unjustifiably driving oil prices higher.⁷ Today, the price of oil is determined not primarily by the familiar laws of supply and demand, but largely by the trading desks of large Wall Street institutions.

If Congress allows this to continue, then once again oil prices threaten to throw our economy back into a double-dip recession, squashing all of the Obama Administration's attempts to revive our economy. Your constituents are flat on their backs financially and will not tolerate gasoline prices rising to \$3 or \$4 per gallon. High energy prices pose a threat to the things this Congress is trying to achieve - climate change, health care, et cetera - because all of those initiatives will be deemed too expensive.

Something must be done. Congress must act now before the U.S. economy is once again brought to its knees.

PROBLEM ONE: SYSTEMIC RISK

There were many factors that led to the rapid deterioration in credit markets and large losses on Wall Street during 2008. There was, however, one single factor that threatened to bring down the financial system as a whole. That was the interlocking web of over-the-counter (OTC) derivatives exposures amongst the biggest Wall Street swaps dealers. Many financial institutions might have gone bankrupt or suffered severe losses, but the system as a whole would not have been imperiled were it not for these completely unregulated dark markets.

OTC derivatives are bilateral contracts entered into between swaps dealers and their customers and between swaps dealers and each other. These contracts are agreements to pay one another certain amounts of money based on the direction of some price series that the contract references. OTC derivatives can encompass interest rates, credit spreads, equities, foreign exchange, commodities and even things as intangible as the weather.

Embedded in every OTC derivative is a credit exposure between the two counterparties based on the likelihood that each counterparty will be able to pay if their bets turn sour. This credit component is a major concern, because often little or no margin collateral is required to be posted to enter into these transactions. For this reason, the major money center banks with the best credit

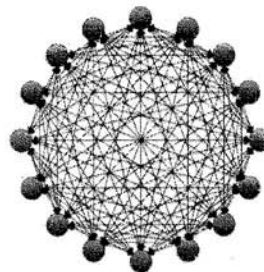
⁷ "OPEC Calls for Curbing Oil Speculation, Blames Funds (Update2)," Maher Chmaytelli, Bloomberg, January 28, 2009.

Testimony of Michael W. Masters - Senate Agriculture Committee - June 4, 2009

ratings are also the largest swaps dealers, because they are the most sought-after counterparties.

The larger a swap dealer is, the more exposures they have to various counterparties and the larger the size of those individual exposures. Since there is a great deal of trading amongst swaps dealers, there is an interlocking web of very large exposures amongst the 20–30 largest swaps dealers.

Graphical Illustration of
Interlocking Web of Exposures



At the peak in 2008 the notional amount of OTC derivatives contracts outstanding totaled over \$684 trillion.⁸ These positions represented an extreme amount of leverage, as very little margin collateral backed up these huge bets.

When Lehman Brothers went bankrupt, many of the major swaps dealers, as well as Lehman Brothers' swaps customers, immediately lost large sums of money that they were owed. At that point, every swaps dealer radically reevaluated the creditworthiness of their counterparties and questioned who might be the next to fail.

While swaps dealers knew the extent of their own exposures, they did not know the extent of anyone else's exposure. They did not know if one of their counterparties lost so much money to Lehman Brothers that they, too, might be forced to file bankruptcy. Not knowing this information, their self-preservation instinct forced them to reduce all their counterparty exposures as much as possible, since they did not know who was viable and who was bankrupt. This phenomenon was multiplied as all of the swaps dealers' customers took the same actions to limit their exposures. The net effect was to force the OTC derivatives market to come to a grinding halt.

This unregulated shadow banking system, as it has been called, was effectively destroyed, which threatened to destroy the regulated financial system with it. At this point, regulators were forced to pump trillions of dollars into the shadow banking system to allow OTC derivatives dealers to make each other whole on their bets. This was necessary to prevent a domino effect of dealer collapses that would have destroyed the world's financial system.

⁸ Bank for International Settlements, "Semiannual OTC Derivatives Statistics," June 2008.
<http://www.bis.org/statistics/derstats.htm>.

Testimony of Michael W. Masters - Senate Agriculture Committee - June 4, 2009

The most notorious of these dealers has been AIG. AIG is not even a bank, but the Federal Reserve was forced to bail them out because if the Fed had allowed AIG to go under, they would have dragged the whole financial system with them.

SOLUTION: MANDATORY EXCHANGE CLEARING

The risk of a financial system collapse must be eliminated, not regulated.

The U.S. does not need a Systemic Risk Regulator. We need regulation that eliminates the risk to the system. A fundamental premise of finance is that return follows risk. Wall Street swaps dealers should not be allowed to earn an outsized return by putting our financial system at risk.

The problems inherent in the shadow financial system were two-fold:

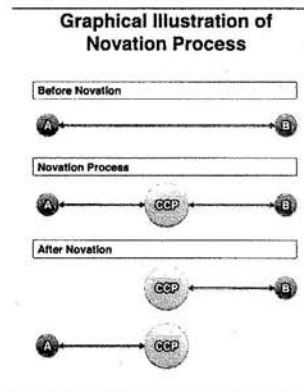
(1) The interlocking web of very large exposures between the major swaps dealers created the potential for a domino effect, wherein the failure of one dealer could lead to the failure of all dealers.

(2) Losses did not have to be very high in order to force the first domino to fall, due to the extreme leverage that characterized those positions. This leverage was the result of requiring little or no margin collateral to be posted to insure those bets.

Everyone agrees that clearing needs to take place in order to increase the transparency of OTC derivatives markets. But not all clearing is created equal, and Congress must mandate that all OTC derivatives clear through a Designated Clearing Organization (DCO).

This clearing process must include two important provisions in order to counteract the two inherent problems in the shadow financial system. First, clearing must involve novation, wherein the DCO becomes the Central Counterparty (CCP) to both sides of the trade. And second, clearing must involve daily margin posting wherein the DCO/CCP collects daily margin variation payments from those dealers whose bets are going against them.

As an example, if Bank A enters into an interest rate swap with Bank B, then once that swap agreement clears, with novation, through the CCP, then the CCP becomes the counterparty to both

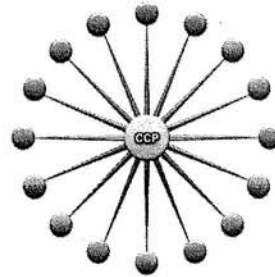


Testimony of Michael W. Masters - Senate Agriculture Committee - June 4, 2009

Bank A and Bank B. The result is that Bank A and Bank B are no longer counterparties to each other.

By insisting upon novation, the interlocking web of exposures amongst swaps dealers is eliminated, because every dealer's exposure is to the DCO/CCP. Another swaps dealer can go bankrupt and it will not affect any of the other dealers because they only have one counterparty – the Central Counterparty.

Graphical Illustration of Swaps Market with Central Counterparty (CCP)



To protect itself, the CCP will require that margin collateral be posted with the initial trade. The CCP will further require that additional margin collateral be posted on a daily basis as market prices fluctuate and those bets result in profits or losses.

As an example, on a \$100 million interest rate swap, each counterparty might have to post \$8 million (the actual amount will be determined by the riskiness of the swaps contract). Then, if at the end of any day, one counterparty is approaching an \$8 million loss on their position, the Central Counterparty will require them to post another \$8 million in order to continually ensure that they have the money to cover their bets.

If this system had been in place last year, then AIG would never have been forced to the brink of bankruptcy. AIG had been putting aside very little margin with which to pay its bets. When AIG's credit rating was downgraded and it was forced to post margin, it did not have the cash to do it. This liquidity squeeze could have been completely avoided if AIG's OTC derivatives trades had cleared with novation through a DCO that required them to post daily margin.

Wall Street Will Oppose These Steps

Recently, the New York Times and the Wall Street Journal have featured articles about what Wall Street is trying to do right now to block efforts at derivatives legislation which, if passed, will cut into their profitable swaps dealing business.⁹ There are three reasons why Wall Street does not like the idea of mandatory exchange clearing of all OTC derivatives.

First, though they express a desire for transparency and got burned last year by the lack of transparency, they know that with greater the transparency comes

⁹ "In Crisis, Banks Dig In for Fight Against Rules," Gretchen Morgenson and Don Van Natta, New York Times, May 31, 2009.

"Banks Seek Role in Bid to Overhaul Derivatives," Serena Ng, Wall Street Journal, May 29, 2009

Testimony of Michael W. Masters - Senate Agriculture Committee - June 4, 2009

narrower bid-ask spreads. As long as they can keep their clients in the dark as to what the true prices are for swaps, the longer they can charge their clients a substantial premium for entering and exiting trades.

Second, once all OTC derivatives are mandated to clear with novation (so that the DCO also becomes the CCP), their credit ratings will no longer be a competitive advantage. They will lose oligopoly pricing power because any two counterparties can trade, regardless of their respective credit ratings, since the CCP becomes the ultimate counterparty to all trades.

Third, they will lose access to unlimited leverage, and leverage ratios will have to come down from 30x or more to something closer to 12x. This means additional financing costs for each trade, which will cut into profitability.

Appropriate Standards for What Must Clear

Wall Street will seek to block mandatory exchange clearing by arguing that swaps are highly customized and that the vast majority of swaps cannot clear. While swaps might have certain elements of customization, they are, by their very nature, more standardized than Wall Street wants to admit.

Almost every OTC derivatives agreement references some published third party pricing service. As an example, for interest rate swaps it is often the London Interbank Offered Rate published by the British Bankers Association. This makes a swap based on LIBOR largely fungible with another swap that references LIBOR. After all, if these swaps were all unique then they could never be traded back and forth between swaps dealers.

For that reason, the standard that regulators should adopt for determining whether or not OTC derivatives should clear is not one of standardization versus customization but rather one of clearable versus non-clearable.

This standard was presented very clearly and forcefully by Chairman Gensler of the Commodities Futures Trading Commission (CFTC) during his confirmation hearing in front of this committee.¹⁰ He said repeatedly that if an OTC derivative can clear, then it should clear. This standard was reiterated by Treasury Secretary Geithner in his letter to Congress outlining the Administration's plans for derivatives regulation, where he said "if an OTC derivative is accepted for clearing by one or more fully regulated CCPs, it should create a presumption that it is a standardized contract and thus required to be cleared."¹¹

¹⁰ Senate Agriculture Hearing, February 25, 2009

¹¹ Letter to Senate Majority Leader Harry Reid from Treasury Secretary Timothy Geithner, May 13, 2009. www.financialstability.gov/docs/OTCletter.pdf

Testimony of Michael W. Masters - Senate Agriculture Committee - June 4, 2009

Derivatives Clearing Organizations regulated by the CFTC have a more than 140-year history of serving as a Central Counterparty. They know which OTC derivatives are standardized and clearable compared with those that are customized and unclearable. As the CCP, they will not clear anything that they cannot value or assess the risk upon. DCOs can be trusted to not clear anything that is customized to the point that it should not clear. Congress will find that the vast majority of OTC derivatives can clear with novation through DCOs.

For the highly customized OTC derivatives that cannot clear, there is a very strong question as to their utility and their social value. Why would someone need to enter into a swap agreement that is so esoteric and inscrutable that a DCO is not willing to touch it? Given the extreme risk associated with such exotic (I would even say toxic) derivatives, banking regulators should require that those derivatives carry capital charges of 50% or more. Then, if a bank enters into a \$100 million exotic unclearable swap, they would be required to set aside \$50 million in capital to cover any potential losses arising from that bet.

Wall Street will try to shift the debate to standardized vs. customized in order to avoid clearing. Congress has the responsibility to make clearable vs. non-clearable the right standard.

CRITICAL DISTINCTION: FINANCIAL DERIVATIVES VERSUS DERIVATIVES ON CONSUMABLE COMMODITIES

Financial instruments are things like stocks and bonds that investors hold in order to receive dividends, interest, cash flows, etc. Because of these associated cash flows these instruments have intrinsic value as investments. Financial instruments are designed to be held (often for the long term) by investors in a portfolio. Stocks, bonds and other financial instruments are issued in the capital markets by corporations for the purposes of funding daily operations and making large project investments for future growth.

Commodities are things like crude oil, copper and corn that are produced from the earth or produced from things that are produced from the earth. The value that human beings derive from commodities comes from their ability to be consumed. Commodities are essential to our economy (like energy) or essential to life itself (like food). Modern society cannot survive without the ability to consume commodities.

Derivatives are financial contracts that derive their value from an underlying asset. Derivatives exist on financial instruments as well as on consumable commodities. The U.S. derivatives markets on consumable commodities date back to 1865; derivatives markets on financial instruments were established over

Testimony of Michael W. Masters - Senate Agriculture Committee - June 4, 2009

100 years later when the first foreign currency contracts began trading in the early 1970s.

Financial derivatives quickly came to dwarf derivatives on consumable commodities. In fact, in June of 2008 when there were \$684 trillion in outstanding OTC derivatives contracts, only \$12.6 trillion was on consumable commodities (less than 2%).¹² With this proliferation, market participants and regulators have lost sight of the critical differences between financial derivatives and derivatives on consumable commodities.

In the financial derivatives markets, every participant is a speculator. Therefore, there is no such thing as "excessive speculation" in financial derivatives. Investors can use financial derivatives to hedge price risk related to underlying financial instruments in their portfolios. An example would be an equity mutual fund manager who might sell S&P 500 futures to reduce his exposure to market risk. Investors can also use financial derivatives to take on price risk. That same equity mutual fund manager might buy S&P 500 futures when he receives an influx of investor cash to maintain market exposure while he is working into the individual stock positions.

In the derivatives market for consumable commodities, in contrast, there are two completely distinct classes of market participants: bona fide hedgers and speculators. Bona fide hedgers are the actual producers and consumers of the physical commodities. They come to the commodities derivatives markets with inherent price risk from their underlying businesses, which they seek to reduce or eliminate. This is achieved when a producer who needs to sell enters into a contract with a consumer who needs to buy. This way both the producer and consumer agree to a future price and thereby eliminate their price risk.

Unlike bona fide physical hedgers, speculators in the derivatives market for consumable commodities have no business in the underlying commodity and therefore no price risk to hedge. If they do not want to assume price risk then their choice is simple, they simply do not transact in these markets. Speculators can always avoid price risk by simply not transacting.

Bona fide physical hedgers do not have that luxury. They provide a vital service to the worldwide economy by producing the essential commodities that the world needs to consume to survive.

In 1936, recognizing that the derivatives market for consumable commodities was created solely for the benefit of bona fide physical hedgers, Congress enacted the Commodity Exchange Act. This legislation allowed for regulators to

¹² Bank for International Settlements, "Semiannual OTC Derivatives Statistics," June 2008. <http://www.bis.org/statistics/derstats.htm>. Please note these figures do not include gold or other precious metals.

Testimony of Michael W. Masters - Senate Agriculture Committee - June 4, 2009

police the commodities futures markets for fraud, manipulation and excessive speculation.

Congress might have banned speculators from the commodities futures markets completely, but it was believed that a limited amount of speculation in the markets was necessary. Speculators were needed on the floor of the commodities futures exchanges so that when sell orders were transmitted via telegraph to the exchange floor, if they did not match up immediately with a comparable buy order (or vice versa) then the crowd of locals could fill those orders, buying and selling and balancing out the needs of producers and consumers. The locals in the pits acted essentially like middlemen or market-makers, similar to the way specialists operated on the New York Stock Exchange.

Perhaps I impute too much wisdom and forethought to Congress at the time but it seems like they were fully aware that buy orders and sell orders are what determine prices and that buying and selling - no matter who is doing it - will determine prices. For that reason, Congress put limits on speculators to ensure that bona fide physical hedgers were dominant in the price discovery process.

It was (and still is) essential that bona fide physical hedgers remain the dominant force in the commodities futures markets for four reasons:

1. **The commodities futures markets exist for the benefit of bona fide physical hedgers**, to provide a way to reduce risk and ensure the continued production of the essential commodities that our economy and citizens rely on every day for our existence.
2. **Bona fide physical hedgers trade to reduce risk, not to take on more risk.** Their primary business is producing and consuming, so their derivatives trading decisions are based on input and output, not emotion.
3. **Physical commodity producers and consumers trade based upon the actual physical supply and demand conditions that they are experiencing in their underlying businesses.** A farmer does not sell more wheat contracts than he actually intends to produce. A miller does not buy more wheat contracts than he actually intends to turn into flour.
4. **Speculative markets are susceptible to price bubbles.** Speculators throughout history have been famous for manias, panics and crashes. As an example, every significant capital market has had a major price bubble in the last ten years (emerging markets bubble, internet/tech bubble, housing bubble, etc). It is common for speculators, when they see prices rising, to pour money into a market, which causes the price to rise even more and attract even more speculators. This self-reinforcing cycle is what leads to price bubbles in excessively speculative markets.

PROBLEM TWO: EXCESSIVE SPECULATION

Excessive speculation is a condition of the derivatives markets for consumable commodities where speculators become more dominant in the marketplace than physical commodity producers and consumers. When excessive speculation is accompanied by speculative euphoria, completely unnatural bubbles occur in the prices for consumable commodities.

I label price bubbles in consumable commodities as unnatural because commodity prices naturally seek an equilibrium point equal to the marginal cost of production. As an example, if wheat prices fall below a level where the wheat farmer can cover his costs, then he will not plant any more wheat, which will result in reduced production and reduced supply, which will lead to higher prices in the future. If wheat prices rise to a level where the wheat farmer is making a dramatic profit above his costs, then he will plant as much wheat as he possibly can, which will increase production and increase supply and lead to lower prices in the future.

The decisions of physical commodity consumers also contribute to the stabilization of prices toward long-term equilibrium. When prices rise they demand less, which leads to excess supply and a falling price. When prices fall then they consume more, which leads to reduced supply and a rising price. So under normal conditions, commodities naturally stabilize around a long-term equilibrium level.

When speculators become dominant in the market for derivatives on consumable commodities, the supply- and demand-based trading of physical commodity producers and consumers takes a back seat to the high stakes trading of speculators as they attempt to out-trade each other to maximize their profits.

If speculators are dominant in a marketplace and a general sense of speculative euphoria takes hold, then a self-reinforcing cycle can set in where speculative inflows of money drive prices up and rising prices attract the inflow of more speculative money. This force can become powerful enough, given the tremendous amount of money that institutional investors have at their disposal, that commodity prices can become elevated well above long-term equilibrium prices over long periods of time.

When bubbles occur in the capital markets, those people left holding the securities at inflated prices suffer when the bubble pops. When bubbles occur in the derivatives market for consumable commodities, it is potentially devastating for every person on the planet.

Americans do not eat a bowl of stocks for breakfast. They don't fill their gas tanks with bonds. Bubbles in the capital markets typically do not hurt the

Testimony of Michael W. Masters - Senate Agriculture Committee - June 4, 2009

average American as they are expanding. But when speculators drive up food and energy prices, it inflicts tremendous pain on innocent bystanders.

SOLUTION: AGGREGATE SPECULATIVE POSITION LIMITS

Price bubbles have become possible in the commodities derivatives markets because of the proliferation of loopholes and the general dismantling of speculative position limits. In recent years, the United States government (at the behest of Wall Street) has effectively dismantled the system of speculative position limits that protected our commodities derivatives markets for more than 50 years. The result has been an unleashing of excessive speculation upon the American consumer.

In order to effectively put the genie back in the bottle, we must close all of the existing loopholes that were signed into law by the Commodities Futures Modernization Act of 2000 (CFMA) and apply aggregate speculative position limits across all trading venues. The rest of this section is dedicated to discussing exactly how to do that.

A speculative position limit is a limit on the size of positions that speculators can hold. Take, for example, Wheat on the Chicago Mercantile Exchange (CME). A speculator cannot control more than 6,500 contracts (either long or short). The purpose of these limits is to prevent speculators, individually and collectively, from exercising too much influence over prices.

Problem 2(A): The Swaps Loophole

Prior to the CFMA, the Commodities Exchange Act (CEA) forbade the idea of over-the-counter (OTC) derivatives on consumable commodities, and required that all derivatives trading occur on a regulated futures exchange. After the CFMA was signed into law in 2000, OTC derivatives on consumable commodities were allowed to proliferate, and they did, rising from a notional value of \$389 billion in December 2000 to a notional value of \$12,389 billion in June 2008 (a greater than 3000% increase).¹³

Because some bona fide physical hedgers have chosen to use the OTC swaps market to hedge their physical commodity exposures, the CFTC has granted a blanket exemption to swaps dealers, giving them virtually free reign to buy and

¹³ Bank for International Settlements, "Semiannual OTC Derivatives Statistics," June 2008. <http://www.bis.org/statistics/derstats.htm>. Please note these figures do not include gold and other precious metals.

Testimony of Michael W. Masters - Senate Agriculture Committee - June 4, 2009

sell enormous quantities of futures contracts without being subject to position limits.¹⁴

This is the swaps loophole: since swaps dealers have free reign to buy and sell in unlimited quantities, a hedge fund looking to speculate in a commodity like wheat (which still has position limits) can enter into a swap of unlimited size with a swaps dealer who can then access the wheat futures market, buying or selling wheat futures far in excess of position limits.

The CFTC justified this practice by saying that the swaps dealer is hedging risk like a bona fide hedger. But they failed to make the critical distinction that wheat farmers incur price risk while producing a valuable commodity used to feed the world, while swaps dealers incur price risk as they try to enrich themselves by serving as a conduit for speculators to avoid position limits.

To their credit, the CFTC has announced their intention to re-examine the swaps loophole and to look for ways to put more restrictions on swaps dealers' access to the futures markets.

Solution 2(A): Mandatory Exchange Clearing for Derivatives on Consumable Commodities Makes Aggregate Speculative Position Limits Simple to Implement

The best way to close the swaps loophole is to mandate that all OTC derivatives on consumable commodities clear through an exchange with novation and daily margin. As outlined earlier, mandatory exchange clearing needs to happen for all OTC derivatives in order to eliminate systemic risk. It is especially important for OTC commodity derivatives, because that will enable regulators to effectively close the swaps loophole by looking through the swaps transaction to the ultimate counterparty.

When an OTC derivative such as a swap clears through an exchange, the exchange breaks that transaction into its component parts and becomes the central counterparty to both sides of the trade. When this happens, both the swaps dealer and their counterparty become counterparties to the exchange. This enables regulators to see both sides of the OTC derivatives transaction. Currently, regulators only see the futures trades that the swaps dealer makes in order to hedge their OTC derivatives transaction.

¹⁴ Please note that while some regulated commodities futures markets still have stated position limits, many do not. On NYMEX for instance, position limits have been replaced by position "accountability" limits, which are really not limits at all.

Testimony of Michael W. Masters - Senate Agriculture Committee - June 4, 2009

Example of How a Swap Would Clear

Swaps are generally composed of a futures-equivalent position and one or more basis positions. Commodity futures are designed to have broad-based appeal in order to attract the most liquidity. For that reason they typically choose the most popular grade(s) of the commodity, the most popular delivery point(s) and the most popular delivery time(s). Futures contracts also have a standard number of units (bushel, barrels, etc).

Swaps and other OTC derivatives allow for changes to one or more of these factors. Those differences between the futures contract and the swap contract are called basis. Heating oil and jet fuel, for instance, are both closely related middle distillates produced from crude oil. They trade closely to one another but not identically. You have to adjust for those basis differences when you go to hedge or clear a swap.

Let's use a simple example of a commercial airline that wants to hedge its consumption of jet fuel through a monthly swap that extends for 24 months (2 years). Keeping it simple, let's assume this swap is for 420,000 gallons of New York Jet fuel each month. A futures contract is for 42,000 gallons so this is the equivalent of 10 futures contracts.

Therefore once the swaps dealer enters into this swap with the commercial airline, he will buy 10 NY Heating Oil contracts in each of the next 24 months to hedge himself. This will cover most of his risk but not 100% of his risk. If the swaps dealer wants to be fully hedged then he can also enter into a NY Heating Oil for NY Jet Fuel basis swap. This basis swap is a product that trades through NYMEX.

Example of Swap Components

New York Jet Fuel Swap	=	New York Heating Oil Futures	+	NY Heating Oil for NY Jet Fuel Basis Swap
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If the airline and the swaps dealer take their swap to NYMEX for clearing then NYMEX will break the trade down into its two parts. The airline will be long 10 NY Heating Oil contracts in each of the next 24 months plus long a NY Jet Fuel for NY Heating Oil swap in those same months. The swaps dealer will be short 10 NY Heating Oil contracts in each of the next 24 months plus short a NY Jet Fuel for NY Heating Oil swap in those same months.

When the swaps dealer's cleared swap position (short 10 contracts x 24 months) is matched with the NY Heating Oil futures that he purchased in order to hedge

Testimony of Michael W. Masters - Senate Agriculture Committee - June 4, 2009

(long 10 contracts x 24 months) then the two will cancel each other out and he will have eliminated all his futures-equivalent risk.

The swaps dealer will only be left with the basis risk from the NY Jet Fuel for NY Heating Oil position. If he wants to totally eliminate his risk he can enter into a basis swap in the OTC markets or through NYMEX. Once he does this then those trades will also clear and at that point the swaps dealer will have no position.

In the meantime, the commercial airline has the exact position that it wanted to have, which is long 420,000 gallons of New York Jet Fuel each month for the next 24 months. Its position just happens to be NY Heating Oil futures plus a NY Jet Fuel for NY Heating Oil basis swap. And now the airline's counterparty is no longer the swaps dealer but NYMEX.

The Costs of Clearing for Bona Fide Physical Hedgers Is Outweighed By The Benefits

Experts agree that once virtually all over-the-counter derivatives begin clearing through an exchange, then bid-ask spreads will narrow substantially due to heightened transparency. This will substantially reduce the costs of entering and exiting positions, and the relatively modest cost of clearing will easily be offset by the change in spreads. When swaps dealers lose their oligopoly pricing power, their customers will win in terms of better pricing.

Bona fide physical hedgers will be required to post margin collateral with the Central Counterparty (CCP), but that collateral will earn interest. So physical hedgers will only be financing the spread between their borrowing rate and the interest they earn on collateral. Every swaps dealer includes a cost of capital and a credit charge in their swaps pricing. This is partially due to the fact that swaps dealers have to post margin when they access the futures markets to hedge. Physical hedgers have been paying this cost in the OTC markets all along; they just have not been explicitly aware of it.

Once spreads narrow, then liquidity in the OTC markets will most likely increase. This is what we observed in the stock market's switch to decimal prices. Bid-ask spreads quickly collapsed from a quarter (25 cents) or an eighth (12.5 cents) down to one or two pennies routinely. This led to more trading and therefore more liquidity.

In addition because of the existence of a CCP, anyone can trade with anyone else. The fact that everybody's counterparty is the CCP means that credit risk is no longer a consideration and counterparties are not limited to trading with large money center banks. Electronic trading will make it possible for producers to trade directly with consumers with no swaps dealer as a middleman.

Testimony of Michael W. Masters - Senate Agriculture Committee - June 4, 2009

Finally, the biggest benefit of mandatory exchange clearing for consumable commodities is that clearing enables the markets to be protected against excessive speculation. The best method for applying aggregate speculative position limits is to require OTC derivatives to clear first. Without substantially all OTC derivatives clearing it becomes very difficult for the CFTC to make those position limits apply. The costs of another speculative bubble are orders of magnitude greater than any costs brought on by exchange clearing.

This Solution Allows CFTC to Leverage the Computational Processing Power of the DCO

Mandating that all OTC derivatives transactions in consumable commodities clear through an exchange solves the problem of how to apply aggregate speculative position limits in the OTC markets. Once the transactions clear, they are broken into their nearest futures contracts equivalents plus a minor basis position. When all OTC derivatives transactions in consumable commodities can be seen by regulators, then it becomes simple to apply aggregate position limits to speculators' positions.

It also means that swaps dealers' swap positions net out with the futures hedges that they have executed against those swaps positions. This means that swaps dealers will only face position limits when they are unhedged, since an unhedged position is the same thing as a proprietary trading position. This is the exact effect that regulators should be looking for.

Under this system, the DCO does all the computational "heavy-lifting" for the CFTC in terms of breaking down OTC derivatives transactions into their component futures equivalents and then netting exposures to arrive at a net position. If OTC derivatives transactions are not forced to clear, then the CFTC must perform all these computational tasks themselves (instead of the DCO) to be in a position to effectively look through swaps transactions and place position limits on speculators in the OTC derivatives markets. The CFTC will, in essence, be forced to assume many of the roles of a DCO.

Problem 2(B): The London Loophole

Some Foreign Boards of Trade (FBOT) trade contracts that are virtually identical to the futures contracts being traded on U.S.-regulated futures exchanges. As an example the Intercontinental Exchange (ICE), which is an Atlanta, GA-based company, has a London-based subsidiary (the former International Petroleum Exchange), which is currently regulated by the U.K.'s Financial Services Authority (FSA). ICE trades a WTI contract that actually cash-settles based on the NYMEX WTI crude oil settlement price.

This is called the "London Loophole" because the ICE WTI contract is essentially fungible with the NYMEX WTI contract. The ICE WTI contracts have no

Testimony of Michael W. Masters - Senate Agriculture Committee - June 4, 2009

speculative position limits and they are currently not subject to CFTC regulation. But because the two contracts are virtually identical, they are tightly bound by arbitrage trading.

The CFTC allows this regulatory arbitrage to continue, even though it is certainly within their power to regulate a commodity contract with a U.S. commodity (West Texas crude) and a U.S. parent company. In fact, any FBOT that wants to have trading terminals in the United States must get the permission of the CFTC to do so and that permission can be conditional on meeting any requirements that the CFTC deems necessary. Likewise, the CFTC has to sign off on any contracts that are to be traded by U.S.-based traders.

Solution 2(B): Require Foreign Boards of Trade to Submit Comparable Data and to Take Comparable Remedial Action for Violations

The solution to the London Loophole is simple. Foreign Boards of Trade must be required to supply all the same data that Designated Contract Markets (DCMs) provide to the CFTC, and they must be prepared to enforce speculative position limits by forcing speculators to reduce over-limit positions.

Anyone trading in U.S.-regulated derivatives markets, whether that is on a DCM or OTC should be required to obtain a Large Trader Identification Number (LTIN).¹⁵ In addition, that trader should be required by law to provide their LTIN to any FBOTs that they trade upon. If speculators want to trade in our markets then they should agree to provide their LTIN to any FBOTs that they trade upon. Any traders that fail to provide their LTINs when trading abroad should be banned from trading in the United States.

As a condition for allowing FBOTs to place their terminals in the United States and to trade with American citizens and corporations, they must agree to share large trader reporting data (including LTIN numbers) with the CFTC on a daily basis. If the CFTC determines that a trader is over their speculative position limits, then the FBOT must agree to take appropriate actions to remedy the situation.

Right now the possibility for cross-border regulatory coordination is at an all-time high. G8 energy ministers just issued a statement this week along with OPEC calling for greater regulation to crack down on excessive speculation in the energy markets.¹⁶ The United Nations and Asian energy ministers have made similar calls as well.¹⁷ It could be possible to establish a global large trader

¹⁵ I discuss LTINs in depth later in this testimony.

¹⁶ "G8 ministers lay course on energy security, efficiency," Silvia Marchetti, Xinhua, May 25, 2009

¹⁷ "OPEC, Asia May Call for Curbs on Speculation in Oil (Update2)," Shigeru Sato and Yuji Okada, Bloomberg, April 26, 2009.

Testimony of Michael W. Masters - Senate Agriculture Committee - June 4, 2009

reporting system given the current desire for greater global coordination and regulation. The CFTC should be authorized to share similar information on large traders with other foreign regulatory authorities that want to establish similar systems to monitor aggregate speculative position limits.

Problem 2(C): The Enron Loophole

The Commodities Futures Modernization Act of 2000 (CFMA) arbitrarily created a new category of commodities called "exempt commodities." CFMA allowed exempt commodities to be traded on Exempt Commercial Markets (ECM), free from speculative position limits and most all of the CFTC requirements of Designated Commercial Markets (DCM).

The flawed belief was that there were some consumable commodities (such as crude oil) that had such large deliverable supplies that they were not susceptible to manipulation. This is a grave error for two reasons.

First, a commodity that has a large supply but a similarly large demand is balanced so tightly that it does not take a great amount of effort to manipulate the market for that commodity. Second, as I have already detailed, derivatives markets for consumable commodities are not just subject to manipulation, but to excessive speculation as well. This flawed concept completely ignores the critical element of excessive speculation, whereby prices can be dramatically affected even if there is no specific intent to manipulate.

Solution 2(C): Require Exempt Commercial Markets to Become Designated Commercial Markets

Enron pushed hard for the inclusion of exempt commodities and ECMs in the CFMA, which is why this is called the Enron Loophole. They used this loophole to create Enron Online and then they reportedly used Enron Online to manipulate electricity markets on the West Coast of the United States.

With Enron bankrupt and discredited and the flawed concept of ECMs exposed, it makes sense to simply do away with the ECM designation. All ECMs should be required to convert to Designated Commercial Markets or shut down operations.

Gold and Silver Can Remain Exempt Commodities

Exempt commodities should be defined within the Commodity Exchange Act as gold and possibly silver. While gold and silver are commodities consumed in industrial applications, they historically have been recognized as stores of value, and have been used as currency for thousands of years. Therefore, they are considered by most to be more like investments than other consumable commodities.

Testimony of Michael W. Masters - Senate Agriculture Committee - June 4, 2009

Gold and silver have historically represented valid investment vehicles, and therefore do not need to be protected from excessive speculation by position limits.¹⁸ If a bubble were to occur in the price of gold, it would not have the devastating impact to someone's health or the health of the economy the way bubbles in food and energy prices do.

CFTC Must Set Aggregate Speculative Position Limits for All Derivatives on Consumable Commodities

Fifteen years ago, when there was only one trading venue for consumable commodities and, in most cases, only one futures contract for each basic commodity, it was very simple to apply speculative position limits. Today, because there are multiple trading venues and multiple variations on each basic commodity, it has become necessary to develop a system of aggregating those positions together in order to apply an overall speculative position limit.

The goal with aggregate speculative position limits is simply to treat speculators equally regardless of which trading venue they select to trade in. The playing field needs to be leveled so that speculators are not given the incentive to engage in regulatory arbitrage and move their trading from one (more transparent or more regulated) venue to another.

The CFTC must set the aggregate speculative position limits for all consumable commodities in order to protect those derivatives markets against excessive speculation. Exchanges can continue to set position limits for financial futures to protect against manipulation (where their interest is aligned with the public interest) but they should not be allowed to set aggregate speculative position limits for consumable commodities. There are two primary reasons for this:

1. The futures exchanges (like CME group), which have become for-profit public companies, have a duty to shareholders to maximize profits. There is an inherent conflict of interest between their shareholders' interest and the public interest as a whole. The public interest would dictate that speculative trading be limited as much as possible while still maintaining sufficient liquidity. Since the futures exchanges profit based on the level of volume, their shareholders would like to see no speculative position limits at all.
2. Because futures exchanges are no longer the sole venue for trading derivatives on consumable commodities, they are not able to form a comprehensive speculative position limit that covers their competitors in addition to themselves.

The CFTC needs to identify speculative position limits for the nearest to expiration contract period, all other contract periods, and an overall limit for all

¹⁸ Like financial futures, gold and silver still need to be protected from fraud and manipulation.

Testimony of Michael W. Masters - Senate Agriculture Committee - June 4, 2009

positions combined. As an example, in crude oil, perhaps speculators should be limited to holding no more than 1,000,000 barrels in the prompt month, 3,000,000 barrels in any other single month, and no more than 5,000,000 barrels in total. Speculative position limits should be expressed in the underlying units (barrels and bushels), rather than the number of contracts, since OTC derivatives positions will be included for determining the aggregate limits.

A distinction is drawn for the nearest to expiration contract period because it needs additional protection to prevent manipulation as the derivatives enter the delivery period. A limit is imposed upon each individual contract period in order to prevent a speculator from concentrating all its trading in one period. And the overall limit is imposed to prevent a situation of excessive speculation in the commodity as a whole.

A speculator that violates position limits by holding larger positions than the limits would allow must be prevented from adding to these positions. This means that those positions become "liquidation only" and they can be reduced but not added to. A speculator that repeatedly violates position limits can face stiff monetary penalties and the CFTC can force them to liquidate their positions (on a pro rata share across trading venues) until they fall back below the limits.

Issue All Large Traders an Identification Number at the Control Entity Level

When large traders fill out CFTC Form 40, they should be issued a Large Trader Identification Number (LTIN). This LTIN must then be associated with every trade that clears, whether that trade originated on a DCM, DTEF, FBOT or OTC. At the end of every trading day, every clearing organization (including foreign clearing organizations) must report the positions of all large traders according to their LTIN. This accomplishes two things. First and foremost, the positions can be compiled by LTIN to see if any speculators are exceeding position limits. It also allows for the Commitments of Traders data to be collected daily instead of weekly.

Large Trader Identification Numbers (LTIN) must be issued at the control entity level. For instance one hedge fund gets one LTIN. Speculators cannot be allowed to create multiple shell subsidiaries in order to obtain multiple LTINs.

Bona fide physical hedgers who fill out Form 40 should also be issued LTINs. As part of Form 40, they should be required to indicate (under penalty of perjury) the size of their physical commodity business and whether they are selling commodities, buying commodities or both (middlemen). The LTIN can then be used to make sure that these physical hedgers are in fact hedging and not just speculating in the markets. For instance, an oil producer (who is long the price of oil to begin with) should not be allowed to establish a net long position in futures

Testimony of Michael W. Masters - Senate Agriculture Committee - June 4, 2009

contracts. Nor should they be allowed to establish a net short position that exceeds the size of their underlying business.

Positions Should Be Aggregated for the Basic Commodity

Any time there is a strong relationship between substantially similar commodities then those commodities should receive one aggregate position limit for the purpose of limiting excessive speculation. As an example, wheat is wheat, whether it's soft or hard, spring or winter, it's still wheat. Crude oil is crude oil, whether it's heavy or light, sweet or sour, it's still crude oil. If the price of light sweet crude skyrockets then that is going to have a substantial impact on the price of heavy sour crude. If the price of soft red winter wheat crashes, then that is going to have a substantial impact on the price of hard red spring wheat.

This is not to say that there are no differences between these commodities, but rather that the differences are extremely well-known and that is why there is a great deal of basis trading and arbitrage trading that takes place between substantially similar commodities. Any time there is arbitrage or basis trading there is a strong price discovery relationship. These basis and arbitrage trades are what "enforce" the relationship between these commodities and it is for this reason that they should be aggregated together under one speculative position limit.

As an extreme example, if a speculator wanted to buy 1 billion barrels worth of NYMEX WTI crude oil futures contracts, but was prevented from doing so by speculative position limits, and they purchased 1 billion barrels worth of ICE Brent crude oil futures contracts instead, then that would push up the price of ICE Brent. But it would also push up the price of all other crude oil contracts around the world, because a large fraction of the people selling those 1 billion barrels worth of ICE Brent would be arbitrageurs and basis traders who would be selling ICE Brent and simultaneously buying WTI, Dubai Sour, et cetera. Having speculative position limits on the NYMEX would go a long way to blunt the impact of this arbitrageur/basis trader buying (as long as those traders were not given exemptions from speculative position limits). But even with speculative limits, there are enough of these types of traders that it would be impossible for large magnitude price moves in ICE Brent not to have a significant effect on NYMEX WTI prices.

For this reason, the speculative position limits should be set for the commodity as a whole (crude oil) rather than for one particular grade or delivery location. One practical benefit of this approach is that exemptions for basis trading and arbitrage are not necessary because both legs of their trades fall under the same umbrella speculative position limit and therefore net each other out.

Testimony of Michael W. Masters - Senate Agriculture Committee - June 4, 2009

The 2008 Farm Bill introduced the concept of "significant price discovery" contracts. This gives the impression that it is somehow possible for two contracts on the same commodity to not have a significant impact on each other. However, this is not possible whenever arbitrage trading is occurring. The arbitrage and basis relationships between substantially similar commodities ensure that they always significantly affect one another from a price discovery standpoint.

Positions Should Be Aggregated Across Trading Venues

In our above example dealing with NYMEX WTI and ICE Brent, we talked about how two venues trading different grades of crude oil would still have a strong price discovery relationship binding them together. This relationship would be even stronger (virtually one for one) if we are talking about NYMEX WTI and ICE WTI where the deliverable grades are identical and one contract cash-settles against the other. Right now there are no hard and fast speculative position limits in either contract (except for the last 3 days on the NYMEX) so those two contracts are bound at the hip by arbitrage.

We gave another example earlier of an airline that approaches a swaps dealer about hedging their jet fuel exposure by entering a swap for 420,000 gallons of jet fuel per month for the next 24 months. To hedge this swap, the swaps dealer has two options: (1) they can go to the NYMEX and buy 10 heating oil contracts in the each of the next 24 months or (2) they can find a refiner that wants to hedge their jet fuel (or heating oil) production by entering into a swap to sell 420,000 gallons of jet fuel per month for the next 24 months.

In either case this swap has a direct price discovery impact on the futures market resulting in either 10 more heating oil contracts on the long side (if the swaps dealer hedges directly on the futures exchange) or 10 fewer heating oil contracts on the sell side (if the refiner hedges in the OTC markets rather than on the futures exchange).¹⁹ So it is clear from these two examples that the derivatives market for consumable commodities has multiple venues that are really just extensions of one another.

Because the trading venue does not matter in terms of the overall price effect on the market as a whole, speculative position limits need to be aggregated across trading venues. The objective is to simply level the playing field and treat all speculators equally regardless of whether they trade on a DCM, DTEF, FBOT or OTC.

¹⁹ Please note that if one swaps dealer trades with another swaps dealer, then the first dealer has simply passed along the problem of how to hedge to the second dealer.

Testimony of Michael W. Masters - Senate Agriculture Committee - June 4, 2009

Congress Should Define Excessive Speculation and Charge the CFTC with Enforcing an Overall Limit on the Amount of Speculation Present in the Derivatives Markets for Each Basic Commodity

The Commodity Exchange Act (CEA) does not clearly define the concept of excessive speculation. Perhaps Congress believed that the term was self-explanatory, simply meaning "too much speculation." But since the concept was not clearly defined, swaps dealers and the futures exchanges have been able to redefine it to mean something more akin to manipulation.

For that reason, I would propose that Congress amend the CEA to clearly state that excessive speculation is a condition of the derivatives markets for consumable commodities wherein speculators are a more dominant force in price discovery than bona fide physical hedgers. And when a state of excessive speculation exists, it is possible for speculative price bubbles to form.

Since a speculative price bubble in consumable commodities is potentially devastating to humanity, I believe Congress should mandate a percentage of open interest calculation to ensure that the positions held by speculators never exceed the positions held by bona fide physical hedgers (50% of the market). Then Congress should instruct the CFTC to adjust the individual speculative position limits so that the overall speculation percentage of the markets lies in the range of 15% - 35%.

Please note that the average consumable commodity futures market was about 25% speculative ten years ago.²⁰ It is only in the last ten years that we have seen a surge in speculation to the point where speculators now dramatically outnumber bona fide physical hedgers in many markets. With that surge in speculation has come a surge in the volatility of commodity prices – last year's bubble in crude oil prices being the primary example. We need sufficient liquidity in these markets, but we don't need excessive liquidity because that leads to excessive speculation and excessive price volatility.

With the proliferation of the Internet and electronic trading facilities, it is much easier for physical producers and consumers to transact amongst themselves without the need for speculators' liquidity. That is why 25% might be more than enough speculation to provide the markets with sufficient liquidity.

If there is too much speculation in the overall derivatives market for a consumable commodity (say 40%), then the individual speculative position limits must be adjusted downward to reduce the overall level of speculation. This can be accomplished through a series of "circuit breakers" which would be designed to keep overall speculation within a targeted range.

²⁰ These calculations can be found on pages 33-34 of our report "The Accidental Hunt Brothers" www.accidentalthuntbrothers.com

Testimony of Michael W. Masters - Senate Agriculture Committee - June 4, 2009

CFTC Should Semi-Annually Convene a Hearing of Physical Commodity Producers and Consumers to Recommend Aggregate Speculative Position Limits and an Overall Market Percentage for Speculation

To recognize the foundational fact that derivatives markets for consumable commodities exist solely to enable bona fide physical producers and consumers to hedge their price risk, Congress should mandate that the CFTC semi-annually convene a hearing of physical producers and consumers. These producers and consumers (for whom these markets exist) know whether or not the markets are working for them and whether or not they need more liquidity or less speculation. They are therefore in the best position to recommend aggregate speculative position limits for each commodity and also a target for an overall speculation percentage in that commodity derivatives market. The CFTC should adopt those recommendations or provide a detailed formal response to Congress as to why they are rejecting the proposals.

Congress Should Give the CFTC Explicit Power to Police OTC Commodities Derivatives Markets for Fraud and Manipulation

If OTC derivatives are allowed to trade off-exchange then the CFTC must be given explicit powers to police the consumable commodities OTC derivatives markets for fraud and manipulation. Commodities futures are fully regulated by the CFTC against fraud and manipulation. The physical energy markets are regulated by the Federal Energy Regulatory Commission (FERC) and Federal Trade Commission (FTC) for fraud and manipulation in natural gas/electricity and oil respectively. Therefore it makes sense that the OTC markets be regulated for fraud and manipulation as well. In the end, all regulatory arbitrage of this sort should be eliminated.

Passive "Investment" In Derivatives on Consumable Commodities is a New and Very Damaging Threat to the Markets

As mentioned earlier, the distinctions between financial derivatives and derivatives on consumable commodities have been blurred. Wall Street has pulled the wool over institutional investors' eyes and convinced them that derivatives on consumable commodities are a legitimate "asset class" and that it is possible to "invest" in commodities futures.

Derivatives have no value in and of themselves. All their value is derived from the underlying asset. In the case of consumable commodities, what is underlying these contracts are not securities or capital markets instruments, but the food and energy that Americans need to consume in order to survive and thrive.

Testimony of Michael W. Masters - Senate Agriculture Committee - June 4, 2009

I hope that the U.S. government would not allow investors to buy up actual food or actual crude oil and hoard them because they are deluded into thinking they are making a good investment. We need those commodities to feed ourselves and fuel our economy. If investors, therefore, cannot “buy and hoard” the underlying commodities, then they should not be allowed to “buy and hold” the derivatives on those commodities.

Derivatives on consumable commodities do not pay interest, dividends or rents, and they have no associated cash flows because the underlying commodities have none of these things. In fact, in many cases consumable commodities have transportation and storage costs and decay over time, which means the “yield” from holding these commodities is negative.

Speculators are permitted in the derivatives markets for consumable commodities only because they provide liquidity. If someone attempts to “buy and hold” a position in commodity futures by continuously rolling it then that speculator is consuming liquidity. They have bought that contract perhaps from a bona fide physical producer and then rather than selling it to a bona fide physical consumer they hold onto it for “the long term.”

Because these passive investors are almost always buying, their buying pressure pushes prices up. And since they are holding for the long term, it could be years and years before they sell. In the meantime, if enough people buy and hold, prices will increase and remain elevated for a long period of time.

Commodity index investment is an especially damaging form of passive investment that entails the buying and holding of a large basket (index) of consumable commodities derivatives. These investors do not trade on the basis of supply and demand. Instead, they blindly allocate money to crude oil, copper, corn, et cetera, which all have vastly different supply and demand dynamics.

Every barrel or bushel traded for reasons other than supply and demand is a barrel or bushel that distorts the price discovery function of the consumable commodities derivatives markets. Someone who buys one or more consumable commodities derivatives with the express intention of “hedging against inflation” damages the price discovery function of those markets by investing without regard for the underlying supply and demand conditions. In buying commodities futures, that misguided investor is actually causing inflation by pumping up commodity prices.

Passive “Investment” in Consumable Commodities Should Be Severely Restricted

For the reasons I just detailed, passive investment in these markets should be severely restricted. It is simple to define what constitutes passive investment. It

Testimony of Michael W. Masters - Senate Agriculture Committee - June 4, 2009

is a trading strategy that calls for maintaining a continuously long (or short) position in a consumable commodity.

Passive investors should face aggregate speculative position limits that are 10% or less than the limits faced by actively trading speculators. So, as an example, if the aggregate speculative position limit is 5,000,000 barrels for crude oil, then passive investors should only be allowed to buy and hold a maximum of 500,000 barrels of crude oil derivatives.

This also means that the levels for what constitutes a reportable position, for large trader reporting and identification purposes, should be reduced by a commensurate amount. So, as another example, if any speculator over 250,000 barrels typically needs to report their position then any passive investor over 25,000 barrels should be forced to report.

This regime of much tighter aggregate speculative position limits needs to apply to exchange traded funds (ETFs), exchange traded notes (ETNs), any other hybrid securities, as well as to commodity-based mutual funds. Any individual who wants to buy ETFs, ETNs or mutual funds that represent a passive investment in consumable commodities should be required to fill out Form 40 and obtain a Large Trader Identification Number (LTIN) before they can place their order.

The Commodities Futures Trading Commission (CFTC) Has the Experience and Skills to Implement these Recommendations and the Securities and Exchange Commission (SEC) and Federal Reserve (Fed) Do Not

In order to eliminate systemic risk and effectively implement a system of mandatory exchange clearing with novation and margin, we need regulators who are intimately familiar with the novation and margin processes. Futures exchanges have been novating contracts and assessing margin for over 140 years. The CFTC and its predecessors have been regulating these processes for over 70 years.

In contrast, the clearing processes for securities simply involve the transfer of money in exchange for the securities themselves. They do not involve novation or daily margin posting. Therefore, the SEC lacks the experience necessary to effectively regulate these areas. So does the Federal Reserve, who allowed the shadow financial system to proliferate under their watch and only intervened after the system began to crumble.

In addition, the CFTC and its predecessors have been imposing speculative position limits for over 70 years. They are the only regulator who has ever been charged with guarding the markets against excessive speculation.

Testimony of Michael W. Masters - Senate Agriculture Committee - June 4, 2009

The SEC presides over the capital markets where everyone is a speculator. They are unfamiliar with the concept of excessive speculation and have little experience with setting and enforcing position limits.

In fact in a gross example of regulatory arbitrage, the SEC has allowed passive commodity investments in ETFs, ETNs and commodity mutual funds. They have signed off on double-leveraged crude oil ETFs (like DXO) that allow any investor to make leveraged speculative investments in crude oil within their retirement accounts. This does not show good judgment from a consumer protection or a market protection standpoint.

The Federal Reserve has little experience in regulating commodities markets and setting speculative position limits. Most banks are forbidden to participate in the physical commodities markets, although the Federal Reserve has granted exemptions for the big commodities swaps dealers like Goldman Sachs, Morgan Stanley and J.P. Morgan. Since all banks would naturally be characterized as speculators in the commodities derivatives markets, the Federal Reserve seems like an illogical choice for guarding these markets against excessive speculation.

For these reasons, the CFTC is the best regulator to police the consumable commodities derivatives markets. They also are the best choice for overseeing the mandatory exchange clearing of the OTC derivatives markets as a whole because of their experience with novation and daily margin posting.

SUMMARY

In summary, let me say that the solutions I have outlined in my testimony are not brand new solutions. (1) Exchange clearing with novation and margin, and (2) speculative position limits have been proven effective over many decades of experience. In many ways, what we need to do is turn back the clock on several of the deregulatory measures that were undertaken in the last 15 years. The unintended consequences of those deregulatory decisions have been devastating for America.

I applaud you, Senator Harkin, for what you are trying to do with your recently introduced legislation. It appears that your legislation effectively slams the door shut on the loopholes that the Commodities Futures Modernization Act of 2000 opened up. There is no doubt that your legislation, because it requires mandatory exchange trading and therefore mandatory exchange clearing, would protect the financial system and eliminate the chance of another systemic meltdown. Likewise with all speculators trading on an exchange it would be simple for the CFTC to impose speculative position limits that treated them all the same.

Testimony of Michael W. Masters - Senate Agriculture Committee - June 4, 2009

I believe the solutions that I have proposed in my testimony today would accomplish the same primary objectives as your legislation, while allowing the over-the-counter (OTC) derivatives markets to survive. I applaud you for your leadership on this issue and I look forward to working with you and your staff to ensure that America does not have to suffer through another financial meltdown or another speculative bubble in food and energy prices.

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SANTA BARBARA • SANTA CRUZ

LYNN A. STOUT
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June 4, 2009

United States Senate
Committee on Agriculture, Forestry and Nutrition
Washington, DC 20510-6000

Dear Committee Members,

Thank you for inviting me to testify today. My name is Lynn Stout, and I am the Paul Hastings Professor of Corporate and Securities Law at the University of California at Los Angeles. My scholarly expertise includes the theory and history of derivatives regulation. I also serve as an independent director of a large mutual fund, giving me practical experience in the derivatives market. I have also published several academic articles on the topic of derivatives regulation.¹ Please allow me to note that my articles on derivatives, which I published in the 1990s, predicted that deregulating financial derivatives was likely to result in increased market risk, reduced investor returns, and price distortions and bubbles.² Those predictions, unfortunately, have proven correct.

Studying the history and theory of derivatives regulation inevitably leads to four basic conclusions. First, despite industry claims, derivative contracts are not new and are not particularly innovative. Although derivatives have gone by many different names, derivatives trading in the United States dates back at least to the early 1800s, and in other nations, centuries earlier. The 1884 Supreme Court case of *Irwin v. Williar*, for example, describes the contract law rules that applied to derivatives contracts in the 19th century. (They were then called "difference contracts.")³

Second, derivatives trading may provide some benefits to the overall economy. It is important to note, however, that while the industry routinely claims the social benefits from derivatives trading are substantial, there is no empirical evidence that supports this claim or establishes the magnitude of the supposed social benefits. At the same time, throughout history, unregulated derivatives markets have been associated with at least four distinct economic dangers. First, unregulated trading has been associated with asset price bubbles. Second, it has been associated with increased risk. Third, derivatives speculation has been criticized for reducing real economic productivity by diverting valuable resources, especially human time and creativity, away from industries and activities that contribute more to sustainable economic

¹ See e.g., Lynn A. Stout, *Betting the Bank: How Derivatives Trading Under Conditions of Uncertainty Can Increase Risks and Erode Returns in Financial Markets*, 21 J. Corp. L. 53 (1995); Lynn A. Stout, *Insurance or Gambling? Derivatives Trading in a World of Risk and Uncertainty*, 1996 Brookings Rev. 39 (Winter); Lynn A. Stout, *Why The Law Hates Speculators: Regulation and Private Ordering in the Market for OTC Derivatives*, 48 Duke L. J. 701 (1999).

² See, e.g., Stout, *Why The Law Hates Speculators*, 48 Duke L. J. 769-771 (arguing that making over-the-counter "OTC" financial derivatives exempt from the Commodities Exchange Act may erode average returns, increase market risk, and lead to price distortions and market bubbles).

³ 110 U.S. 499 (1884).

growth and to social welfare. Fourth, derivatives trading has been associated with increased levels of fraud and manipulation in underlying markets.

A third basic conclusion that can be drawn from studying the history of derivatives is that healthy economies regulate derivatives trading. My research indicates that the only time a significant US derivatives market has not been subject to regulation was during the eight years following the passage of the Commodity Futures Modernization Act of 2000 (CFMA). Although it was not widely appreciated at the time, the CFMA eliminated more than a century of legal restraints on derivatives trading by declaring that over-the-counter (OTC) financial derivatives were not subject to traditional contract law rules and were not subject to the Commodity Exchange Act (CEA) or the oversight of the Commodity Futures Trading Commission (CFTC).

Fourth, history teaches that successful derivatives regulation generally does not take the form of either a heavy-handed ban on all derivatives trading, or direct monitoring by some omniscient government overseer. Traditionally, derivatives markets have been successfully regulated through a web of procedural rules that include reporting requirements, listing requirements, margin requirements, position limits, insurable interest requirements, and limits on enforceability. These sorts of rules can be put in place ex ante, reducing the need for government to exercise discretion and giving derivatives traders certainty about what is and is not required of them. The rules also have the advantage of operating largely as automatic “circuit breakers” that make it unnecessary for regulators to have either initiative or omniscience. Finally, these traditional rules have a long track record of success (dating back decades and in some cases centuries) in permitting beneficial forms of derivatives trading while weeding out excessive risk, speculation, and manipulation. The most obvious recent example is the notable success that the CFTC has had since 1974 in preventing excessive speculation in the markets for commodities derivatives.

An Introduction to Derivatives

Let me begin by explaining that, although Wall Street often surrounds derivatives contracts with jargon that makes them seem complex and difficult to understand, derivatives are quite simple. A derivative contract is nothing more than a bet or gamble on what is going to happen in the future. Just as you might place a bet on the horse you expect to win a horserace (your betting ticket is your derivative contract), you can bet on future interest rates by entering an interest rate swap contract, or bet on a company’s future creditworthiness by entering a credit default swap contract.

Until the 19th century, most derivative contracts were bets on the future prices of agricultural commodities, such as the rice derivatives traded in Japan in the 15th century and the commodities futures and options traded under the oversight of the CFTC today. To use the language of derivatives traders, the “underlying”—that is, the thing being bet upon—was the price of rice, wheat, or corn.

Financial derivatives, which became common in the U.S. in the 1800s, are simply derivative bets where the “underlying” is an interest rate, currency exchange rate, credit rating, or securities price, rather than wheat or corn. The first financial derivatives in the U.S. appear to have been stock options and futures, essentially derivative bets on the future prices of corporate stocks. The 1990s have seen an explosion in other forms of derivatives contracts, including derivative contracts on interest rates (interest

rate swaps), credit ratings (credit default swaps), and even weather derivatives. Contrary to industry claims, the development of large markets in financial derivatives was not the result of some new idea or “innovation.” Rather, it was the result of the steady deregulation of financial derivatives trading.

Using Derivatives: Hedging or Speculation?

Derivatives trading can provide economic benefits. Most importantly, derivative bets can, at least in theory, be used as a form of insurance to hedge against risk. For example, if you own a corporate bond and you are worried the bond might decline in value, you can purchase a credit default swap bet that offsets your risk, because the swap will increase in value if the bond decreases in value. This is true hedging, and it serves a useful purpose by reducing risk.

But it is essential to recognize that derivative bets are also ideally suited for pure speculation. The economic literature defines speculation as the attempt to profit not by producing something or by providing investment funds to someone who is producing something, but by predicting the future better than others predict the future.⁴ Just as you can make money from predicting the outcome of a horse race without actually owning a horse, you can make money betting on the fate of a company by buying credit default swaps (CDS) without ever buying stocks or bonds that would actually provide investment funds to the company. In both cases, you are not contributing anything either to the welfare of the horse, or to the welfare of the company. And in both cases, you are increasing your risk level by making the bet, just as a gambler increases her risk level when she goes to the track.

Derivatives speculation may provide modest social benefits by increasing liquidity for the underlying and by marginally improving the accuracy of the market price for the underlying (“price discovery”). Again, however, while the industry routinely claims these benefits are substantial, no empirical evidence exists to support this claim. Without doubt, derivatives speculation can also provide very large financial benefits for individual traders (offset by some counterparty’s loss), just as gambling can provide large benefits for individual gamblers (offset by some other gambler’s loss). These speculative trading gains are purely private benefits, however, that come at other investors’ expense. Meanwhile, unrestrained derivatives speculation has historically been linked to a host of very serious economic ills, including price bubbles and crashes, increased risk, reduced real economic growth, and increased fraud and manipulation.

This is probably why virtually every derivatives trader claims that he or she is using financial derivatives for hedging, not for speculation.⁵ This is also why hedge funds call themselves hedge funds, so as to create an impression they are not speculators trying to profit at the expense of average investors. In fact, it can be difficult to prove with certainty that any particular derivatives trade is not a hedge, because traders are usually clever enough to hypothesize some underlying risk they are supposedly exposed to that

⁴ See Lynn A. Stout, *Irrational Expectations*, 3 Legal Theory 227 (1997)(discussing theories of speculation).

⁵ In some cases, derivatives traders claim they are “hedging” when in fact they are using derivatives to offset some of the risk associated with taking a speculative position they would not have taken but for the availability of derivatives. This is the equivalent to a racetrack gambler claiming she is “hedging” when, in addition to betting on a horse to win, she also buys a ticket for win-place-show. In other cases, derivatives traders may have mistakenly thought they were hedging because they relied too much on the supposed accuracy of some “risk management” model.

the derivative supposedly offsets. Nevertheless, it is clear that by 2008, the market for CDS, for example, was primarily a speculative market.

We know this with mathematical certainty because by 2008, the notional value of the CDS market (that is, the dollar value of the bonds on which CDS bets had been written) had reached \$67 trillion.⁶ At the same time, the total market value of the underlying bonds issued by U.S. companies outstanding was only \$15 trillion.⁷ When the notional value of a derivatives market is more than four times larger than the size of the market for the underlying, it is a mathematical certainty that most derivatives trading is speculation, not hedging. And both economic theory and business history associate speculative markets with serious negative economic consequences.

Economic Problems Associated With Excessive Speculation

In particular, when a derivatives market becomes overwhelmed by speculation, we can expect to see several bad things happen. First, we can expect to see asset price bubbles and crashes. In effect, expectations in the speculative market, where derivatives gamblers can make very large bets using very small amounts of money, come to infect prices in the underlying market. An early example of this was the famous Dutch tulip bulb bubble of 1637, in which trading in newly-invented tulip bulb derivatives triggered a sudden increase and equally sudden crash in tulip bulb prices.⁸

Second, excessive speculation adds to systemic risk, because individual speculators lose or gain large amounts of money unexpectedly. The best recent example of this is the case of AIG, where speculation in CDS on the part of AIG traders who believed they could predict the future creditworthiness of corporate borrowers led to large and unexpected derivatives trading losses which threatened AIG's economic health, in turn threatening the health of AIG's trading partners. The result was a "domino effect" that threatened the stability of the banking system.

Third, excessive speculation reduces overall economic performance by draining valuable resources, including valuable human capital, away from more productive uses. Professor Simon Johnson of MIT's Sloan School of Management estimates that between 1973 and 1985, the financial sector of the US economy never earned more than 16 percent of U.S. domestic corporate profit. During the past decade, however, the finance sector took in as much as 41 percent of all corporate profit.⁹ Much of this profit reflects trading gains reaped by hedge funds and proprietary trading divisions of investment banks, which enjoyed these gains at the expense of average investors. Put differently, while derivatives speculation can be very profitable for individual speculators, from a social perspective it is a zero-sum game that consumes valuable social resources while making little or no contribution to social welfare or average investor returns.

⁶ Bank for International Settlements, *Quarterly Review Statistical Annex* at A103 Table 19 (Amounts Outstanding of Over-The-Counter (OTC) Derivatives) (December 2008)

⁷ Id. at A97, Table 16B (Domestic Debt Securities).

⁸ See Peter M. Garber, *Tulipmania*, 97 J. Pol. Econ. 535 (1989).

⁹ Simon Johnson, *The Quiet Coup*, *The Atlantic* (May 2009).

Fourth, the opportunity to trade freely in derivatives encourages fraud and price manipulation in the market for the underlying. To see why, assume a derivatives trader can easily buy \$100 million in CDS on a public company with \$20 million in outstanding stock. By spending just over \$10 million to buy a majority of the company's shares, then using its shareholder position to cause the company to pursue strategies that destroy value, the derivatives trader can reap an enormous profit on its \$100 million CDS trade which more than offsets the decline in the value of its \$10 million equity investment.

Regulating Derivatives: The Lessons of Experience

The economic dangers of derivatives first captured public attention in 1994, when Proctor & Gamble Co. announced an unexpected \$157 million dollar loss from speculative trading in interest rate swaps. Of course, Proctor & Gamble's loss was soon followed by much larger derivatives trading losses, including those that led to the collapse of Orange County's pension fund and of Barings Bank in the 1990s; to the near-collapse of Long Term Capital Management in 1998; to Enron's bankruptcy in 2001; and most recently, to the collapse of Bear Stearns and AIG in 2008.

Why did these losses occur? As we have seen, derivatives trading was not new. What was new, however, was that beginning in the early 1990s, trading in financial derivatives was increasingly made free from any sort of regulation. For example, in the 1990s, the CFTC granted a regulatory exemption from the Commodities Exchange Act for certain forms of financial derivatives, especially interest swaps. When the CFTC subsequently attempted to extend its jurisdiction to other types of financial derivatives, it was rebuffed by Congressional passage of the CMFA of 2000. The CMFA not only exempted most OTC financial derivatives from CFTC oversight, it also reversed, for the first time in American legal history, long-standing common law rules limiting their legal enforceability.

The unfortunate results of this deregulation are now obvious. How should lawmakers respond?

History teaches that there are a wide variety of well-developed, sophisticated, time-tested regulatory tools that can be brought to bear on the problem of regulating financial derivatives. These tools can protect the legitimate use of derivatives for hedging purposes, while discouraging excessive speculation. They do not require us either to ban all derivatives trading, or to attempt to subject derivatives markets to the oversight of a centralized, all-powerful regulator tasked with intervening on an ad hoc, discretionary basis. To the contrary, derivatives markets can be successfully regulated through a variety of regulatory requirements that do not prohibit derivatives trading but do subject trading to various reporting requirements, listing requirements, margin requirements, position limits, insurable interest requirements, and limits on enforceability. The obvious prototype for this regulatory approach is the successful regulation of commodities derivatives by the CFTC under the authority of the CEA. This approach has a number of advantages, including its emphasis on ex ante rules that provide certainty for traders; its reliance on automatic "circuit breakers" rather than agency discretion; and its time-tested success.

When it comes to regulating financial derivatives, there is no need to re-invent the regulatory wheel. The economic problems associated with financial derivatives are neither novel nor unique. They exist in any market prone to speculation. Similarly, the challenges associated with regulating speculation in financial derivatives, including the challenges of protecting legitimate hedging transactions and preventing speculative trading from migrating to other jurisdictions, are not unique. Logic and history suggest they

can be successfully addressed by the same sorts of regulatory rules we have employed, to great effect, in other markets prone to excessive speculation.

Lynn A. Stout
Paul Hastings Professor of Corporate Law and Securities Regulation
UCLA School of Law.

DOCUMENTS SUBMITTED FOR THE RECORD

JUNE 4, 2009

Exchanges Warn On OTC Clearing

Financial Times - June 3 2009 18:01

By Jeremy Grant in London

Three of the world's largest exchanges have warned regulators and lawmakers not to force too much of the over-the-counter derivatives markets into clearing houses, saying that market participants should have a role in deciding how far such products are shifted away from the opaque privately negotiated markets.

The comments on Wednesday, by executives at NYSE Liffe, Intercontinental Ex-change and London Stock Exchange, come from businesses that are likely to be the main beneficiaries of a push by the Obama administration to ensure more OTC derivatives are cleared and traded on exchanges and other regulated trading platforms.

Tim Geithner, US Treasury secretary, has called for more OTC derivatives to be processed through clearing houses to reduce the counterparty risks associated with defaults, and for "standardised" OTC contracts to be traded on-exchange.

But exchanges, many of which own their own clearers, are concerned that legislation written by the US Congress should not go so far as to force the more complex, tailored OTC derivatives into clearing houses that are ill-equipped to deal with the risks associated with them.

In particular, they are concerned about how the unwinding of positions would be handled with such products, many of which are illiquid compared with standardised products.

Mark Ibbotson, chief operating officer at NYSE Liffe, the futures arm of NYSE Euronext, said: "The plea we'd have is mandates are kept to a minimum. Is it right that every [OTC derivatives] product should be put in a straitjacket on an exchange?"

"It could damage the security of a clearing house to force products on to a clearing house that shouldn't be there. We don't want mandated solutions, let's have us working with the market," Mr Ibbotson said at the Mondo Visione Exchanges Forum.

David Peniket, chief operations officer of ICE Europe, part of the US-based Intercontinental Exchange, said it was important to involve market participants in how far clearing is extended to the OTC markets.

He cited the gradual adoption by market participants of clearing in OTC energy markets after Enron's collapse.

ICE started offering clearing of OTC energy products in the early 2000s. The New York Mercantile Exchange, now owned by CME, launched Clearport, a similar service, in 2002.

"Regulators will certainly have markets that they want to encourage into clearing but I think it's very important to let markets develop their solutions," he told the Financial Times. "There is certainly a concern around mandatory solutions, that you damage liquidity."

Adam Kinsley, head of regulation at LSE, said: "The onus is on exchanges to develop commercial offerings that people want to use, and I don't think it's the right way for regulators to force inappropriate products on-exchange."



Jennifer M. Grigsby
 Senior Vice President,
 Treasurer and Corporate Secretary

May 28, 2009

Mr. Timothy F. Geithner
 Secretary of the Treasury
 1500 Pennsylvania Avenue, NW
 Washington, D.C. 20220

Dear Secretary Geithner:

Chesapeake Energy Corporation, the nation's largest independent producer of clean-burning, American natural gas, would like to thank the Administration for striving to achieve worthy goals of transparency, accountability and market efficiency in the over-the-counter (OTC) derivatives market. Following your recent proposals and those of federal lawmakers, we appreciate the opportunity to offer the following comments and proposals.

In your May 13, 2009, letter to Capitol Hill, you outlined the objectives for government regulation of the OTC derivatives markets following consultations with the Commodity Futures Trading Commission (CFTC), the Securities and Exchange Commission (SEC) and other federal regulators. The goals were the following: (1) preventing activities in those markets from posing risk to the financial system; (2) promoting the 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. As a company that extensively utilizes OTC commodity derivatives as a vital risk-management tool, **we also strongly support transparency, accountability, and market integrity.**

However, the letter goes on to say that "to contain systemic risks, the CEA (Commodity Exchange Act) and the securities laws should be amended to require clearing of all standardized OTC derivatives through regulated central counterparties (CCPs)" with "robust margin requirements and other necessary risk controls and to ensure that customized OTC derivatives are not used solely as a means to avoid using a CCP. For example, if an OTC derivative is accepted for clearing by one or more fully regulated CCP, it should create a presumption that it is a standardized contract and thus required to be cleared."

Subsequent to reviewing the above proposal and others outlined in your letter, as well as legislation introduced in both the House and Senate (specifically, H.R. 977 by House Agriculture Committee Chairman Peterson and S. 272 by Senate Agriculture Chairman Tom Harkin), we have serious concerns about the impact these proposals would have on responsible, credit-worthy non-speculating end-user companies like Chesapeake Energy that hedge only the physical products we produce. Yet we also have areas where we support responsible reform to achieve the goals.

Chesapeake Energy Corporation Concerns

To begin, I would like to clarify several important points based on misconceptions we have heard.

Chesapeake Energy Corporation
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- (1) First, it must be understood that the cash requirements of clearing OTC derivatives on an exchange would prove to be a significant liquidity drain on American companies that are using these contracts for prudent risk-management purposes. At a time when the U.S. economy needs more free-floating capital, posting cash margin on an exchange would prove to have the opposite effect, in fact, risking a more serious liquidity crisis. Chesapeake Energy invests more than 100 percent of our free cash flow into finding and producing clean-burning, American natural gas. The primary objective of our risk-management policy is to provide for cash-flow certainty and stability so we can responsibly plan and execute our future business strategy. A requirement to post cash would inject cash uncertainty into our business model and, thus, reduce our ability to explore for and produce natural gas.

For example, on June 30, 2008, our negative "mark-to-market," or what we owed our counterparties for natural gas hedging transactions, which were outstanding but not yet matured, was about \$6.3 billion. If our company had been forced to immediately fund such an enormous cash margin requirement, our company, which officially discovered what is known as the Haynesville Shale that same year, potentially the most significant natural gas field ever discovered in North America, would not have had the liquidity to invest in this new play. Additionally, by December 31, 2008, the natural gas market had reversed and our \$6.3 billion negative mark-to-market became a positive \$1.3 billion mark-to-market. In short, requiring cash to be posted on an exchange defeats the purpose of using OTC derivatives, which is to provide cash certainty for investing in the future.

- (2) Furthermore, we understand another significant concern about the OTC derivative market is that this market is unsecured. This is not the case for most end-users of these contracts. For example, on June 30, 2008, when Chesapeake owed about \$6.3 billion under our OTC derivative contracts, we had pledged collateral valued at more than \$11 billion to our derivative counterparties. The collateral we pledged included both letters of credit and mortgages on our oil and gas properties – our underlying business assets. While the security is not always in cash, our counterparties were and continue to be well-secured. This is how most end-users utilize this market and, as a result, help alleviate systemic risk.
- (3) Finally, there is a misconception that most OTC contracts are "standard" and can be easily housed on an exchange. However, an important feature of most OTC contracts is their ability to be "customized." Exchange-traded derivatives would not be able to be customized to offset our risks, therefore, the derivative would not precisely match the economics of the underlying risk being hedged. While OTC derivatives are not inherently complex products, their exact terms and conditions must be specifically customized to meet our needs, most importantly with respect to the accounting treatment governing our derivative contracts. Clearing requires standardization, and mandated clearing eliminates this essential ability to customize. Outside of the lack of economic offset, a standardized OTC contract would not meet stringent accounting rules, thus increasing near-term income statement volatility because of prudent longer-term risk-management policies. This "mis-match" could cause investors to be confused about financial results.

In short, as evidenced above, a company like Chesapeake Energy is merely an end-user of OTC derivatives. Companies like ours do not make the market, and we believe that forced

clearing ultimately will result in less end-user risk management and more volatility passed on to the consumer.

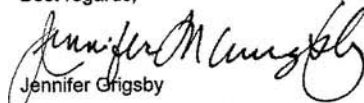
What We Support

There are important measures that Chesapeake supports. For instance, based on the proposals in your letter, we support the following initiatives and would be happy to discuss further:

- (1) First, **Chesapeake believes standardized trades between institutions (dealers, hedge funds, etc.) can be cleared**, addressing concerns about transparency and systemic risk without creating onerous, and at times unachievable, obstacles for end-users. We also believe determining what is "clearable" should be left to regulators, not clearinghouses.
- (2) Second, given concerns that the OTC derivatives market is uncollateralized or unsecured, **we recommend clear exceptions for clearing for end-users that protect their counterparties with ample and firm collateral**, such as – in our case – liens on our oil and natural gas properties.
- (3) We also support **counterparty reporting**, but not on a real-time basis, which is onerous and unnecessary to achieve the objectives of transparency. Additionally, we support reporting information to the general public on a regular basis.
- (4) Finally, **we support requirements to store all market information within a centralized warehouse** to facilitate access to information for regulators from a single source. Again, transparency and information-sharing are worthy goals, and we support both.

Thank you very much for your consideration, and we would be happy to expand further on any of the points in the letter and be a resource to you as a responsible end-user of OTC derivatives. Please contact Elliot Chambers at (405) 935-6119 or Sarah Gainer at (405) 935-4686 with any questions.

Best regards,



Jennifer Grigsby

CC:

The Honorable Harry Reid
The Honorable Nancy Pelosi
The Honorable Mitch McConnell
The Honorable John Boehner
The Honorable Christopher Dodd
The Honorable Tom Harkin
The Honorable Saxby Chambliss
The Honorable Barney Frank
The Honorable Spencer Bachus
The Honorable Collin Peterson
The Honorable Frank Lucas

The Role of Speculation in the Recent Commodity Price Boom (and Bust)

by

Scott H. Irwin, Dwight R. Sanders, and Robert P. Merrin*

Written testimony submitted to the Senate Committee on Agriculture, Nutrition and Forestry –
June 4, 2009

* Scott H. Irwin is the Laurence J. Norton Chair of Agricultural Marketing in the Department of Agricultural and Consumer Economics at the University of Illinois at Urbana-Champaign. Dwight R. Sanders is an Associate Professor in the Department of Agribusiness Economics at Southern Illinois University, Carbondale, Illinois. Robert P. Merrin is a Ph.D. student in the Department of Finance at Universiteit Maastricht, Netherlands.

The Role of Speculation in the Recent Commodity Price Boom (and Bust)

Introduction

Led by crude oil, commodity prices reached dizzying heights during mid-2008 and then subsequently declined with breathtaking speed (see Figure 1). The impact of speculation, principally by long-only index funds, on the boom and bust in commodity prices has been hotly debated.¹ It is commonly asserted that speculative buying by index funds in commodity futures and over-the-counter (OTC) derivatives markets created a “bubble,” with the result that commodity prices, and crude oil prices, in particular, far exceeded fundamental values at the peak (e.g., Gheit, 2008; Masters 2008; Masters and White, 2008). The main thrust of bubble arguments is that: i) a large amount of speculative money was invested in different types of commodity derivatives over the last several years, ii) this ‘titanic’ wave of money resulted in significant and unwarranted upward pressure on commodity prices, and iii) when the flow of speculative money reversed the bubble burst. Based on the bubble argument, a number of bills have been introduced in the U.S. Congress with the purpose of prohibiting or limiting index fund speculation in commodity futures and OTC derivative markets.

The purpose of this paper is to show that the bubble argument simply does not withstand close scrutiny. Four main points are explored. First, the arguments of bubble proponents are conceptually flawed and reflect fundamental and basic misunderstandings of how commodity futures markets actually work. Second, a number of facts about the current situation in commodity markets are inconsistent with the existence of a substantial bubble in commodity prices. Third, available statistical evidence does not indicate that positions for any group in commodity futures markets, including long-only index funds, consistently lead futures price

changes. Fourth, there is a historical pattern of attacks upon speculation during periods of extreme market volatility.

Conceptual Errors

As noted in the introduction, bubble proponents argue that large investment flows, through index-type investments, resulted in unjustified upward pressure on commodity prices. Not only was the pressure unjustified according to bubble proponents, but it also caused very large overvaluations of commodities. For example, Fadel Gheit, Managing Director and Senior Oil Analyst for Oppenheimer & Co. Inc., made the following statement while testifying before the U.S. House of Representatives in June 2008:

"I firmly believe that the current record oil price in excess of \$135 per barrel is inflated. I believe, based on supply and demand fundamentals, crude oil prices should not be above \$60 per barrel... There were no unexpected changes in industry fundamentals in the last 12 months, when crude oil prices were below \$65 per barrel. I cannot think of any reason that explains the run-up in crude oil price, beside excessive speculation." (Gheit, 2008).

While bubble arguments may seem sensible on the surface, they contain conceptual errors that reflect a fundamental and basic misunderstanding of how commodity futures and OTC derivative markets actually work.

The first and most fundamental error is to equate money flows into futures and derivatives markets with demand, at least as economists define the term. Investment dollars flowing into either the long or short side of futures or derivative markets is not the same thing as demand for physical commodities. Our esteemed predecessor at the University of Illinois, Tom Hieronymus, put it this way, "...for every long there is a short, for everyone who thinks the price is going up there is someone who thinks it is going down, and for everyone who trades with the flow of the market, there is someone trading against it." (Hieronymus, 1977, pp. 302) These are

zero-sum markets where all money flows must by definition net to zero. It makes as much logical sense to call the long positions of index funds new “demand” as it does to call the positions on the short side of the same contracts new “supply.”

An important and related point is that a very large number of futures and derivative contracts can be created at a given price level. In theory, there is no limit. This is another way of saying that flows of money, no matter how large, do not necessarily affect the futures price of a commodity at a given point in time. Prices will change if new information emerges that causes market participants to revise their estimates of physical supply and/or demand. Note that a contemporaneous correlation can exist between money flows (position changes) and price changes if information on fundamentals is changing at the same time. Simply observing that large investment has flowed into the long side of commodity futures markets at the same time that prices have risen substantially (or the reverse) does not necessarily prove anything. This is more than likely the classical statistical mistake of confusing correlation with causation. One needs a test that accounts for changes in money flow and fundamentals before a conclusion can be reached about the impact of speculation.

It should be said that the previous argument assumes all market participants are equally informed. When this is not the case, it is rational for participants to condition demands on both their own information and information about other participants' demands that can be inferred (“inverted”) from the futures price (Grossman, 1986). The trades of uninformed participants can impact prices in this more complex model if informed traders mistakenly believe that trades by uninformed participants reflect valuable information. An argument along these lines can be applied to the rise of index funds in commodity markets. It is possible that traders interpreted the large order flow of index funds on the long side of the market as a reflection of valuable private

information about commodity price prospects, which would have had the effect of driving price higher as these traders subsequently revised their own demands upward. Given the publicity that accompanied index fund entry into commodity futures markets and the transparency of their trading methods, it is highly doubtful that this happened on a wide enough scale in recent years to consistently drive price movements (more on this in a later discussion of noise trading).

The second conceptual error is to argue that index fund investors artificially raise both futures and cash commodity prices when they only participate in futures and related derivatives markets. In the short-run, from minutes to a few days, commodity prices typically are discovered in futures markets and price changes are passed from futures to cash markets (e.g., Garbade and Silber, 1983). This is sensible because trading can be conducted more quickly and cheaply in futures compared to cash markets. However, longer-term equilibrium prices are ultimately determined in cash markets where buying and selling of physical commodities must reflect fundamental supply and demand forces. This is precisely why all commodity futures contracts have some type of delivery or cash settlement system to tie futures and cash market prices together. Of course, delivery systems do not always work as well as one would hope (Irwin et al., 2008).

It is crucial to understand that there is no change of ownership (title) of physical quantities until delivery occurs at or just before expiration of a commodity futures contract. These contracts are financial transactions that only rarely involve the actual delivery of physical commodities. In order to impact the equilibrium price of commodities in the cash market, index investors would have to take delivery and/or buy quantities in the cash market and hold these inventories off the market. There is absolutely no evidence of index fund investors taking delivery and owning stocks of commodities. Furthermore, the scale of this effort would have

had to be immense to manipulate a world-wide cash market as large as the crude oil market, and there simply is no evidence that index funds were engaged in the necessary cash market activities.

This discussion should make it clear that it is wrong to draw a parallel (e.g., Masters and White, 2008) between index fund positions and past efforts to “corner” commodity markets, such as the Hunt brother’s effort to manipulate the silver market in 1979-80. The Hunt brothers spent tens of millions of dollars buying silver in the cash market, as well as accumulating and financing huge positions in the silver futures market (Williams, 1995). All attempts at such corners eventually have to buy large, and usually increasing, quantities in the cash market. As Tom Hieronymus noted so colorfully, there is always a corpse (inventory) that has to be disposed of eventually. Since there is no evidence that index funds had any participation in the delivery process of commodity futures markets or the cash market in general, there is no obvious reason to expect their trading to have impacted equilibrium cash prices.

A third conceptual error made by many bubble proponents, and unfortunately, many other observers of futures and derivatives markets, is an unrealistic understanding of the trading activities of hedgers and speculators. In the standard story, hedgers are benign risk-avoiders and speculators are active risk-seekers. This ignores nearly a century of research by Holbrook Working, Roger Gray, Tom Hieronymus, Lester Telser, Anne Peck, and others, showing that the behavior of hedgers and speculators is actually better described as a continuum between pure risk avoidance and pure speculation. Nearly all commercial firms labeled as “hedgers” speculate on price direction and/or relative price movements, some frequently, others not as frequently. In the parlance of modern financial economics, this is described as hedgers “taking a view on the market” (e.g., Stulz, 1996). Apparently, there is also some contamination in the non-commercial

category, with “speculators” engaged in hedging activities. This problem is highlighted in the recent Commodity Futures Trading Commission (CFTC) report on swap dealers and index traders, which included the statement that, “The current data received by the CFTC classifies positions by entity (commercial versus noncommercial) and not by trading activity (speculation versus hedging). These trader classifications have grown less precise over time, as both groups may be engaging in hedging and speculative activity.” (CFTC, 2008b, p. 2)

What all this means is that the entry of index funds into commodity futures markets did not disturb a sterile textbook equilibrium of pure risk-avoiding hedgers and pure risk-seeking speculators, but instead the funds entered a dynamic and ever changing “game” between commercial firms and speculators with various motivations and strategies. Since large commercial firms can take advantage of information gleaned from their far-flung cash market operations, it is not unreasonable to expect that these firms have a trading advantage compared to all but a few very large speculators.² The following passage from a recent article on Cargill, Inc. (Davis, 2009) corroborates this view of the operation of commodity futures markets:

Wearing multiple hats gives Cargill an unusually detailed view of the industries it bets on, as well as the ability to trade on its knowledge in ways few others can match. Cargill freely acknowledges it strives to profit from that information. “When we do a good job of assimilating all those seemingly unrelated facts,” says Greg Page, Cargill’s chief executive, in a rare interview, “it provides us an opportunity to make money...without necessarily having to make directional trades, i.e., outguess the weather, outguess individual governments.”

This sheds an entirely different light on the entry of large index fund speculators into commodity futures and derivatives markets. Large hedgers are no innocents in this game and their economic interests are not easily harmed by new entrants.

Inconsistent Facts

In addition to logical errors, a number of facts about the situation in commodity markets are inconsistent with the arguments of bubble proponents. To begin, if speculation drove futures prices consistently above fundamental values, the available data indicates it was not obvious in the relative level of speculation to hedging. The statistics on long-only index fund trading reported in the media and discussed at Congressional hearings tend to view speculation in a vacuum—focusing on absolute position size and activity. As first pointed out by Working (1960), an objective analysis of futures market activity must consider the balance between speculators and commercial firms hedging market risks. A key insight from this framework is that speculation can only be considered ‘excessive’ relative to the level of hedging activity in the market.³

Weekly Commitments of Traders (COT) data provided by the CFTC are enlightening in this regard. Table 1 shows the division of open interest for nine commodity futures markets, averaged for the first three months of 2006 and 2008.⁴ The four basic hedging and speculative positions are: HL = Hedging Long = Commercial Long Positions; HS = Hedging Short = Commercial Short Positions; SL = Speculation Long = Non-Commercial Long + Index Trader Long Positions; SS = Speculation Short = Non-Commercial Short + Index Trader Short Positions. Note that index fund traders are allocated almost exclusively to the SL category in Table 1 and that $HL + SL = HS + SS$.⁵

As expected, Table 1 reveals that long speculation—driven by index funds—increased sharply in all but one of the nine commodity futures markets over January 2006 through April 2008.⁶ In four of the eight markets with an increase in long speculation (corn, soybeans, soybean oil, and cotton), the increase in short hedging actually exceeded the increase in long

speculation. Corn provides a pertinent example. Speculative buying in corn, which includes commodity index funds for this analysis, increased by nearly 250,000 contracts; but, selling by commercial firms involved in the production and processing of corn increased by an even greater amount, around 500,000 contracts. What this means is that long speculators (as a group) must have been trading with short hedgers. Working (1960) argued that this was beneficial to overall market performance since speculators provide liquidity and risk-bearing capacity for hedgers.

In the other four markets with an increase in long speculation (CBOT wheat, live cattle, feeder cattle, and lean hogs), the increase in short hedging was less than the increase in long speculation. Live cattle provides a pertinent example here. Speculative buying in cattle, again including commodity index funds, increased by nearly 70,000 contracts; whereas selling by commercial firms increased by only about 16,000 contracts. In this situation the bulk of the increase in long speculation had to be absorbed by an increase in short speculation. Working (1960, p. 210) argued that trading between speculators generally was “unneeded” and reflected either, “entry into the market of a considerable group of inexperienced or ill-informed speculators” or “recognition by one group of speculators of significant economic conditions or prospects that are currently being ignored by other, equally expert and generally well-informed, speculators.” Either case could result in a deterioration of market performance. However, Sanders, Irwin, and Merrin (2008a) show that the observed increase in speculation for these markets was still well within historical bounds for commodity futures markets. Even higher levels of speculation have been observed in the past without adverse consequences for market performance.

In sum, observed speculative levels in commodity futures markets since early 2006, even after accounting for index trader positions, either did not exceed the hedging needs of

commercial firms or did not exceed historical norms for the level of speculation relative to hedging needs. Simply put, there is no compelling evidence that speculation was ‘excessive.’

The second inconsistent fact is that price movements in futures markets with substantial index fund investment were not uniformly upward through the spring of 2008. Panel A in Table 2 shows the increase in commodity futures prices over January 2006—April 2008 for the same nine markets as in Table 1. The spectacular price increases were concentrated in grain and oilseed markets, while prices in other markets either increased moderately or declined. It is especially interesting to note that prices either dropped or rose only slightly in the markets with the highest level of speculation relative to hedging (Table 1: live cattle, feeder cattle, and lean hogs). Figure 2 reveals the same pattern in a different form. Here the position of commodity index traders over time is plotted as a percentage of total market open interest. The highest concentration of index fund positions was often in livestock markets, the very markets without large price increases through the spring of 2008. It is difficult to rationalize why index fund speculation would have little or no impact in commodity futures markets with the highest concentration of index positions, relative to either hedging positions or total open interest, yet have a large impact in the markets with the lowest concentration.

The third inconsistent fact is that high prices were also observed in commodity markets not connected to index fund investment. Panels B and C in Table 2 provide four examples.⁷ Rough rice futures and fluid milk futures are not included in popular commodity indices tracked by index funds, but prices in these two markets increased 162% and 37%, respectively, over January 2006—April 2008. Apples for fresh use and edible beans do not have futures markets, and thus no index fund investment, yet prices in these markets increased 58% and 78%, respectively, over the same time interval. If index fund speculation caused a bubble in

commodity prices, why then did prices increase substantially in commodity markets without any index fund activity?

A fourth inconsistent fact has to do with inventories for storable commodities. Following Krugman (2008), Figure 3 illustrates market equilibrium for a storable commodity with and without a price bubble. The standard equilibrium occurs at the intersection of the supply and demand curves and results in a price of P_E . Now assume there is a bubble in the market that pushes price above equilibrium to P_B . At this inflated price the quantity supplied exceeds quantity demanded and the excess shows up as a rise in inventories. We should therefore observe an increase in inventories when a bubble is present in storable commodity markets. In fact, inventories for corn, wheat, and soybeans fell sharply over the last three years. Inventories of other commodities, such as crude oil, stayed relatively flat or declined modestly until very recently. The lack of a notable buildup in commodity inventories is one more reason to be skeptical that a large bubble developed in commodity futures prices.

A fifth inconsistent fact is the nature of commodity index trading. The literature on “noise traders” shows that a group of uninformed traders can consistently push prices away from fundamental value only if their market opinions are unpredictable, with the unpredictability serving as a deterrent to arbitrage (e.g., De Long et al., 1990). This notion seems unlikely given the ease with which other large traders can trade against index fund positions. Index funds do not attempt to hide their current position or their next move. Generally, funds that track a popular commodity index (e.g., Goldman Sachs Commodity Index) publish their mechanical procedures for rolling to new contract months. Moreover, they usually indicate desired market weightings when the index is re-balanced. So, the main uncertainty in their trading patterns

usually stems from overall in-flow or out-flows of monies associated with the underlying investment vehicle.

The problems created by the mechanical trading of index funds is well-illustrated by a recent story (Meyer and Cui, 2009) on problems experienced by the U.S. Oil Fund L.P., the largest exchange-traded crude oil index fund, when rolling positions from one nearby contract to the next:

“It's like taking candy from a baby,” said Nauman Barakat, senior vice president at Macquarie Futures USA in New York. That candy comes out of the returns of investors in the fund. Take Feb. 6, when U.S. Oil moved its 80,000 contracts from March to April at the end of the trading day, selling the March contract and buying April. Because U.S. Oil publishes the dates of its roll in advance, traders knew the switch was coming. At 2 p.m., 30 minutes before closing, trading in New York Mercantile Exchange oil contracts soared, and the price of the April contract narrowed to \$4 more than the March contract. Within minutes, that gap had widened and closed at \$5.98, according to trading records. As the fund's managers were about to roll their contracts, “suddenly came the awfully extreme move,” said one manager. Some said the move is a sign that big trades were placed ahead of U.S. Oil's roll. The price move instantly made it more expensive for U.S. Oil to roll into the April contract and cost the fund about \$120 million more than it would have a day earlier.”

As the above passage so amply highlights, it is highly unlikely that other well-capitalized speculators, such as commodity trading advisors, hedge funds, and large floor traders, would allow index funds to push futures prices away from fundamental values when index trades are so easily anticipated.

A related point is that large and long-lasting bubbles are less likely in markets where deviations from fundamental value can be readily arbitrated away (easily “poached” in the terminology of Patel, Zeckhauser, and Hendricks (1991)). There are few limitations to arbitrage in commodity futures markets because the cost of trading is relatively low, trades can be executed literally by the minute, and gains and losses are marked-to-the-market daily. Moreover, the finite horizon of futures contracts further diminishes the likelihood that speculative arbitrage

is limited (Shleifer and Summers, 1990). This stands in contrast to markets where arbitrage is more difficult, such as residential housing. The low likelihood of bubbles is also supported by numerous empirical studies on the efficiency of price discovery in commodity futures markets (e.g., Zulauf and Irwin, 1998). Where pricing problems have been documented, they are typically associated with the delivery period of particular commodity futures contracts. However, as noted by the CFTC in a recent background memorandum on the application of its emergency powers, even this type of problem has only risen to an “emergency” level three times since the Commission was founded in 1974 (CFTC, 2008a).

Empirical Tests

The preceding discussion focuses on empirical facts that are inconsistent with substantial bubbles in commodity futures prices. When considered as a whole, these facts build a persuasive case against bubbles. However, the facts are largely circumstantial, since they tend to rely on indirect evidence. Bubble proponents can then argue that “this time is different” even if the links between commodity money flows and bubbles are not fully understood. This is an especially difficult argument to settle because the one variable that can provide definitive evidence about the level of commodity prices—fundamental value—is unobservable. It is like politics, everyone has an opinion.

While fundamental value is unobservable, all is not lost. It is still possible to conduct empirical tests of the hypothesis that money flows from index funds aided and abetted the recent boom and bust in commodity prices. This can be done by running standard Granger causality tests between futures price changes and position changes in commodity futures markets. These tests establish whether lagged position changes help to forecast current futures price changes.⁸

Sanders, Boris, and Manfredo (2004), Bryant, Bessler, and Haigh (2006), Gorton, Hayashi, and Rouwenhorst (2007), and Sanders, Irwin, and Merrin (2008b) conduct Granger causality tests using publically available data on positions of commercial, non-commercial, and non-reporting trader groups from the weekly COT report published by the CFTC.⁹ A typical set of results, drawn from Sanders, Irwin, and Merrin (2008b), is presented in Table 3. A statistically significant relationship between the movement of commodity futures prices and measures of position change is found in only 5 out of 30 cases. In other words, position changes by COT trader groups helps forecast futures price movements in only 16% of the cases, hardly more than what one would expect based on pure randomness. And the evidence is even slimmer if results are limited to non-commercial traders (speculators).

The previously cited studies cast considerable doubt on the value of position changes for any group in consistently forecasting futures price movements. However, these studies also use publically-reported COT data, which is aggregated across all contracts and reported only on a weekly or monthly basis. This may limit the power of Granger causality tests because positions cannot be matched precisely to contract maturity months and positions cannot be tracked over daily intervals. Some have argued that if speculator positions do impact returns it is most likely over time horizons shorter than a week (Streeter and Tomek, 1992).

The Interagency Task Force on Commodity Markets led by the CFTC recently conducted thorough Granger causality tests for the crude oil futures market using non-public data on the daily positions of commercial and non-commercial traders (ITFCM, 2008). Daily price changes and position changes for commercial and non-commercial traders, as well as various sub-groups of traders, were examined over January 2003—June 2008. Consistent with the findings in other studies, there was no evidence that daily position changes by any of the trader sub-categories

systematically led crude oil futures price changes over the full sample period. This result held for all categories of speculators tracked by the CFTC: non-commercial traders in total, hedge funds, swap dealers, and non-commercial traders combined with swap dealers. At least in the crude oil futures markets, Granger causality test results are unaffected by the use of daily versus weekly data or position changes for sub-groups of traders. This bolsters the findings from other studies that did not have access to such detailed data on trader positions.

Bubble proponents can still point out that none of the above referenced studies tested specifically whether commodity index trader positions help to forecast price movements over the last several years. In forthcoming work, Aulerich and Irwin (2009) provide just this type of evidence for 12 commodity futures markets. They conduct Granger causality tests using non-public data from the CFTC on the daily positions of commodity index traders over January 2000 through July 2008. A unique feature of this study is that the authors were able to extend the series on commodity index positions back through the entire sample under study for each of the 12 markets. Aulerich and Irwin found only a few cases where index trader position changes helped to forecast price changes in commodity futures markets. When significance was found the size of the estimated price impact was small. These findings also held when the sample was broken into sub-periods.

While it is always possible to dither over the power of Granger causality tests or whether specifications adequately control for changing fundamentals, the evidence to date leads to a high degree of skepticism that positions for any group in commodity futures markets, including index traders, consistently forecast futures price changes (this will not be true for skilled individual traders within a group).

Lessons from History

A pervasive theme running through the history of U.S. futures markets is skepticism or out-and-out hostility towards speculators (Jacks, 2007).¹⁰ Rapidly increasing or decreasing commodity prices at various times over the last 125 years have been accompanied by assorted attempts to curtail speculation or control prices. For example, just after World War II, soaring grain futures prices, especially for wheat, attracted political attention. President Truman proclaimed that, “the cost of living in this country must not be a football to be kicked around by grain gamblers,” and ordered the Commodity Exchange Authority (precursor to today’s Commodity Futures Trading Commission) to require futures exchanges to raise margins to 33% on all speculative positions, a truly extraordinary level. In a statement that echoes those being made today, President Truman added, “If the grain exchanges refuse, the government may find it necessary to limit the amount of trading.”¹¹

In the boldest move against speculators in U.S. commodity futures, trade in onion futures was banned by the U.S. Congress in 1958. The ban, actually still in place, was due to the widespread belief that speculative activity created excessive price variation (Working, 1963). Again, in language very similar to that heard today, a Congressional report stated that “speculative activity in the futures markets causes such severe and unwarranted fluctuations in the price of cash onions as to require complete prohibition of onion futures trading in order to assure the orderly flow of onions in interstate commerce.”¹²

The experience of the last time period with a comparable level of structural change in commodity markets, 1972-1975, is particularly instructive. U.S. and international commodity markets experienced a period of rapid price increases from 1972-1975, setting new all-time highs across a broad range of markets. These price increases were often blamed on speculative

behavior associated with the "...tremendous expansion of trading in futures in a wide range of commodities" (Cooper and Lawrence, 1975, p. 702).¹³ Following these price increases, public and political pressure to curb speculation resulted in a number of regulatory proposals and the upward adjustment of futures margin requirements (Hieronymus, 1977; Rainbolt, 1977; Tomek, 1985). These changes were accompanied by even more drastic measures—such as federal price controls and an embargo against soybean exports—aimed at lowering commodity price levels.

The actions used to reign in supposedly damaging speculation in the past run the gamut from requiring futures exchanges to raise margins to an outright ban on futures trading. The historical evidence is thin, at best, that measures to limit the impact of speculation had the desired effect on market prices. For instance, there is no historical evidence that directives to increase futures margins were effective at lowering overall price levels. The only consistently documented impact of the higher margin requirements is a decline in futures trading volume due to the increased cost of trading (Fishe and Goldberg, 1986; Peck and Budge, 1987; Haradouvelis and Kim, 1996).

Finally, it is important to note the historical pattern of attacks upon speculation. Petzel (1981, p. 117) commented that, "In periods of rising prices (e.g., the early 1920s, the Korean War, inflation, and the 1970s) grain speculators have been accused of increasing the prices of agricultural commodities artificially. During the early 1930s when agricultural prices were low, grain speculators were accused of depressing prices." Market cycles seem to be accompanied by a predictable pattern of speculative complaints: when prices are exceptionally low, natural sellers in the market, such as farmers, complain that speculators are the problem and when prices are exceptionally high, natural buyers in the market – consumers and processors – complain about speculators. While his focus was a relatively obscure episode in the 1925 wheat market, the

conclusion reached by Petzel (1981, p. 126) applies with equal force today, "...it is all too easy after suffering an economic loss to look for the villain in the piece. In 1925 the public found its villains and conspirators in the large speculators."

Conclusions

There is little evidence that the recent boom and bust in commodity prices was driven by a speculative bubble. If speculation by long-only index funds did impact commodity futures prices, it is not evident in the empirical evidence available to date. Economic fundamentals, as usual, provide a better explanation for the movements in commodity prices. The main factors driving prices up in the energy markets included strong demand from China, India, and other developing nations, a leveling out of crude oil production, a decrease in the responsiveness of consumers to price increases, and U.S. monetary policy (Hamilton, 2008). In the grain markets, factors driving up prices also included demand growth from developing nations and U.S. monetary policy, as well as the diversion of row crops to bio-fuel production and weather-related production shortfalls (Trostle, 2008). The favorable demand factors were reversed in quick order due to the recent financial market meltdown and burgeoning world-wide recession, leading to large price drops across-the-board in commodity futures markets (Good and Irwin, 2008). The complex interplay between these factors and how they impact commodity prices is often difficult to grasp in real-time and speculators have historically provided a convenient scapegoat for frustration with rapidly rising and falling prices.¹⁴

Legislative proposals currently being considered may in fact curtail speculation—through reduced volume of trade—but the initiatives could severely compromise the ability of commodity markets to accommodate the needs of firms to manage price risks. In particular, limiting the participation of index fund investors would rob the markets of an important source

of liquidity and risk-bearing capacity at a time when both are in high demand. The net result is that commodity futures markets will become less efficient mechanisms for transferring risk from parties who don't want to bear it to those that do, creating added costs that ultimately get passed back to producers in the form of lower prices and back to consumers as higher prices.

The recent attacks on speculation in commodity markets harkens back to an earlier era. For most of the past 30 years a consensus seemed to have been reached among policy-makers that speculation played a valuable and important role in commodity futures markets. Writing in the 1970s, Tom Hieronymus had this to say about the matter:

“For many years the anti-futures trading arguments tended to prevail so that speculation was treated as a necessary evil that accompanied the desirable hedging process. During the last decade the balance appears to have shifted so that a favorable view is more widely held. It is doubtful that the favorable view is yet in the majority but it is generally held by students of futures markets and increasingly held by members of Congress and the CFTC.” (Hieronymus, 1977, p. 298)

Much to the surprise of agricultural economists, there is little doubt after the political uproar of the last year that a majority of the public still does not hold a favorable view of speculation. It is yet to be determined whether members of the U.S. Congress hold the same view and whether this portends a return to the anti-futures trading environment of an earlier era.

References

- Aulerich, N.M., and S.H. Irwin. "Direct Evidence on the Relationship between Daily Positions of Index Traders and Price Changes in Commodity Futures Markets." Paper to be presented at the NCCC-134 Conference on Applied Commodity Price Analysis, Forecasting, and Market Risk Management, St. Louis, Missouri, April 20-21, 2009.
- Bryant, H., D.A. Bessler, and M.S. Haigh. "Causality in Futures Markets." *Journal of Futures Markets*. 26(2006):1039-1057.
- Commodity Futures Trading Commission (CFTC). "CFTC Emergency Authority Background." Washington, D.C., 2008a. Available online:
<http://cftc.gov/stellent/groups/public/@newsroom/documents/file/cftcemergencyauthoritybackgrou.pdf>.
- Commodity Futures Trading Commission (CFTC). "Staff Report on Commodity Swap Dealers & Index Traders with Commission Recommendations." Washington, D.C., 2008b. Available online:
<http://www.cftc.gov/stellent/groups/public/@newsroom/documents/file/cftcstaffreportonswapdealers09.pdf>.
- Cooper, R.N., and R.Z. Lawrence. "The 1972-75 Commodity Boom." *Brookings Papers on Economic Activity* 3(1975):671-723.
- Davis, A. "Cargill's Inside View Helps It Buck Downturn." *The Wall Street Journal*, January 14, 2009. Available online:
http://online.wsj.com/article/SB123189501407679581.html?mod=rss_whats_news_us.
- De Long, J. B., A. Shleifer, L. H. Summers, and R. J. Waldmann. "Noise Trader Risk in Financial Markets." *Journal of Political Economy* 98(1990):703-738.

- Engelke, L., and J.C. Yuen. "Types of Commodity Investments." in *The Handbook of Commodity Investing*, F.J. Fabozzi, R. Fuss, and D. Kaiser eds., Hoboken, NJ: John Wiley and Sons, 2008, pp. 549-569.
- Fishe, R.P.H., and L.G. Goldberg. "The Effects of Margins on Trading in Futures Markets." *Journal of Futures Markets* 6(1986):261-271.
- Garbade, K.D., and W.L. Silber. "Price Movements and Price Discovery in Futures and Cash Markets." *Review of Economics and Statistics* 65(1983):289-287.
- Gheit, F. "Testimony before the Subcommittee on Oversight and Investigations of the Committee on Energy and Commerce, U.S. House of Representatives." June 23, 2008. Available online: http://energycommerce.house.gov/cmte_mtgs/110-oi-hrg.062308.Gheit-testimony.pdf.
- Good, D., and S. Irwin. "Implications of Credit Market Problems for Crop Prices." Illinois Farm Economics Update 2008-03, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, 2008. Available online: http://www.farmdoc.uiuc.edu/IFEU/IFEU_08_03/IFEU_08_03.pdf.
- Gorton, G.B., F. Hayashi, and K.G. Rouwenhorst. "The Fundamentals of Commodity Futures Returns." National Bureau of Economic Research (NBER) Working Paper No. 13249, July 2007.
- Grossman, S.J. "An Analysis of "Insider Trading" on Futures Markets." *Journal of Business* 59(1986): S129-S146
- Hamilton, J.D. *Time Series Analysis*. Princeton, NJ: Princeton University Press, 1994

- Hamilton, J.D. "Understanding Crude Oil Prices." Working Paper, Department of Economics, University of California-San Diego, 2008. Available online:
http://dss.ucsd.edu/~jhamilto/understand_oil.pdf.
- Hardouvelis, G.A., and D. Kim. "Price Volatility and Futures Margins." *Journal of Futures Markets* 16(1996):81-111.
- Hartzmark, M. L. "Returns to Individual Traders of Futures: Aggregate Results." *Journal of Political Economy* 95(1987):1292-1306.
- Hieronimus, T.A. *Economics of Futures Trading for Commercial and Personal Profit, Second Edition*. New York, NY: Commodity Research Bureau, 1977.
- Interagency Task Force on Commodity Markets (ITFCM). "Interim Report on Crude Oil." Washington D.C., 2008. Available online:
<http://www.cftc.gov/stellent/groups/public/@newsroom/documents/file/itfinterimreportocrudeoil0708.pdf>.
- Irwin, S.H., P. Garcia, D.L. Good, and E.L. Kunda. "Recent Convergence Performance of CBOT Corn, Soybean, and Wheat Futures Contracts." *Choices*, 2nd Quarter, 23(2008):16-21.
Available online: <http://www.choicesmagazine.org/magazine/article.php?article=26>.
- Jacks, D.S. "Populists versus Theorists: Futures Markets and the Volatility of Prices." *Explorations in Economic History* 44(2007):342-362.
- Krugman, P. "More on Oil and Speculation." *New York Times*, May 13, 2008. Available online:
<http://krugman.blogs.nytimes.com/2008/05/13/more-on-oil-and-speculation/>.
- Labys, W.C., and H.C. Thomas. "Speculation, Hedging and Commodity Price Behavior: An International Comparison." *Applied Economics* 7(1975):287-301.

- Masters, M.W. "Testimony before the Committee on Homeland Security and Government Affairs, U.S. Senate." May 20, 2008, Available online:
http://hsgac.senate.gov/public/_files/052008Masters.pdf
- Masters, M.W., and A.K. White. "The Accidental Hunt Brothers: How Institutional Investors are Driving up Food and Energy Prices." 2008. Available online:
<http://accidentalthuntbrothers.com/>.
- Meyer, G., and C. Cui. "U.S. Oil Fund Finds Itself at the Mercy of Traders." *The Wall Street Journal*, March 6, 2009. Available online:
<http://online.wsj.com/article/SB123629874701846317.html>.
- Patel, J., R. Zeckhauser, and D. Hendricks. "The Rationality Struggle: Illustrations from Financial Markets." *American Economic Review* 81(1981):232-236.
- Peck, A.E. "Reflections of Hedging on Futures Markets." *Food Research Institute Studies* 17(1979-80):327-349.
- Peck, A.E., and C. Budge. "The Effects of Extraordinary Speculative Margins in the 1947-48 Grain Futures Markets." *Food Research Institute Studies* 20(1987):165-180.
- Petzel, T.E. "A New Look at Some Old Evidence: The Wheat Market Scandal of 1925." *Food Research Institute Studies* 18(1981):117-128.
- Rainbolt, J.V. "Regulating the Grain Gambler and His Successors." *Hofstra Law Review* 6(1977):1-25.
- Sanders, D.R., K. Boris, and M. Manfredo. "Hedgers, Funds, and Small Speculators in the Energy Futures Markets: An Analysis of the CFTC's Commitments of Traders Reports." *Energy Economics* 26(2004):425-445.

- Sanders, D.R., S.H. Irwin, and R.P. Merrin. "The Adequacy of Speculation in Agricultural Futures Markets: Too Much of a Good Thing?" Marketing and Outlook Research Report 2008-02, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, 2008a. Available online:
http://www.farmdoc.uiuc.edu/marketing/morr/morr_08-02/morr_08-02.pdf.
- Sanders, D.R., S.H. Irwin, and R.P. Merrin. "Smart Money? The Forecasting Ability of CFTC Large Traders." Working Paper, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, 2008b. Available online:
<http://www.farmdoc.uiuc.edu/irwin/research/SmartMoneyCFTCTraders1.pdf>.
- Shleifer, A., and L.H. Summers. "The Noise Trader Approach to Finance." *Journal of Economic Perspectives* 4(1990):19-33.
- Stout, L.A. "Why the Law Hates Speculators: Regulation and Private Ordering in the Market for OTC Derivatives." *Duke Law Journal* 48(1999):701-786.
- Streeter, D. H., and W. G. Tomek. "Variability in Soybean Futures Prices: An Integrated Framework." *Journal of Futures Markets* 12(1992):705-728.
- Stulz, R. M. "Rethinking Risk Management." *Journal of Applied Corporate Finance* 9(1996):8-24.
- Tomek, W. G. "Margins on Futures Contracts: Their Economic Roles and Regulation." in *Futures Markets: Regulatory Issues*, A. E. Peck ed. Washington, D.C., American Enterprise Institute for Public Policy Research, 1985, pp. 143-209.

- Trostle, R. "Global Agricultural Supply and Demand: Factors Contributing to the Recent Increase in Food Commodity Prices." Outlook Report No. WRS-0801, Economic Research Service, U.S. Department of Agriculture, May 2008. Available online: <http://www.ers.usda.gov/Publications/WRS0801/WRS0801.pdf>.
- Williams, J. *Manipulation on Trial: Economic Analysis and the Hunt Silver Case*. Cambridge, UK: Cambridge University Press, 1995.
- Working, H. "Speculation on Hedging Markets." *Food Research Institute Studies* 1(1960):185-220.
- Working, H. "Futures Markets Under Renewed Attack." *Food Research Institute Studies* 4(1963):13-24.
- Zulauf, C.R., and S.H. Irwin. "Market Efficiency and Marketing to Enhance Income of Crop Producers." *Review of Agricultural Economics* 20(1998):308-331.

Endnotes

¹ In reality, a variety of investment instruments are lumped under the heading “commodity index fund.” Individuals may enter directly into over-the-counter (OTC) contracts with swap dealers to gain the desired exposure to returns from a particular index of commodity prices. Some firms also offer investment funds whose returns are tied to a commodity index. Exchange-traded funds (ETFs) and structured notes (ETNs) have also recently been developed to make it even easier to gain commodity exposure. ETFs and ETNs trade on securities exchanges in the same manner as stocks on individual companies. See Engelke and Yuen (2008) and CFTC (2008b) for further details.

² Hieronymus (1977) argued that large commercial firms dominated commodity futures markets and speculators tended to be at a disadvantage. Based on his theoretical analysis, Grossman (1986, p. S140) asserted, “...it should come as no surprise if a study of trading profit finds that traders representing large firms involved in the spot commodity (i.e., commercial traders) make large trading profits on futures markets.” In the classic empirical study on this subject, Hartzmark (1987) showed that large commercial firms in six of seven futures markets make substantial profits on their futures trades.

³ Peck (1979-80, p. 339) provides a succinct re-statement of Working’s argument, “Taken together, these analyses reaffirm the fundamental importance of hedging to futures markets and dependence of total activity upon hedging needs. The results also lend support to the Working definition of an appropriate measure of hedger demands upon a market. Net hedging is not the most useful view of the demands commercial users make on a market. Speculation is needed to offset both long hedging and short hedging. Only coincidentally are long and short hedgers

sufficiently alike in date and amount to be offsetting, although increased balance increases the probability of such correspondence and differences in seasonal needs between long and short hedgers decreases this probability. The appropriate measure of minimum required speculation must at least begin with total hedging demand.”

⁴ Note that total open interest consists of futures open interest and delta-adjusted options open interest.

⁵ Non-reporting trader positions are allocated to the commercial, non-commercial, and index trader categories in the same proportion as that which is observed for reporting traders (see Sanders, Irwin, and Merrin, 2008a).

⁶ There is an important omission from Table 1—crude oil futures. As the CFTC noted when it first began publishing data on index fund positions, it is difficult to separate out index fund transactions in energy markets because of the degree to which many firms in these markets engage in multiple trading activities that fall into different classifications and the degree to which firms engage in internal netting of these activities. The special swap dealer survey (CFTC, 2008b) does provide an estimate of index trader positions in the crude oil futures market; however, the data are limited to a six-month period from December 31, 2007 to June 30, 2008 and reported only on a net long basis. Computations for crude oil that parallel those reported in Table 1 can be made only by assuming that short positions for index funds are zero.

⁷ The four markets were not selected at random, but instead represent markets that generally have low-cross price elasticities relative to the nine markets in Panel A. If the selected markets had high cross-price elasticities, then observed price increases could have been due to linkages with

the markets in Panel A (and possibly bubble effects in these markets) rather than fundamental factors specific to the selected markets or fundamental factors common to all the markets.

⁸ Granger causality tests reflect the basic idea that if event X causes event Y , then event X should precede event Y in time. These tests require careful interpretation if the null hypothesis of no causality (no statistical prediction) is rejected (Hamilton, 1994). A statistical correlation may be observed between X and Y when in reality an omitted variable Z is the true cause of both X and Y . Hamilton (1994, p. 308) suggests it is better to describe “Granger causality” tests between X and Y as tests of whether X helps forecast Y rather than whether X causes Y . He notes that the tests may have implications for causality in the conventional sense, but only in conjunction with other assumptions.

⁹ In a work well ahead of its time, Petzel (1981) conducted Granger causality tests between the daily position changes of three groups of speculators and price changes for the May 1925 wheat futures contract at the Chicago Board of Trade. Foreshadowing later results, he did not find any evidence that lagged position changes helped to forecast current price changes.

¹⁰ See Stout (1999) for an in-depth discussion of the legal and regulatory history of opposition to speculation in the U.S.

¹¹ Quoted in Peck and Budge (1987, p. 172).

¹² Quoted in Working (1963, p.18).

¹³ It is fascinating to observe the similarity of the current public debate about speculation and the one that followed the mid-70s commodity boom. For instance, Labys and Thomas (1975, p. 287) motivate their paper with words that could have been written in 2008 instead of 1975, “This paper analyses the instability of primary commodity prices during the recent period of economic

upheaval, and determines the extent to which this instability was amplified by the substantial increase in futures speculation which also occurred. Of particular interest is the degree to which this speculation rose and fell with the switch of speculative funds away from traditional asset placements and towards commodity futures contracts.”

¹⁴ The origin of the word “scapegoat” is of more than passing interest in the present context. In ancient Israel, the high priest confessed all the sins of the children of Israel on the Day of Atonement over the head of a live goat. As a symbol of their sins, the goat was then sent into the wilderness to perish.

Table 1. Speculative and Hedging Positions (number of contracts) in Agricultural Futures Markets, First Quarter of 2006 and 2008

Market		HL	HS	SL	SS
Corn					
	2006	328,362	654,461	558,600	208,043
	2008	598,790	1,179,932	792,368	182,291
	Change	270,428	525,471	233,768	-25,752
Soybeans					
	2006	126,832	192,218	183,105	107,221
	2008	175,973	440,793	351,379	74,844
	Change	49,141	248,575	168,274	-32,377
Soybean Oil					
	2006	66,636	124,134	92,515	35,599
	2008	121,196	228,515	128,546	25,844
	Change	54,560	104,381	36,032	-9,755
CBOT Wheat					
	2006	57,942	213,278	251,926	92,148
	2008	70,084	240,864	300,880	121,578
	Change	12,141	27,585	48,954	29,430
KCBT Wheat					
	2006	43,993	110,601	80,158	13,560
	2008	46,459	96,556	67,827	15,767
	Change	2,466	-14,045	-12,330	2,207
Cotton					
	2006	41,582	108,085	86,777	21,824
	2008	107,826	296,434	200,773	18,918
	Change	66,244	188,349	113,995	-2,906
Live Cattle					
	2006	54,549	128,951	129,786	45,305
	2008	34,970	144,549	198,211	80,303
	Change	-19,579	15,599	68,425	34,998
Feeder Cattle					
	2006	10,707	17,725	20,769	10,632
	2008	6,310	13,435	28,284	18,111
	Change	-4,397	-4,290	7,515	7,479
Lean Hogs					
	2006	15,949	65,438	93,522	40,036
	2008	36,825	113,971	149,415	69,055
	Change	20,876	48,533	55,893	29,019

Notes: HL = Hedging, Long; HS = Hedging, Short; SL = Speculating, Long; SS = Speculating, Short. The data reflect average positions in the first calendar quarter of 2006 and 2008, respectively. Open interest is aggregated across futures and options, with options open interest delta-adjusted to a futures equivalent basis.

Source: Sanders, Irwin, and Merrin (2008a)

Table 2. Change in Commodity Prices, January 3, 2006—April 15, 2008

Commodity	January 2006	April 2008	Change
Panel A. Futures Markets Included in Popular Indexes			
Corn	\$2.20/bu.	\$6.06/bu.	175%
Soybeans	\$6.28/bu.	\$13.80/bu.	120%
Soybean Oil	22.96¢/lb.	62.52¢/lb.	172%
CBOT Wheat	\$3.46/bu.	\$8.96/bu.	159%
KCBOT Wheat	\$3.90/bu.	\$9.50/bu.	136%
Cotton	55.24¢/lb.	75.23¢/lb.	36%
Live Cattle	\$96.37/cwt.	\$91.57/cwt.	-5%
Feeder Cattle	\$114.00/cwt.	\$103.95/cwt.	-9%
Lean Hogs	\$64.65/cwt.	\$71.65/cwt.	11%
Panel B. Futures Markets not Included in Popular Indexes			
Rough Rice	\$8.27/lb.	\$22.17/lb.	168%
Fluid Milk	\$12.65/cwt.	\$17.29/cwt.	37%
Panel C. No Futures Markets			
Apples Fresh Use	\$0.26/lb.	\$0.41/lb.	58%
Edible Beans	\$19.30/cwt.	\$34.40/cwt.	78%

Notes: All prices refer to the relevant nearby futures price except apples and edible beans, which are monthly prices received by farmers.

Table 3. Granger Causality Test Results for CFTC Trader Categories, Positions Do Not Lead Returns, 1995-2006.

$$R_t = \alpha_t + \sum_{i=1}^m \gamma_i R_{t-i} + \sum_{j=1}^n \beta_j PNL_{t-j} + \varepsilon_t$$

Market	P-values for Hypothesis Test: $\beta_j=0, \forall j$		
	Commercials	Non-Commercials	Non-Reporting
Wheat CBOT	0.01	0.18	0.54
Wheat KCBOT	0.03	0.24	0.71
Wheat MGE	0.63	0.15	0.76
Corn	0.35	0.79	0.33
Soybeans	0.83	0.05	0.78
Soybean Oil	0.24	0.30	0.94
Soybean Meal	0.70	0.93	0.61
Lean Hogs	0.05	0.34	0.08
Live Cattle	0.75	0.83	0.48
Feeder Cattle	0.10	0.16	0.23

Notes: R is the weekly return for nearby futures in the given market and PNL is the net long position of the trader group in percentage terms.

Source: Sanders, Irwin, and Merrin (2008b)

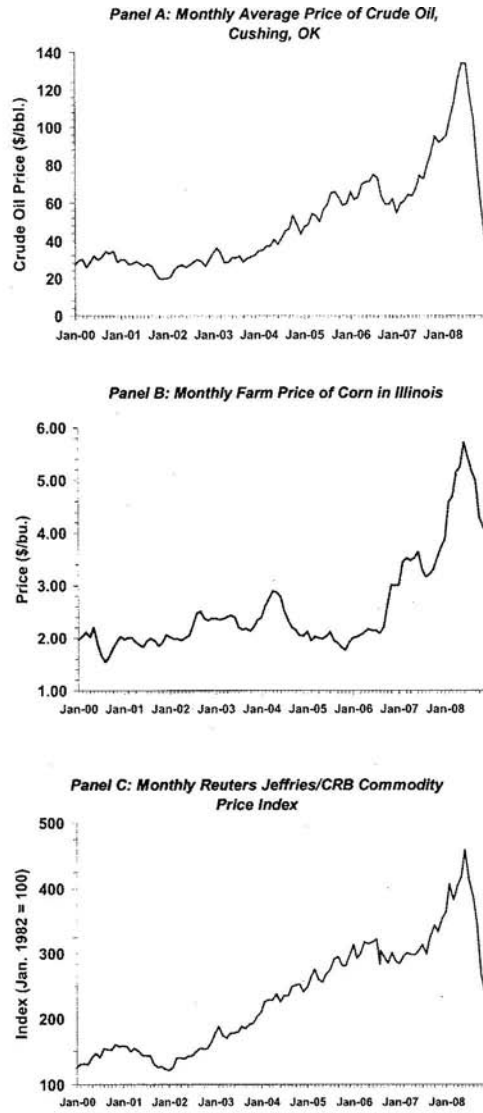
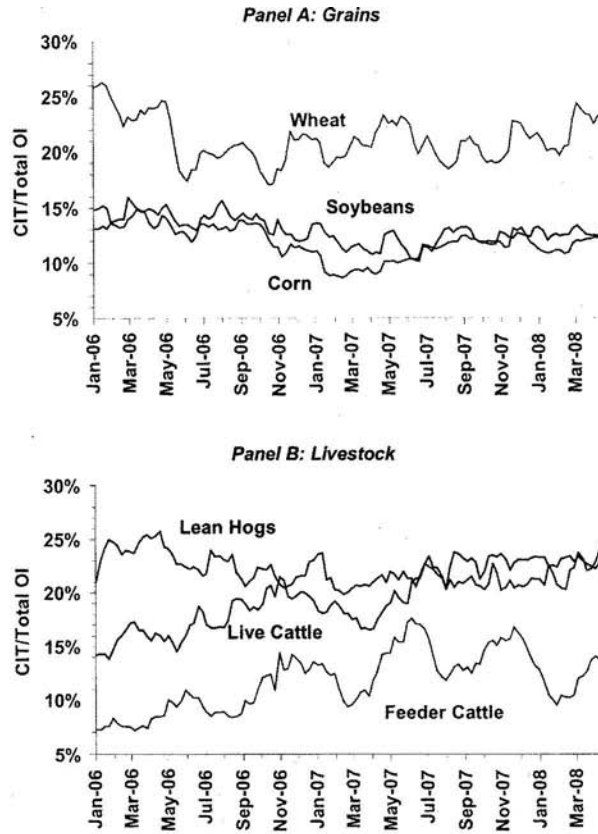


Figure 1. Selected Examples of the Movement of Monthly Commodity Prices, January 2000—December 2008



Note: Total open interest is aggregated across futures and options markets, with options open interest delta-adjusted to a futures equivalent basis.

Source: Sanders, Irwin, and Merrin (2008a)

Figure 2. Proportion of Open Interest Held by Commodity Index Traders (CITs) in Grain and Livestock Futures Markets, January 2006—June 2008

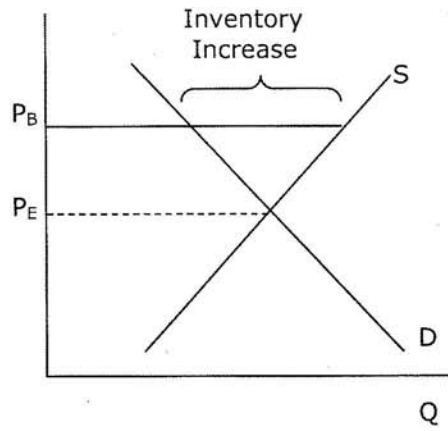


Figure 3. Theoretical Impact of a Price Bubble in a Storable Commodity Market



June 11, 2009

Committee on Agriculture, Nutrition and Forestry
 United States Senate
 328A Russell Senate Office Building
 Washington, DC 20510

Dear Chairman Harkin and Ranking Member Chambliss:

The Association for Financial Professionals (AFP) applauds the Chairman and Ranking Member of the Senate Committee on Agriculture, Nutrition, and Forestry for convening a thought-provoking hearing on the critical issue of regulations pertaining to derivative products. As the global daily resource and advocate for over 16,000 finance and treasury professionals in the United States, AFP maintains that derivative products are essential risk management tools that financial professionals rely on to help stabilize prices and mitigate risk. Our members support the enactment of legislation that encourages secure and transparent markets. However, AFP members have expressed concerns about the unintended consequences of proposals that require mandatory clearing of derivatives and futures products. We are concerned that regulations mandating the clearing of derivatives might negatively impact members' ability to enter into custom interest rate and foreign currency exchange swaps.

AFP members manage and safeguard the financial assets of more than 5,000 U.S. organizations. Our members are responsible for issuing short-and long-term debt and for managing corporate cash, 401(k) plans, and pension assets of their organizations. Many AFP members use interest rate and foreign exchange swaps in their daily business to mitigate risk for their organizations. We are concerned that inflexible regulation of the over-the-counter (OTC) derivatives market might negatively impact the sound and prudent practices of interest rate, foreign exchange swaps and ultimately make it impractical to use these products.

Specifically, many of AFP's financial accounting professionals have voiced concern over the possible conflicts between derivatives regulation, which may lead to the standardized contracts, and the strict hedge accounting rules imposed by the Financial Accounting Standard Board. Financial Accounting Standard 133 (FAS 133) requires a strict demonstration of the effectiveness of a given hedge, which would be impossible if customized contracts became prohibitively expensive or unavailable. With standardization, the ability to comply with the requirements of FAS 133 for applying hedge accounting treatment to swap transactions would become difficult, if not impossible. The net result of this change would be less hedging and more risks being borne by companies in an environment already marked by significant volatility.

Derivatives legislation is of great interest to AFP members for a variety of reasons important to the profession. Recently, AFP surveyed our members to assess the integration of risk management practices within their corporate culture and governance framework. Of all of the instruments used to manage financial risk, our research indicates that the vast majority of companies use over-the-counter forwards and swaps to mitigate that risk. 68% of the companies surveyed use interest rate swaps and 77% of the companies use foreign exchange swaps.

We also asked how the regulation of certain swap agreements would impact their use. In one example, a large health care company revealed that it relies on the ability to swap interest rates from floating to fixed in order to hedge interest rate risk. According to a senior treasury professional, if done correctly, "one can achieve hedge accounting treatment and all changes due to interest rate volatility will run through the balance sheet rather than income statement. This takes volatility out of the income statement and presumably out of the share price."

Another example revealed that a utility company uses swap agreements to hedge its expected future energy usage. A senior treasury executive shared that the company may purchase a contract to lock in the price of its future energy purchases. Under the short cut method, FAS 133 requires them to exactly match the terms and the dates of delivery and, if they do not match, the hedge is rendered ineffective, from an accounting perspective. Simply stated, if any aspect of

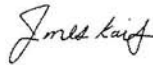
AFP Comments on Regulation of the OTC Derivatives Market
June 11, 2009
Page 2 of 2

the contract varies from the future purchase of energy, that variance would have to be reported on the income statement, which could cause significant volatility in the earnings of the company.

AFP applauds the efforts of the Senate Agriculture, Nutrition and Forestry Committee to bring transparency and stability to the OTC derivatives market, prevent excessive speculation, and secure derivatives markets. Our membership, experts on financial risk management for businesses across the United States, need interest rate swaps and foreign exchange swaps as essential tools for prudent risk management. Common practices already have banks playing a role similar to that of a clearinghouse, making these safe and secure transactions. As the Committee considers legislation on this issue, we urge you to ensure that safeguards against abuse in the derivatives markets do not come at the cost of proven risk management tools that are critical to the stability of American businesses.

We thank the Committee and its members for its hard work and consideration of AFP's views on this matter. Please do not hesitate to contact AFP's Director of Finance Practice, Brian Kalish, at 301.961.6564 or bkalish@afponline.org, if you have further questions on AFP or our members' practices.

Sincerely,



James A. Kaitz
President and CEO
Association for Financial Professionals

Cc: The Honorable Harry Reid, Senate Majority Leader
The Honorable Mitch McConnell, Senate Republican Leader
Members of the Senate Banking, Housing, and Urban Affairs Committee



COMMODITY MARKETS OVERSIGHT COALITION

June 3, 2009

The Honorable Nancy Pelosi
Speaker of the House
U.S. House of Representatives
H-232 Capitol Building
Washington, DC 20515

The Honorable John Boehner
Minority Leader
U.S. House of Representatives
H-204 Capitol Building
Washington, DC 20515

The Honorable Harry Reid
Majority Leader
United States Senate
S-221 Capitol Building
Washington, DC 20510

The Honorable Mitch McConnell
Minority Leader
United States Senate
S-230 Capitol Building
Washington, DC 20510

Dear Congressional Leaders:

Members of this coalition remain concerned that inadequate oversight of the commodities markets and excessive speculation will continue to erode public confidence in the ability of these markets to establish fair prices for energy, agricultural products and other commodities that are reflective of market fundamentals. We urge Congress to act decisively to bring full transparency to all trading environments and platforms, to prevent excessive speculation, and to close the door to potential manipulation.

2008 saw the most dramatic rise in commodities prices in history, resulting in inflated costs for energy and consumer goods in the United States. Internationally, millions of people were suddenly unable to feed themselves due to rising food commodity costs. Congressional hearings and reports revealed that inadequate or non-existent oversight of off-shore and over-the-counter (OTC) markets, ineffective oversight of on-exchange participants and activity, and an under-funded and under-staffed Commodity Futures Trading Commission (CFTC) had opened-the-door to excessive speculation and opaque trading activity. Additionally, members of this coalition voiced growing concern that passively-managed index funds, exchange-traded funds and actively traded hedge funds, swaps and derivatives were turning our commodity markets into a highly volatile "asset class."

We again urge the Congress to pass strong new legislation to restore our confidence in these markets as a risk management and price discovery tool for *bona-fide* commercial players.

Congress has taken some positive steps in the right direction, including last year's CFTC Reauthorization Act, which returns to the CFTC some authority over exempt commercial markets it had lost under the "Enron Loophole" in 2000. Appropriators have steadily increased CFTC funding levels in recent years to allow for much-needed staff, resources, and technology investments and we commend the President's FY2010 budget request of \$161 million. We commend the Senate for swift consideration of CFTC nominees, including the recently-confirmed Chairman Gary Gensler. We are also pleased that on May 13, 2009, President Obama announced his support for full transparency, accountability and oversight in the OTC markets.

Commodity Markets Oversight Coalition
 Letter to Congressional Leaders
 June 3, 2009

Coalition Contact:
 Jim Collura, New England Fuel Institute
 jimcollura@nefi.com or (202) 584-0160

But absent strong and sweeping reform, we will continue to witness extreme price volatility and excessive speculation. Trading will continue to grow in "dark" or unregulated markets and investment speculators will continue to elude federal oversight, data reporting requirements and position limits. Families, businesses, farmers and laborers at home and abroad will continue to "pay the price" in many ways, including volatile and unpredictable energy, food and raw materials prices; impeding economic growth, development, investment, and job creation.

Therefore, we urge Congress to work swiftly and approve legislation that will:

- **Address market activity for *all* commodities**, including energy, agriculture, livestock and metals;
- **Fully close the "Enron Loophole"** by requiring that large over-the-counter trades comply with data reporting requirements and are made subject to speculative position limits;
- **Close the so-called "Foreign Markets Loophole" or "London Loophole"** by requiring the presence of foreign regulators with comparable oversight in order for an off-shore exchange to obtain regulatory exemptions (i.e., no-action letters);
- **Close the "Swaps Loophole"** by limiting hedging exemptions to *bona-fide* commercial participants and requiring that swap traders, index funds and institutional investors comply with all CFTC speculation limits and data reporting requirements;
- **Limit exchange traded fund investments** in physical commodities and their derivatives;
- **Require across-the-board aggregate speculation limits** to prevent traders from taking a controlling position in a commodity by taking large positions on multiple platforms;
- **Require the CFTC to review all current regulatory exemptions** and require Commissioners to withdraw them as appropriate or in accordance with existing or new authorities granted by Congress;
- **Require a thorough review of all new and existing rules and regulations** designed to protect market users and the public from fraud, manipulation and excessive speculation, including position limits, margin requirements, data reporting requirements, and public availability of data; and
- **Require a thorough review of emerging environmental markets**, emissions trading and related Wall Street products and instruments, including derivatives, index funds and exchange traded funds.

The ability to determine a fair price for commodities based on market fundamentals is vital to the success of recent efforts to address energy security, climate change, and the needs of the poor, low income and unemployed. It is essential to the welfare of farmers, truckers, laborers and small businesses, to new job growth and to the overall recovery of an economy that has been wounded by insufficient transparency and oversight of the financial services industry.

In recent weeks, energy commodities including natural gas, crude oil and refined petroleum products have been trading substantially higher despite record inventories and low demand. Internationally, some predict a tight food commodity market in the year ahead. According to a recent Barclays Capital survey, 79 percent of investors plan to increase holdings in these markets. Congress must do its part to help prevent another speculator-driven run-up in energy, agriculture, and other vital commodities.

Commodity Markets Oversight Coalition
 Letter to Congressional Leaders
 June 3, 2009

Coalition Contact:
 Jim Cellura, New England Fuel Institute
 jimcellura@nefi.com or (202) 584-0160

In both chambers of Congress, several bills have been introduced to address the issues discussed in this letter. It is our hope that members can work out their differences and, working with members of this coalition, move forward to pass strong and comprehensive legislation, put an end to excessive speculation and "dark market" trading, and restore confidence in our commodity markets.

Thank you for your consideration.

Sincerely,

Agricultural Missions, Inc.
 Agricultural Retailers Association
 Air Transport Association
 American Association of Crop Insurers
 American Cotton Exporters Association
 American Cotton Shippers Association
 American Public Gas Association
 American Trucking Associations
 Arkansas Oil Marketers Association
 Atlantic Cotton Association
 California Black Farmers and Agriculturalists Association
 Cane Fork Headwaters Association
 Colorado Wyoming Petroleum Marketers Association
 Columban Center for Advocacy and Outreach
 Congregation of Holy Cross
 Consumer Federation of America
 Consumer Watchdog
 Cumberland Countians for Peace & Justice
 Family Farm Defenders
 Florida Petroleum Marketers and Convenience Store Association
 Food & Water Watch
 Friends of the Earth US
 Fuel Merchants Association of New Jersey
 Gasoline & Automotive Service Dealer's of America
 Grassroots International
 Holy Cross International Justice Office
 Illinois Association of Convenience Stores
 Illinois Petroleum Marketers Association
 Industrial Energy Consumers of America
 Independent Oil Marketers Association of New England
 Institute for Agriculture and Trade Policy
 Justice and Witness Ministries, United Church of Christ
 Louisiana Oil Marketers & Convenience Store Assn.
 Maine Oil Dealers Association
 Maryknoll Office for Global Concerns
 Massachusetts Oilheat Council
 Mid-Atlantic Petroleum Distributors Association
 Missionary Society of St. Columban

Commodity Markets Oversight Coalition
 Letter to Congressional Leaders
 June 8, 2009

Coalition Contact:
 Jim Collura, New England Fuel Institute
 Jimcollura@nefi.com or (202) 584-0160

Montana Petroleum Marketers Association
 National Association of Convenience Stores
 National Association of Oil Heat Service Managers
 National Association of Truck Stop Operators
 National Catholic Rural Life Conference
 National Family Farm Coalition
 National Farmers Union
 National Latino Farmers & Ranchers Trade Association
 Nebraska Petroleum Marketers & Convenience Store Association
 Network for Environmental & Economic Responsibility, United Church of Christ
 New England Fuel Institute
 New Jersey Citizen Action Oil Group
 New Mexico Petroleum Marketers Association
 New Rules for Global Finance
 New York Oil Heating Association
 Ohio Petroleum Marketers & Convenience Store Association
 Oil Heat Council of New Hampshire
 Oil Heat Institute of Long Island
 Oil Heat Institute of Rhode Island
 Petroleum Marketers Association of America
 Petroleum and Convenience Marketers of Alabama
 Petroleum Marketers and Convenience Store Association of Kansas
 Petroleum Marketers and Convenience Stores of Iowa
 Platform ABC (Earth, Farmer, Consumer), Netherlands
 Public Citizen
 Quixote Center
 Ranchers-Cattlemen Legal Action Fund / R-CALF USA
 Rural Coalition/Coalición Rural
 Sisters of the Holy Cross Congregation Justice Committee
 Sisters of Notre Dame de Namur Justice and Peace Network
 Society of Independent Gasoline Marketers of America
 Southern Cotton Association
 Texas Cotton Association
 United Egg Association
 United Egg Producers
 Utah Petroleum Marketers and Retailers Association
 Vermont Fuel Dealers Association
 West Virginia Oil Marketers and Grocers Association
 Western Cotton Shippers Association
 Western Peanut Growers Association
 Wisconsin Crop Production Association
 World Cotton Exporters Association

cc: All members of the United States House of Representatives and the United States Senate
 The Honorable Gary Gensler, Chairman, Commodity Futures Trading Commission
 The Honorable Michael Dunn, Commissioner, Commodity Futures Trading Commission
 The Honorable Walter Lukken, Commissioner, Commodity Futures Trading Commission
 The Honorable Jill E. Sommers, Commissioner, Commodity Futures Trading Commission
 The Honorable Bart Chilton, Commissioner, Commodity Futures Trading Commission



Joy Timmons
Executive Vice President

June 3, 2009

The Honorable Timothy F. Geithner
Secretary of the Treasury
U.S. Department of the Treasury
1500 Pennsylvania Avenue, NW
Washington, DC 20220

Dear Mr. Secretary:

The National Association of Manufacturers (NAM), the nation's largest industrial trade association, appreciates and supports the Administration's efforts to improve transparency, accountability and stability in the derivatives market. At the same time, we have some concerns about the proposed regulatory framework for over-the-counter (OTC) derivatives, released by the Treasury Department on May 13, 2009.

Manufacturers of all sizes use OTC derivatives to manage the cost of borrowing or other risks of operating their businesses, including fluctuating currency exchange, interest rates and commodity prices. The ability of commercial users to continue to use OTC derivatives is critical for mitigating risk and limiting damage to the balance sheets of American businesses, particularly during these unprecedented market conditions.

While we support initiatives to prevent excessive speculation and improve transparency and stability in the derivatives market, it is critical that policy makers preserve the ability of responsible companies to access critical OTC derivative products. Consequently, we are concerned about the following issues in the Treasury proposal:

- **Standardization:** A key benefit of OTC derivatives to commercial users is the ability of companies to customize derivatives to their specific risk management needs. Provisions that require the clearing of OTC derivatives would lead to the standardization of these tools, impeding the ability of companies to accurately hedge risks and comply with the requirements of Financial Accounting Standard 133 (FAS 133). Without the ability to hedge specific risks, companies would be forced to shoulder greater risks in an environment already marked by high volatility.
- **Cost of "Clearing":** Exchanges insulate commercial participants from credit exposure by requiring the value of the derivative contract (mark to market) to be posted in cash or Treasury securities and for market moves twice a day. The efficiency of clearing relies on high volumes of standardized products, characteristics that do not exist in the individual hedging transactions of the OTC market. Hedging in the OTC market is customized to fit the actual underlying risk on the value of the goods shipped and produced. The margin requirements associated with clearing would create an additional

Manufacturing Makes America Strong

1331 Pennsylvania Avenue, NW • Washington, DC 20004-1790 • (202) 637-3043 • Fax (202) 637-3182 • jtimmmons@nam.org • www.nam.org

The Honorable Timothy F. Geithner
June 3, 2009
Page Two

administrative and liquidity burden for commercial users, resulting in additional financing and administrative costs.

- **Limited Dealers:** NAM members also are concerned about the potentially unintended consequence of reduced competition in the provision of OTC commodity derivative products, which would have a negative impact on end users. Any reform proposal should not create a monopoly in the OTC derivatives market for a certain group of dealers at the expense of the manufacturers who need to manage their risk. This would only increase prices, reduce transparency, and increase systemic risk.

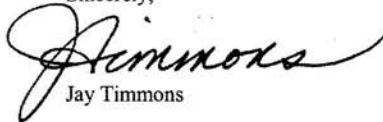
On a broader note, the NAM agrees with the Administration that the current financial crisis has exposed some areas in our financial regulatory system that should be addressed. Not all OTC derivatives, however, pose a risk to the financial system. We welcome the opportunity to work with policy makers to identify where increased, targeted oversight is warranted.

Similarly, while we understand the need for adequate reporting and record keeping, corporations already provide reports to the Securities and Exchange Commission (SEC) and other government agencies. We would like to work with policy makers on ways to set up a trade repository to enhance further transparency by pulling together information already required under existing reporting requirements.

In sum, NAM members believe strongly that any reform effort should ensure companies' continued access to OTC derivatives, providing them with greater financial certainty and allowing them to allocate resources to core business activities. Thank you in advance for considering our concerns. As this proposal moves through the legislative process, we look forward to working with you and members of Congress on legislation that encourages transparency and stability in the derivatives markets without sacrificing the ability of corporations to use these necessary tools.

With all best wishes, I remain,

Sincerely,



Jay Timmons

JT/gjj

QUESTIONS AND ANSWERS

JUNE 4, 2009

Chambliss for Chairman Gensler

1. You state in your testimony that swap dealers should be required to post capital and be subject to margin requirements. In his written testimony, Mr. Dines from Cargill states that "there is a concern that the new regulatory framework could be developed such that only financial institutions could remain active dealers." He goes on to discuss the inappropriateness of eliminating non-financial institutions as competitors. Do you feel that the regulatory regime you have outlined today for the regulation of dealers would in fact result in only financial institutions remaining as sell-side swap participants?
2. What information would CFTC find useful in a mandatory reporting regime? Would mandatory reporting for all transactions create more information than would be useful for regulatory analytical purposes? How would you structure mandatory reporting? Does the CFTC have the resources to analyze such a vast amount of data? Who do you feel should regulate the trade repositories you mention in your testimony, and do you envision one entity taking on this responsibility for all OTC transactions?
3. I gather from your testimony that you and I agree that the need for customized transactions requires us to find a way to make sure businesses can still use these vital risk management tools under this new regulatory regime. In your testimony, as Secretary Geithner did in his letter to the Congress last month, you state that a transaction should be deemed standardized if a clearinghouse is willing to accept it for clearing. Do you feel that the clearinghouses are the most appropriate entity to determine if a contract is standardized?
4. You have proposed product standardization so that "OTC derivative trades and open positions are fungible and can be transferred between one exchange or electronic trading system to another." Are you proposing that the best capitalized clearing houses with the strongest creditworthiness be forced to accept the credit and risk of dealing with potentially weaker clearing houses?
5. Given the fact that the vast majority of global futures and options markets do not permit fungibility and that existing OTC clearing facilities here and outside the U.S. also do not permit fungibility, how does your proposal ensure a level competitive playing field that allows U.S. clearing houses and exchanges the ability to compete?

Senator Pat Roberts
Senate Committee on Agriculture, Nutrition and Forestry
Questions for the Record
June 4, 2009

To Chairman Gensler:

1. What is your definition of "systemic risk?" How has this definition been applied to the financial bailouts? Do you believe every OTC participant or product creates "systemic risk" to our national economy? If so why? If not, then why propose treating all participants and products as if they do create a "systemic risk?"
2. The recent proposal by the Treasury Department for a systemic risk regulator calls for the imposition of capital requirements for participants in the OTC derivatives markets. Some view this as creating a significant barrier to entry, one that could in fact force many non-financial companies out of these markets. If the result of such a requirement was to leave only a few large market participants, wouldn't that enhance the possibility of systemic risk, rather than lessen it?
3. How do you envision a systemic risk regulator will function in today's financial markets? What will be their primary role relative to the other regulatory agencies? Do you envision a regulator that would assume some of the duties of agencies such as OTS, SEC, and CFTC, and how do these authorities differ from the ones each currently possess independently?

To Mr. Dines:

1. How would the imposition of capital requirements for all dealers of OTC derivatives, as suggested by the Treasury Department's systemic risk regulator proposal, affect the OTC and derivatives markets and market participants? Would imposing such capital and licensing requirements drive non-financial intermediaries out of the derivatives market and if so what would be the economic effect of forcing manufacturers and other non-bank entities out of the commodities markets?

Senate Committee on Agriculture, Nutrition & Forestry
Regulatory Reform and the Derivatives Markets
Questions for the record
Chairman Gary Gensler
June 4, 2009

Senator Saxby Chambliss

- 1) You state in your testimony that swap dealers should be required to post capital and be subject to margin requirements. In his written testimony, Mr. Dines from Cargill states that “there is a concern that the new regulatory framework could be developed such that only financial institutions could remain active dealers.” He goes on to discuss the inappropriateness of eliminating non-financial institutions as competitors. Do you feel that the regulatory regime you have outlined today for the regulation of dealers would in fact result in only financial institutions remaining as sell-side swap participants?

Non-financial firms should be eligible to serve as swap dealers so long as they meet appropriate capital, margin, business conduct and reporting standards.

- 2) What information would CFTC find useful in a mandatory reporting regime? Would mandatory reporting for all transactions create more information than would be useful for regulatory analytical purposes? How would you structure mandatory reporting? Does the CFTC have the resources to analyze such a vast amount of data? Who do you feel should regulate the trade repositories you mention in your testimony, and do you envision one entity taking on this responsibility for all OTC transactions?

It is important that regulators be able to see both a particular trader's on- and off-exchange derivatives positions. Thus, derivatives dealers should be subject to recordkeeping 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 would 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 recorded information meets regulatory needs and that the repositories have strong business conduct practices. Trade repositories should collect and maintain the same data elements as the data collected for trades that are cleared. Based on the increased volume of information that would be received, the Commission would need to increase its resources devoted to the analysis and reporting of information.

- 3) I gather from your testimony that you and I agree that the need for customized transactions requires us to find a way to make sure businesses can still use these vital risk management tools under this new regulatory regime. In your testimony, as Secretary Geithner did in his letter to the Congress last month, you state that a transaction should be deemed standardized if a clearinghouse is willing to accept it for clearing. Do you feel that the clearinghouses are the most appropriate entity to determine if a contract is standardized?

The determination of what is standardized should be made by regulators pursuant to criteria established by Congress. Whether a clearinghouse will accept a product, however, is an appropriate factor that should be included among such criteria.

- 4) You have proposed product standardization so that "OTC derivative trades and open positions are fungible and can be transferred between one exchange or electronic trading system to another." Are you proposing that the best capitalized clearing houses with the strongest creditworthiness be forced to accept the credit and risk of dealing with potentially weaker clearing houses?

Arrangements should be established that facilitate open access to clearinghouses and foster competition amongst exchanges and trading platforms. Such arrangements should mandate that clearinghouses have rigorous risk management standards.

- 5) Given the fact that the vast majority of global futures and options markets do not permit fungibility and that existing OTC clearing facilities here and outside the U.S. also do not permit fungibility, how does your proposal ensure a level competitive playing field that allows U.S. clearing houses and exchanges the ability to compete?

Any fungibility arrangements should be designed to promote competition amongst clearinghouses and exchanges.

Senator Pat Roberts

- 1) What is your definition of "systemic risk?" How has this definition been applied to the financial bailouts? Do you believe every OTC participant or product creates "systemic risk" to our national economy? If so why? If not, then why propose treating all participants and products as if they do create a "systemic risk?"

Systemic risk is the danger that financial problems or failure at a firm will have serious repercussions across financial markets and the economy. I believe that we must enact comprehensive regulation covering OTC derivatives dealers and markets to help lessen such risk and promote market transparency. Capital, margin and business conduct

standards as well as mandated central clearing will help lower risk to the economy and American public.

- 2) The recent proposal by the Treasury Department for a systemic risk regulator calls for the imposition of capital requirements for participants in the OTC derivatives markets. Some view this as creating a significant barrier to entry, one that could in fact force many non-financial companies out of these markets. If the result of such a requirement was to leave only a few large market participants, wouldn't that enhance the possibility of systemic risk, rather than lessen it?

Capital requirements for OTC dealers would lower risk to the financial system and economy. Dealers with less risk exposure would have lower capital requirements. Both financial and non-financial companies could register as OTC dealers. End users of OTC derivatives would not have capital requirements, but would be required to post some type of collateral.

- 3) How do you envision a systemic risk regulator will function in today's financial markets? What will be their primary role relative to the other regulatory agencies? Do you envision a regulator that would assume some of the duties of agencies such as OTS, SEC, and CFTC, and how do these authorities differ from the ones each currently possess independently?

Though Congress may designate a regulator to oversee large financial institutions posing risk to the broad economy, I believe that responsibility for conducting market oversight would remain with the market regulators such as the CFTC or SEC.

Senate Committee on Agriculture, Nutrition & Forestry
Regulatory Reform and the Derivatives Markets
Questions for the record
Mr. David Dines
June 4, 2009

Senator Pat Roberts

- 1) How would the imposition of capital requirements for all dealers of OTC derivatives, as suggested by the Treasury Department's systemic risk regulator proposal, affect the OTC and derivatives markets and market participants? Would imposing such capital and licensing requirements drive non-financial intermediaries out of the derivatives market and if so what would be the economic effect of forcing manufacturers and other non-bank entities out of the commodities markets?
 - This is a very important question. Certainly, some level of capitalization seems appropriate, but it should be activity and risk-based. Non-financial dealers have an important role in the markets, and have managed their businesses such as not to require any tax payer assistance. More importantly, the markets with non-financial dealers, primarily the agricultural and energy markets, did not create systemic risk during the recent financial crisis.
 - We need to strike the right balance between having the right levels of capital and licensing requirements, and allowing these non-financial dealers to be able to continue to operate.
 - Removing non-financial bank intermediaries offers no advancement in reducing system risk, lessens competition and will likely result in more expensive risk management opportunities.

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